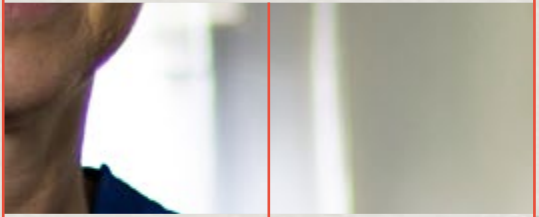


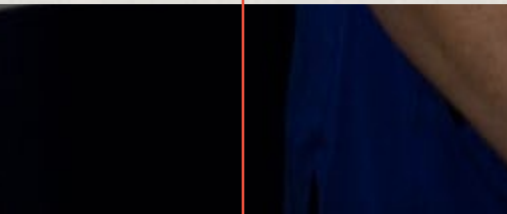


2018_
ANNUAL

_2019
REPORT



MISSING
COLLABORATING TO IDENTIFY
LONG-TERM MISSING PERSONS



**VICTORIAN INSTITUTE
OF FORENSIC MEDICINE**



Report of Operations Accountable Officer's Declaration

In accordance with the *Financial Management Act 1994*, I am pleased to present the Victorian Institute of Forensic Medicine's Annual Report for the year ending 30 June 2019.

Professor Noel Woodford
Director

Contents



Overview	04	Significant Events	73
VIFM at a glance			
The Chairman's Perspective			
Director's Report		VIFM Staff	76
Chief Operating Officer's Report			
Obituary			
Corporate Governance	14	Financial Performance	78
Feature: Missing Persons	24	Legislative and Statutory Reporting	81
Highlights and Achievements	36	Financial Statements	89
Operational Report	44	Appendices	127
Forensic Services Division		A: Disclosure Index	
Drug Testing for Victoria Police		B: Services and Obligations	
Donor Tissue Bank of Victoria		C: Committees	
Academic Programs		D: Publications	
The International Program		E: Presentations	
		F: Staff by Department	

Overview



Overview

Who We Are

As an institution focussed on forensic medicine, we serve the community and the courts. Our statutory responsibilities are to provide independent forensic medical and scientific expertise to the justice system, tissue for transplantation, and to both teach and undertake research that will benefit the community.

The Victorian Institute of Forensic Medicine (VIFM) provides the justice system with the crucial evidence that underpins safe convictions and appropriate acquittals. Our doctors and scientists investigate deaths reported to the Coroner, examine alleged offenders and medically assess and support victims of crime.

The Donor Tissue Bank of Victoria (DTBV) supports patients and their families by providing safe tissues to medical specialists and Victorian hospitals for transplantation and medical research.

Our medical and scientific staff members undertake research that directly contributes to public health and safety and the just working of our legal system. By contributing to the professional development and education of forensic pathologists, physicians and scientists, we ensure a high standard of forensic medical services for Victoria and provide critical support for our healthcare and justice systems.

Mission

We exist to provide quality-driven, ethically-grounded, independent forensic medical and scientific services for the justice system; to expand and share our knowledge locally and globally; and to make a positive contribution to the health and safety of our community.

Vision

We strive to continue to be a trusted and innovative leader in global forensic medicine and science.

Our Motto

*Veritas Omnia Vincit
– Truth Conquers All*

Our Values

RESPECT - We respect all people, our history, our calling and the law.

OPENNESS - We are open-minded, open to each other, and open to knowledge and learning.

SERVICE - We provide services for the community that are responsive and client-focused.

INTEGRITY - We will be beyond reproach. We commit to truth, confidentiality, impartiality and accountability. We commit to systems that are secure, reliable, accurate, valid and safe.

INNOVATION - We are creative and curious. We are not afraid to do things differently. We will continue our search for knowledge and truth.



Our Working Relationships

The Institute is a statutory agency within the Justice and Community Safety portfolio and our responsible minister is the Attorney-General.

We work in close partnership with many sectors of the Victorian community.

The strength of the working relationships we have with our clients and stakeholders is critical to our success. Our primary stakeholders are the courts and we work for, and in close collaboration with, the Coroners Court of Victoria.

The Institute operates the Coronial Admissions and Enquiries Office and undertakes medico-legal death investigations on behalf of the Coroners Court. The Institute also has a Service Level Agreement with Victoria Police to deliver clinical forensic medical services and toxicology testing. Other important partners include the Victorian courts, Monash University, the University of Melbourne, the Australian Federal Police, legal and medical professionals, and public and private hospitals.

Our Role in Teaching, Training and Research

The Institute's founding legislation and mission requires us to undertake professional training and research in forensic medicine and related scientific disciplines.

These academic activities in medicine, law and science are fundamental to the Institute's credibility in the courts, and allow us to maintain a highly professional standing in national and international medical, legal and scientific communities.

Our Organisation at a Glance

Forensic Services and Donor Tissue Banking at VIFM

Death Investigation

- » Forensic pathology
 - + Autopsy or external examination
 - + Histopathology
- » Forensic radiology
- » Mortuary services
- » Forensic science
 - + Post-mortem toxicology
 - + Molecular biology (DNA)
 - + Histology
 - + Microbiology
- » Forensic odontology
- » Forensic anthropology
- » Forensic entomology
- » Cold case investigations

Clinical Forensic Medicine

- » Sexual assault examinations
- » Physical assault examinations
- » Examinations of victims of interpersonal violence including family violence
- » Fitness for interview examinations
- » Traffic medicine
- » Clinical pharmacology

Drug Testing Services for Victoria Police

- » Road traffic toxicology
- » Clinical toxicology
- » Occupational toxicology

Donor Tissue Bank of Victoria

- » Deceased and living donor identification
- » Tissue collection
- » Tissue processing
- » Tissue quality and safety evaluation
- » Tissue distribution for transplantation
- » Tissue distribution for research

Academic Programs in collaboration with the Department of Forensic Medicine, Monash University

Research

- » Injury prevention
- » Health law
- » Aged care
- » Medical imaging
- » Adverse medical events
- » Drug harm unit
- » Coronial law

Library Services

Teaching & Training

- » Undergraduate
 - + Medical Law Program
 - + Forensic Medicine Program
- » Postgraduate
 - + Master of Forensic Medicine
 - + PhD by Research
- » International Programs

International Program

- » Forensic capacity
 - + Disaster victim identification preparedness
 - + Forensic pathology
- » Consultancy services
- » Training and network facilitation
- » Humanitarian support

Corporate Services & Development providing corporate and logistical support to our operations

Quality and Improvement

- » Oversight and management of the VIFM Quality Management System including:
 - + Document control administration
 - + Continuous Improvement and Corrective Actions (CIRCA) administration
 - + Internal quality auditing
 - + Proficiency testing administration
 - + NATA Accreditation and ISO Certification administration and coordination
 - + TGA Licensing and Biologicals Framework Registration
- » Business improvement using the Lean 6 Sigma methodology
- » VIFM External Source Complaints Program administration
- » Internal investigation of quality issues
- » Oversight of risk management

Information, Communications and Technology

- » Forensic operations IT system maintenance and development
- » IT and telecommunications infrastructure operations and maintenance
- » Digital communications

Finance & Business Services

- » Financial management and accounting
- » Procurement advice
- » Financial compliance monitoring
- » Key performance indicator monitoring
- » Purchasing and supplies management
- » Building and facility management

Legal, Governance and Policy

- » Governance support for the VIFM Council and Committees
- » Statutory interpretation and legal advice
- » Policy development
- » Research governance support
- » Strategic and business planning leadership and support
- » Contract management
- » Privacy and data protection
- » Compliance monitoring

Human Resources and Development

- » Recruitment and selection
- » Payroll, remuneration and benefits
- » Employee learning and development
- » Performance management
- » Employee relations
- » HR / advice
- » Industrial relations
- » Occupational health and safety
- » Employee wellbeing and support
- » Leave management

The Chairman's Perspective

The Hon. John Coldrey AM QC



Serving Our Society

If you take the trouble to read this Annual Report – and you should – you will learn of the extraordinary diversity of forensic medical and scientific activities undertaken by the experts who practice at the Victorian Institute of Forensic Medicine (VIFM).

The spectrum of disciplines located within this single venue makes the Institute unique in the world. Its independence, reliability, and dedication to the discovery of the truth have led to its status as an international leader in such specialised fields as forensic medicine and pathology, radiology, toxicology, forensic odontology (dentistry), histopathology, forensic anthropology and entomology and molecular biology.

Within these pages you will read of medico-legal investigation, the medical examination of victims of crime, the provision of expert evidence to the Courts, disaster victim identification, accident prevention strategies, the operation of the Donor Tissue Bank of Victoria (DTBV), the fostering of forensic medical and scientific capacity within the Asia-Pacific region and Africa, the conduct of research, the training of overseas and local medical practitioners and the teaching of post-graduate students. (If you are averse to “hard copy” this information may be gleaned from the new VIFM website launched in December 2018).

In 2018, the VIFM celebrated 30 years of service to the State of Victoria and to the national and international communities. It was marked by a reception at which the former Premier, The Hon. John Cain Snr was the guest of honour. He, together with his Attorney General, The Hon. Jim Kennan, was responsible for the legislation establishing the Institute.

Since its creation, the VIFM has been fortunate in attracting the support of

every Victorian Government and it is appreciative of the work of successive Attorneys General. On that note I thank the Hon. Martin Pakula for his endeavours on behalf of the Institute during his tenure of office and welcome the Hon. Jill Hennessey, whose efforts have already secured some of the much needed funding, vital for the operation of the Institute's essential services.

In last year's Report I wrote that the VIFM was a front line organisation and detailed how its activities promoted the safety, protection and public health of the community. Nothing has changed in that regard – except the ever-burgeoning workload and the attendant increasing pressures upon the Institute's doctors and scientists. Consequently, the recruitment of additional experts is essential.

So too, is the acquisition of increasingly sophisticated laboratory equipment. Pre-eminent among such equipment is a new CT scanner. The radiological information supplied by the current CT scanner is revolutionising the post mortem process by reducing the necessity to conduct full autopsies.

This is an extremely significant advance as the number of bodies received in the

mortuary surges towards 7000 a year. (I interpolate that the VIFM was one of the first medical institutes in the world to adopt forensic imagery as an integral part of the medico-legal death investigation. That early adoption has led to this organisation having the largest global database of post mortem CT images providing a rich resource for teaching and research).

A further urgent requirement is the upgrading of ageing and deteriorating facilities.

I give fair warning that the implementation of these vitally important initiatives will necessitate future additional funding. Unless it is forthcoming, the capacity of the VIFM to effectively serve this community will be placed in jeopardy.

Incidentally, it needs to be understood that as a frontline demand-driven organisation, predominantly staffed by specialists, the yearly budgetary reduction occasioned by the blanket requirement of a notional efficiency dividend is impractical, unrealistic and financially harmful.

During the reporting period the detailed Strategic Plan for 2019-2022 was

developed by the members of the Institute in conjunction with the VIFM Council. It reaffirms our aim of embracing “innovation to strengthen and enhance our position as a trusted leader in forensic medicine and science”; our purpose of providing “independent quality forensic medical and scientific services to support families, the community and the justice system”; and of undertaking “research and teaching to expand and share our knowledge”.

Apart from our 30th anniversary, the Institute participated in the recognition of the 10th anniversary of the horrific Black Saturday bushfires. The VIFM acknowledges the 173 victims – each with their own catalogue of achievements and aspirations; and their loved ones and friends left to grieve and remember. It also acknowledges the courage and bravery of the Emergency Services personnel.

Additionally, in reflecting on this tragedy, reference should be made to the staff of this Institute who faced the daunting task of identifying the fire ravaged bodies – a truly traumatic and heart rending experience. Identification of a loved-one or friend is a vital stage in the quest for peace of mind for those left behind. The identification process was expected to take many months. It was accomplished by members of the VIFM in just 90 days.

I have written before about the importance of funding to enable the increase of forensic medical and scientific expertise in the Asia Pacific region. While that lack of capacity continues, victims of crime are frequently denied the justice that these advances could deliver. And those victims – those who are most vulnerable – are predominantly women and children.

Since 2009 the VIFM has undertaken training projects in the international arena – too many to mention here – but they essentially comprise ad hoc assistance. What is urgently required is an adequately funded program targeted at raising forensic capacity in the region. Ideally it could, and should, be part of Commonwealth foreign aid.

It is appropriate to advise the Victorian Parliament of some of the technological advances recently embraced by the Institute:

» Two new liquid chromatography mass spectrometry (LCMS) machines have enabled toxicologists to cope with the increase in Victoria Police roadside drug testing.

- » The acquisition of a Massively Parallel Sequencing (MPS) instrument provides molecular biologists with the ability to determine hair and eye colour, sex and geographic ancestry from a fragment of DNA. Not only does it have the potential to identify missing persons but also to track suspects who have left genetic material at a crime scene. This is the only machine of its type in a forensic medical institute in Australia.
- » Using computer images derived from CT scanning, the Institute has developed the capacity to create 3D models of fatal injuries to significantly assist juries.
- » The adoption of cutting edge technologies has ensured that the Institute toxicologists can identify a plethora of new and often dangerous drugs.

As a major project the VIFM is developing an interdisciplinary approach to the identification of missing persons. The Institute is working closely with Victoria Police and other police forces with relevant records. At present there are more than 2000 long-term missing persons throughout Australia. Moreover, there are currently unidentified remains of 23 people housed at the Institute and more than 20 unidentified bodies have been buried since 1985. The loved-ones of the missing inevitably experience corrosive uncertainty, ongoing sadness, and the torment of unanswered questions. A concerted effort is needed to develop a regime which not only seeks to alleviate the distress of loved-ones, but which may also have implications for the criminal justice system.

With its medical and scientific expertise, the Institute is ideally placed to take a leading role in this initiative.

The VIFM Council

Once again the Institute has benefitted from its governance by a highly credentialed Council (Board), whose activities include overseeing the organisation's strategic planning and monitoring its finances. The voluntary and dedicated commitment of Council members to the successful attainment of the objectives of the VIFM deserves recognition and thanks. The diverse and considerable achievements of the Council members are set out in the biographical notes in the Corporate Governance section of this report.

In this reporting period Professor Christina Mitchell, Dean of Medicine at Monash University, retired from the Council. Her very considerable contributions to the Institute over seven years have included the development of the Department of Forensic Medicine and the co-chairing of the selection panel for a new Director in 2013-14. Professor John McNeil (Sir John Monash Distinguished Professor) succeeded Professor Mitchell until his retirement from his university role as Head of the School of Public Health and Preventive Medicine in May 2019. I thank them both for their wise counsel.

Since its inception, the Council has enjoyed the ongoing support and advice of successive State Coroners in their role as ex officio Council members. In the current year, during the absence of Judge Hinchey, Acting State Coroners Iain West and, subsequently, Caitlin English, have provided the Council with their valuable insights.

In the course of preparing this Report we learned of the death, in July 2019, of Professor Vernon Plueckhahn. Professor Plueckhahn was a pioneering giant in the field of forensic pathology. He played a pivotal role in the creation of this Institute and he later served as its Acting Director and as an inaugural Council member. His was the first Fellowship award by the Institute and he will forever have an honoured place in the VIFM pantheon. (A tribute to Professor Plueckhahn is featured in this report).

Substantial Contributors

Once again I acknowledge the unstinting contributions of the Chairmen of the Council subcommittees – Executive and Finance, Audit and Risk Management, Ethics and Donor Tissue Bank – being respectively, Professor Bob Conyers, Stephen Nossal and Tim Fitzmaurice.

Special thanks are due to the Chief Operating Officer Mari-Ann Scott and Chief Financial Officer Peter Ford for the consummate discharge of their roles.

I conclude by expressing my unbounded admiration for all the members of the VIFM. Yet again they have performed magnificently in a challenging and stressful environment under the distinguished leadership of Professor Noel Woodford.

Director's Report

Professor Noel Woodford

On the tenth anniversary of the Black Saturday bushfire tragedy, which was commemorated in February this year, the VIFM and Coroners Court were honoured by a visit from Her Excellency the Honourable Linda Dessau AC, Governor of Victoria, and her husband Mr Anthony Howard AM QC. The occasion was a reminder of the extraordinary challenge we faced identifying the 173 deceased bushfire victims; and how our comprehensive forensic medical and scientific expertise, allied to strong professional relationships with police, coroners and other stakeholders, allowed us to overcome the many obstacles to bring some closure and a measure of solace to families, in the form of reliably identified remains.

Whilst not a mass disaster event the impact of a long-term missing person case is no less significant for those left behind, who must grieve without answers. The VIFM's specialist scientific staff is at the forefront of efforts to promote better collaboration and coordination in the approach to such cases, and this year's annual report highlights the efforts we have been making to solve this difficult problem.

As our last annual report emphasised, 2018 marked another milestone in the life of the VIFM, but this time a happy one – our 30th birthday. During the year we celebrated first informally with an afternoon tea for our staff, and later at a ceremony at which The Hon. John Cain Snr, former Premier of Victoria, spoke with clarity and passion of the vision of extraordinary individuals that saw the VIFM become a reality. This year it was a special privilege to celebrate the contributions of two of those individuals, in the naming of Cordner Hall and the John Phillips Library.

This year, as in each of the previous 30, we have been busier than ever. As Victoria's population increases and ages the pressure on us to do more with less becomes steadily more difficult to withstand. In the face of considerable demands for our services we have been introducing efficiency measures and technological advances across all areas of our operations – including in the mortuary and laboratories. At the same time we are taking steps to safeguard the physical and mental wellbeing of our staff by introducing a number of health-related initiatives



including peer support networks, and mental health training.

In the pages that follow, you will gain insights into just how diverse and complex our operations have become. We are not simply a public mortuary – we are an Institute, benefiting from all that that name implies. We provide forensic medical and scientific services, but we also learn from our service work. We teach and train the next generation of practitioners, and develop the evidence base from our research so that the courts, families, police and others who rely on us can have the utmost confidence in our work.

It is the richness of the professional experience here and the way we embrace innovative ways of working that continues to make us a place where people want to come to learn, work and contribute. I am so proud to work with people who enthusiastically rise to meet our multiple challenges for the benefit of the community, whether it be in the development and delivery of our many short courses, the Monash University Masters of Forensic Medicine, the biennial Schofield Oration, contributing to improvements in aged care and tackling the scourge of domestic violence, the welcoming of countless international colleagues, providing support overseas in the wake of mass tragedies and preparation for tragedies to come, or providing insights at home into the prevalence of illicit drugs in injured drivers.

This year also saw the launch of our new 2019-2022 Strategic Plan, developed after extensive consultations with our staff and stakeholders. In addition to the clearly stated Aim and

Purpose, the plan commits us to six explicit goals in the areas of environment, system and people, with well-defined approaches by which to achieve our desired outcomes, and a particular focus on staff development and wellbeing. Fellow members of the VIFM's Senior Executive Group, Executive Team and Managers' Group all welcome the opportunity of putting the plan into effect, and I could ask for no better teams to work with.

Before finishing, I want to pay particular tribute once again to the Chairs and members of our Council and its subcommittees: Executive and Finance, Audit and Risk Management, Donor Tissue Bank, and Ethics, for the extraordinary contribution they make to our institutional sustainability and prosperity. We are very fortunate indeed that people of their calibre so generously donate their time so that we can benefit from their expertise and counsel. I would also like to acknowledge the strong support we continue to receive from the Attorney-General and Department of Justice and Community Safety which is more crucial than ever in these challenging economic times.

Finally I would like to acknowledge the distinguished service of Deputy State Coroner Iain West who retired in April this year. Iain has been a great friend to the Institute for more than 26 years and it has been a genuine privilege and pleasure to work with him over that time.

This report is a testament to the hard work and dedication of all our staff in contributing to a safe, just and healthy community, and I very much hope you enjoy reading about what we have achieved over the past year.



Our 30 year anniversary celebrations held during this last year was an opportunity to be reminded of the importance of the complex and multi-functional work that we do for the Victorian community. We were fortunate to hear from former Victorian Premier, The Hon. John Cain Snr, who opened the Coronial Services Centre on 26 July 1988. At that opening in 1988 he spoke about a broad role for the Institute, highlighting most importantly of all, that the Institute was to offer relatives of a deceased person an independent scientific review of whether, in the period leading up to death, everything that could have been done was done, and whether what was done was appropriate. It was heartening that, 30 years later, he was voluble in his praise of the work of the VIFM, in meeting, indeed exceeding, the expectations of its original proponents.

Since its beginnings the Institute has grown in size and sophistication. Sometimes I think about it like a complicated clock, with our timely outputs in the form of medico-legal reports and expert opinions, research, teaching and tissue for transplantation dependant on the support of a range of unique interlocking mechanisms. Specialised teams in the Corporate Services Division of the Institute, for which I am responsible, embody some of those mechanisms. The Corporate Services teams work closely with, and are proud to support, the important work of their operational colleagues. This is a brief description of some of the things they do:

- » Human Resources and Organisational Development manage the employment of a range of specialist medical, scientific, nursing and corporate staff

(employed as both VPS and under an enterprise bargaining agreement for medical practitioners) as well as overseeing staff wellbeing and occupational health and safety programs in an often stressful and confronting environment.

- » Quality and Improvement ensure that the Institute maintains its laboratory and Donor Tissue Bank accreditations under its technical regulatory framework, assess and mitigate the significant risks in this operational environment, manage and respond to complaints and incidents, as well as continually seeking safer and more efficient work practices.
- » Finance provide nuanced budget advice to help us secure the necessary funds to keep the Institute's wide-ranging operations going as well as processing an enormous number of operational transactions. They manage our complex budget, at a time when the government continues to seek efficiency measures despite the workload of the Institute continuing to grow with the Victorian population.

- » Legal, Governance and Policy ensures that the Institute operates legally and ethically within our complex legal framework of more than 50 statutes, provides corporate support to the VIFM Council and committees and works closely with our counterparts at the Coroners Court to ensure a seamless and efficient service to the community on joint operational issues.
- » The Information Communications Technology team builds, maintains

Chief Operating Officer's Report

Ms Mari-Ann Scott

and develops the bespoke case management systems that underpin all of the Institute's forensic operations, as well as ensuring the security of our highly sensitive case information, providing IT services to the Coroners Court and integrating our new records management system.

One aspect of our work over the last 12 months that I would like to highlight is the evolution of the Institute's electronic case management system (the iCMS) for our coronial work. From the very early days of the Institute this system was developed in-house at the VIFM to support our operations from the reporting of a death, through the medico-legal investigation, identification of the deceased, scientific testing, family contact and release of the deceased person. The iCMS now comprises over 1500 individual computer screens accessed by staff across the building so that they can perform their part in the long chain of actions that follow a body being admitted to the mortuary. This system embeds quality and mitigates risk.

It is time for a generational change to bring the iCMS up to the standards expected across government. We have conducted a wholesale review of the current system and examined options to achieve a complete restructure of the foundation architecture. This will be a key strategic decision to be determined in the coming 12 months.

Finally we are seeking a transformation of the way we record and access data. Information security is a constant challenge and we have engaged a cyber security analyst. We are also working to improve our data quality and to ensure its accessibility. In addition, we have recently implemented a new electronic records management system that provides our staff with a comprehensive solution for managing the creation and maintenance of records throughout the documents' life cycle, from creation to disposal.

I hope you enjoy reading about our efforts across the Institute over the past 12 months.

In Memory of Professor Vernon D Plueckhahn OBE, AM

By Professor Kerry Breen

Victoria has lost one of its most respected citizens with the passing of Vern Plueckhahn who died in July 2019 at the age of 98. Born in Riverton in rural South Australia in March 1921, and descended from German Lutheran migrants who arrived in Adelaide in the 1840s, Vern was raised on his parent's farm. After his father suffered a serious accident, the family moved to Adelaide where Vern spent his teenage years. He attended Adelaide High School and did well. When he was 14 his mother became very ill, dying at home of breast cancer during Vern's last year at school. Within a year, his father remarried and moved back to the country, leaving Vern to fend for himself.

Harboring thoughts of becoming a doctor but knowing that he could not afford to study full-time, he worked as a laboratory technician at Adelaide's Institute of Medical and Veterinary Science (IMVS). At the same time, he became a part-time science student at the University of Adelaide. His first job at the Institute in 1937 was to be the "lab boy" for the new Director, Dr Weston Hurst, who had recently arrived from the UK. Later Vern acknowledged how much Hurst had taught him about attention to detail and precision in laboratory medicine. He remained at IMVS until 1941 by which time he had completed two and a half years of his science degree.

The direction of his career was strongly influenced by the outbreak of World War II. In 1940 he had sought to enlist in the Air Force but was not accepted because he was working in an essential service. He tried again in 1941 and joined the Army. Because of his five years of

laboratory experience and his university studies, he was soon made a sergeant and allocated to the hospital ship Wanganella, a converted passenger liner. He was placed in charge of the pathology laboratory on the ship which he ran single-handedly for four years. This was not an entirely safe place to be. Despite international conventions, the ship was attacked twice as were two other Australian hospital ships, one of which was sunk with the loss of over 200 lives. Duty on the Wanganella took him to Singapore, South Asia, the Middle East, the Mediterranean and the South Pacific. He was discharged from the Army in 1945 as the war was coming to a close. However, this did not represent a complete break from the armed forces as he then joined the Citizen Military Forces where he served for 18 years, rising to the level of Colonel at the age of 38.

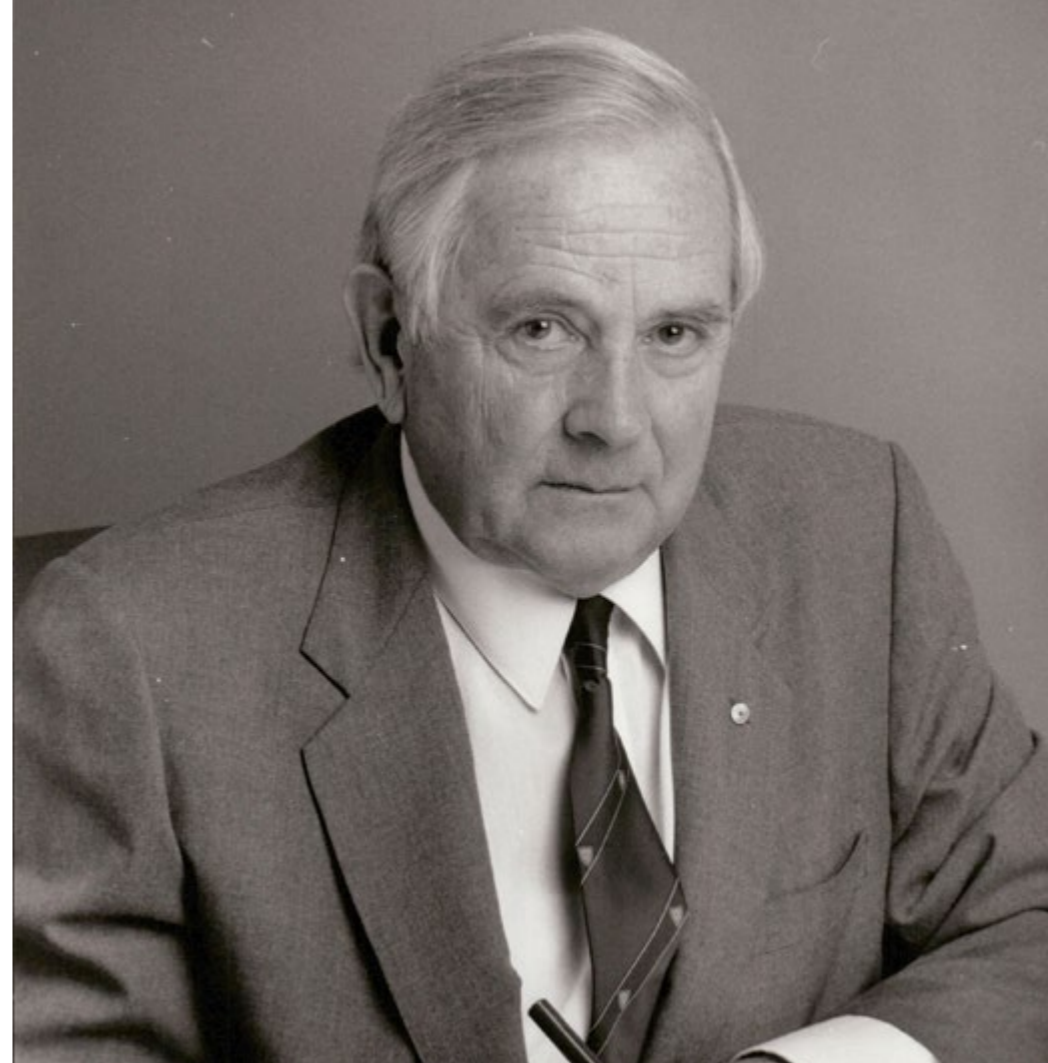
Benefitting from government assistance for returned military personnel, he enrolled in medicine at the University of Adelaide. He was exempted from the first year of the course so he graduated in 1949, winning prizes in clinical medicine, obstetrics and public health, and being ranked third in his year overall. After a year as an intern at the Royal Adelaide Hospital and six months at the Adelaide Children's Hospital, he became assistant pathologist at the Royal Melbourne Hospital (RMH) to Dr Douglas Hicks. His thinking was that this would give him the time to study for his specialist physician exams, and he was indeed successful at these.

Towards the end of two years at RMH, he was invited by Dr John Lindell, who had recently been appointed head of the

Hospitals and Charities Commission, to take on the challenge of heading an expanded regional pathology service at Geelong Hospital. In 1954 at the age of 32, he assumed this role and remained as head until compulsory retirement in 1986. In the intervening years he built a pathology department that was the pride of Geelong Hospital and its medical staff and arguably the centre of the hospital's intellectual life. It became a popular place for training laboratory technicians, in whom Vern took special interest, and for training doctors to become pathologists.

The level of innovation he promoted and the scale of its service activity soon placed it in the leading rank of pathology departments nationally. During a two year period when he also served as Acting Director of Medical Services of the Hospital he was instrumental in it becoming a clinical school for medical students from Monash University, a development that had lasting benefits for the hospital and the people of Geelong.

At the time of his appointment to Geelong Hospital, its mortuary served also the Geelong Coroner, thus providing the unexpected opportunity for Vern to develop into one of Australia's best known and highly respected forensic pathologists. He grasped the opportunity to undertake ground-breaking research including studies to validate blood alcohol measurements made at autopsy and documentation of the critical role of alcohol misuse in deaths by drowning in boating and swimming accidents. Working closely with his microbiologist Joan Banks, he undertook a study of "golden



staph" infection and its prevention with PhisoHex emulsion in newborn babies at the Geelong Hospital Maternity Wing, a study that eventually involved over 80,000 babies and their mothers. He became internationally recognised for this work and when questions arose about the possible toxicity of PhisoHex, he was invited to testify to the FDA in the USA. He also gave expert evidence in four trials in the French courts relating to a tragic accident when a harmless baby talcum powder was inadvertently contaminated with hexachlorophene (the ingredient of PhisoHex) and 30 babies died.

He was frequently asked to give expert forensic evidence in courts around Australia. Most notably he appeared for the defence in the 1982 trial of Lindy Chamberlain in the Darwin Supreme Court for the murder of her infant daughter, Azaria. At the trial, the jury preferred the evidence of a UK forensic pathologist over his. Plueckhahn regarded the conviction of Lindy Chamberlain as the gravest miscarriage of justice in Australian legal history and offered his services pro bono to assist in the subsequent appeals and the Royal Commission into the conviction.

His views were finally heeded as the Royal Commissioner was highly critical of the UK pathologist and accepted the evidence given by Plueckhahn.

He taught pathology and forensic medicine at the University of Melbourne, served as President of the Victorian Branch of the Australian Medical Association and as President of the Royal College of Pathologists of Australasia. He was a prolific writer contributing over 90 articles to the medical literature, authoring two editions of a textbook on forensic pathology and co-authoring three editions of a textbook on medical ethics, law and professionalism. In 1979 he was made an Officer of the British Empire and in 1989 a Member of the Order of Australia.

Vern Plueckhahn gave a lasting legacy to the people of Victoria in the form of the Victorian Institute of Forensic Medicine which recently celebrated 30 years of existence. Vern had railed against the appalling conditions at the 'morgue' and coroner's court in Flinders Street Extension. He spent 15 years campaigning for his compelling vision and eventually convinced the new Labor

Attorney-General Jim Kennan, and the Premier John Cain, to take action. The result was a state-of-the-art mortuary and laboratory complex co-located with a new coroner's court in Southbank which was opened in 1988. His vision included the concept that the Institute would (against government policy) be a statutory authority, and also be active in training and research.

He successfully negotiated for the Institute to be a part of the Faculty of Medicine at Monash University with the Director of the Institute also being the Professor of Forensic Medicine at Monash. (He would also be the first to acknowledge the crucial roles of The Hon John Phillips, Professor Graeme Schofield and Dr Gad Trevaks in these developments). And he was acting Director of the Institute for several months pending Professor Stephen Cordner's arrival to take up this position in May 1987.

In 1953, just before his move to Geelong, Vern married Ann Roark at Trinity College Chapel in Parkville. This was to be a long, happy and successful partnership. They soon built a family home in Geelong where they raised four children and where friends were generously entertained. Despite a heavy workload and much travel, Vern made his family his first priority, perhaps a reflection of missing something in his own family life in his later teenage years. Not an overtly religious man but a highly moral one, Vern continued a Lutheran practice of reading the Bible every evening. Sadly his wife Ann predeceased him in 2012 as did his sister Edna who died in Canada in 1998. He is survived by his younger brother Glen and his four children, Debra, Sally, David and Rick.

Editor's note: This obituary was kindly written by Professor Kerry Breen. He is Professor Plueckhahn's biographer and 'A Passion for Justice: The life and times of Vernon Plueckhahn' has very recently been published by Australian Scholarly Publishing. Copies are available by email to enquiry@scholarly.info or at the publisher's website: www.scholarly.info.

In addition, Prof Stephen Cordner delivered the eulogy at Professor Plueckhahn's funeral, and it can be read on the VIFM's website: www.vifm.org.



Corporate Governance

The Hon. John Coldrey AM QC

Foundation

The Institute is established as a body corporate with perpetual succession by the *Victorian Institute of Forensic Medicine Act 1985* (“the VIFM Act”). The VIFM Act sets out the Institute’s objects, functions and powers which include the provision of forensic pathology and related services in Victoria; the provision of clinical forensic medicine and related services to Victoria Police; the provision of tissue banking services; the provision of services in the investigation of a death reported to the coroner; the provision of undergraduate and postgraduate training in forensic pathology, medicine and science; and conducting research in the fields of forensic pathology, medicine and science.

The VIFM Council

The VIFM Act provides that the governing body of the Institute is the VIFM Council. The Council may regulate its own proceedings and the Council Charter provides the framework for its governance. As a Victorian Public Sector Entity, the VIFM operates in accordance with the provisions of Part 5 of the *Public Administration Act 2004* and the *Financial Management Act 1994*.

Council Composition

The VIFM Act provides that the Council comprises 13 members. The members of Council, other than the Director and the State Coroner, are appointed by Governor-in-Council. The Attorney-General appoints the Chairperson. The members of the Council are:

- » the Director of the Institute (ex officio)
- » the State Coroner (ex officio)
- » a nominee of the Council of the University of Melbourne
- » a nominee of the Council of Monash University
- » a nominee of the Minister for the time being administering the *Health Services Act 1988*
- » a nominee of the Minister for the time being administering the *Victoria Police Act 2013*
- » a nominee of the Chief Justice
- » two nominees of the Attorney-General, at least one of whom is a Fellow of the Royal College of Pathologists of Australasia
- » a nominee of the Chief Commissioner of Police
- » a nominee of the Minister for the time being administering Part II of the *Community Services Act 1970*
- » a nominee of the Minister for the time being responsible for women’s affairs in Victoria, and;
- » one other person who has knowledge of, or experience in, accountancy or financial management.

The Executive Officer to Council is the VIFM’s Chief Operating Officer.

Council Committees

The Council has four committees to ensure compliance with legislative, accreditation and other regulatory requirements.

- » The Executive and Finance Committee
- » The Audit and Risk Management Committee
- » The VIFM Ethics Committee
- » The Donor Tissue Bank Committee

The composition and terms of reference of these committees is included in Appendix C.

The VIFM Act provides that the Council comprises 13 members. The members of Council, other than the Director and the State Coroner, are appointed by Governor-in-Council. The Attorney-General appoints the Chairperson.

The Honourable John Coldrey AM QC

*Council Chairman
Nominee of the Attorney General*

Since becoming a barrister in 1966 John Coldrey has contributed to many different areas of the legal profession throughout Australia. Following his appointment as the Director of Public Prosecutions for Victoria in 1984 he became a Justice of the Victorian Supreme Court in 1991 where



he served until 2008. He was also active in the Northern Territory where in his role as the Director of Legal Services for the Central Land Council he was involved in the grant of Aboriginal title to Uluru as well conducting Aboriginal land claims and negotiating major industry agreements with the Northern Territory Government and mining companies.

John Coldrey has written numerous major conference papers and legal publications relating to the operation of the criminal law. He has been a member of various committees and councils including chairing the Consultative Committee on Police Powers of Investigation. In 2004, John Coldrey was awarded the Gold Medal of the International Society for Reform of Criminal Law (of which he is a Board member) in recognition of his contribution towards criminal law reform. He is an Honorary Life Member of the Criminal Bar Association of Victoria and has served as a judicial member of the Forensic Leave Panel and the Adult Parole Board of Victoria.

In 2011 the Victorian Bar Council created 'Coldrey Chambers' – a set of barristers' chambers named in his honour. In 2013 John Coldrey was made an Honorary Fellow of Monash University. In 2019 John Coldrey was appointed as a Member (AM) in the General Division of the Order of Australia for significant service to the law and to the judiciary, to legal reform, and to the community. He joined the VIFM Council in 2008.

Professor Noel Woodford

*Ex Officio Council Member
Executive and Finance Committee Member
Ethics Committee Member
Director*



Professor Noel Woodford is the Director of the VIFM, a position he has held since July 2014. He first joined the VIFM in 1998 as a Fellow in Forensic Pathology, after training in anatomical pathology at the Alfred and Royal Melbourne Hospitals. In 2000 he worked as a senior lecturer in forensic pathology at the University of Sheffield, returning to the VIFM in 2003. In 2008 Noel was appointed Head of Forensic Pathology.

He is a Fellow of both the Royal College of Pathologists of Australasia and the Royal College of Pathologists (UK). He holds the Diploma of Medical Jurisprudence from the Society of Apothecaries of London, and gained a Master of Laws from Cardiff University during his time in the UK. Noel is an examiner for the RCPA and RANZCR and vice-chair of the Forensic Pathology Advisory Committee of the College. Noel has a particular interest in sudden unexpected natural adult death and the application of radiological techniques in forensic pathology.

Ms Tracy Beaton

Nominee of the Minister for Community Services



Tracy Beaton is the Chief Practitioner and Director of the Office of Professional Practice at the Department of Health and Human Services. She leads the Office to promote and safeguard the rights, best interest and quality of life of vulnerable Victorians through practice leadership and development. Tracy provides expert advice, consultation and leadership to review of complex cases, impacting children and families in child protection, and others in need of human services.

Professor Glenn Bowes AO

Nominee of the Council of the University of Melbourne

Professor Glenn Bowes is Associate Dean (Advancement) and a Professor of Paediatrics in the Faculty of Medicine, Dentistry and Health Sciences at The University of Melbourne. He completed his medical degree and PhD at Monash University and his postdoctoral fellowship at the University of Toronto. Glenn was Director of Respiratory Services at the Alfred Hospital in Melbourne where he developed Australia's first adult cystic fibrosis program in the early 1980s. He was recruited to Australia's premiere children's hospital, the Royal



Children's Hospital Melbourne, in the early 1990's to establish the nation's first clinical, academic program in youth health, the Centre for Adolescent Health, and become the inaugural Professor of Adolescent Health at the University of Melbourne. During 16 years at the Royal Children's Hospital campus Glenn held a range of executive leadership roles including Chief Medical Officer, Executive Director and more recently Stevenson Professor of Paediatrics and Head of Department of Paediatrics.

Glenn has been a board member of many organisations committed to serving children and young people. These include Mentone Grammar, President and Camp Chief of a youth leadership development organisation, Lord Somers Camp and Power House, and an elected member of the Council of the University of Melbourne. He is currently a Board Director of St Michael's Grammar School. He was appointed an Officer in the General Division of the Order of Australia (AO) in 2016 for his distinguished service to medical education and its administration, to the advancement of child health and welfare, and through contributions to government and professional organisations.

Professor Robert Conyers

*Nominee of the Attorney-General
Executive and Finance Committee Chairman
Audit and Risk Management Committee Chairman*

Bob Conyers is a graduate in medicine, science, research and business. He undertook his medical specialist, pathologist training in Sydney becoming a Fellow of the Royal College of Pathologists of Australasia. He was awarded a Nuffield Medical Fellowship at Oxford University to undertake research into the regulation of carbohydrate metabolism and gained his Doctor of Philosophy degree there. He has held the positions of: Senior Consultant Pathologist and Head of the Metabolic Research Group at the Institute of Medical and Veterinary Science, Adelaide; Director of Biochemistry, Alfred Hospital and Head of the Cardiac Metabolic Laboratory, Baker Medical Research Institute; Executive Director of Pathology for the North West Health Care Network (which included pathology



services at Royal Melbourne and Western Hospitals); Executive (Group) Medical Director for the Gribbles Group in Australasia; and Clinical Director, Chemical Pathology - Victoria, St John of God Pathology.

Bob has held senior positions on major hospital committees, in professional and scientific associations, and on peak government advisory committees in relation to diagnostic pathology and animal welfare. He has been a non-executive director on the Council of the Royal College of Pathologists of Australasia and on the Board of the Australian Medical Association of Victoria. He is an Adjunct Professor in the Department of Forensic Medicine, Faculty of Medicine, Nursing and Health Sciences, Monash University.

Bob's metabolic and nutritional research has been into oxalate kidney stones, cancer wasting, energy metabolism in sports, and metabolic support of the heart in surgery and transplantation. He holds a Masters degree in Business Leadership and is a Fellow of the Australian Institute of Company Directors. He has been made a Fellow of the Victorian Institute of Forensic Medicine and a Fellow of the Australian Medical Association.

Mr Luke Cornelius APM

*Nominee of the Chief Commissioner, Victoria Police
Member, Donor Tissue Bank Committee*

Assistant Commissioner Luke Cornelius is Victoria Police's longest serving Assistant Commissioner. He joined Victoria Police in 2003, following 14 years' service as a federal agent with the Australian Federal Police. A qualified solicitor and barrister, AC Cornelius' first appointment with Victoria Police was as Commander, Legal Services Department.

He was promoted to Assistant Commissioner, in charge of the Ethical Standards Department (now called Professional Standards Command), in 2005. He went on to lead Southern Metro Region before heading up Victoria Police's response to the VEOHRC Review into sex discrimination and sexual harassment.



His distinguished service to policing, both federally and in Victoria, was officially recognised in the 2010 Australia Day Honours when he was awarded the Australian Police Medal (APM) for contribution to police reform, the promotion of ethics and integrity in policing, human rights, engagement with vulnerable communities and for capacity building in East Timor.

He has also been awarded the National Police Service Medal, National Medal, Police Overseas Service Medal, United Nations Medal for service in East Timor and a Commissioner's Commendation for outstanding service while serving with the United Nations Transitional Authority in East Timor.

The founding Chief Executive Officer of the Police Federation of Australia, he also served as the National Secretary of the Australian Federal Police Association. AC Cornelius is a member of the Victoria Police Command and is the Chief Commissioner's representative on the Blue Ribbon Foundation Board.

AC Cornelius holds a Masters of Public Administration: Executive (Monash), an Honours Degree in Law: First Class (Flinders), a Graduate Diploma in Legal Practice (ANU) and is admitted to practice in the ACT Supreme Court. In April 2019, AC Cornelius was appointed Assistant Commissioner, North West Metro Region.

Mr Tim Fitzmaurice

*Nominee of the Chairman
Member, Executive and Finance Committee Member, Audit
and Risk Management Committee Donor Tissue Bank
Committee Chairman*



Tim Fitzmaurice is a qualified accountant and a fellow of the Certified Practising Accountant (FCPA) and holds a Graduate Diploma in Risk Management and Business Continuity. He is a member of the Australian Institute of Company Directors (AICD) and Risk Management Institute of Australia (RMIA). Tim manages his own management consulting practice in organisational governance and compliance, financial and risk management. He previously held senior financial and risk management executive roles at the Transport Accident Commission (TAC) until his retirement in December 2017.

Dr Lee Hamley

Nominee of the Minister for Health



Dr Lee Hamley has been working in public hospital management in Victoria for over 20 years in medical administration and general management. In July 2006 she joined Alfred Health as Executive Director Medical Services at The Alfred & Chief Medical Officer Alfred Health. Her previous senior appointments include at Eastern Health as Chief Medical Officer and General Manager of Acute Services at Box Hill Hospital and before that in similar roles at Northern Health. Lee's current role includes professional responsibility for Alfred Health's medical staff and responsibility for diagnostic services, pharmacy, medical workforce, medical education, clinical governance and legal support services.

She is the Executive Director responsible for patient safety and quality and chairs a number of committees including the Alfred Health Infection Prevention Committee.

Judge Sara Hinchey

*Ex Officio Council Member
State Coroner to August 2019*



County Court Judge Sara Hinchey was the Victorian State Coroner until August 2019. Prior to her appointment as a County Court Judge in May 2015, her Honour had extensive experience as a barrister, appearing in numerous high-profile inquests, as well as maintaining a broad-ranging practice including commercial law, occupational health and safety, corporate crime, professional negligence and professional disciplinary matters.

Her inquisitorial experience included briefs in relation to the Royal Commissions into Institutional Responses to Child Sexual Abuse and the 2009 Victorian Bushfires. Throughout her career, her Honour regularly appeared in the higher courts of Australia including the Federal and High Courts.

Justice Elizabeth Hollingworth

Nominee of the Chief Justice



Elizabeth Hollingworth studied law in Western Australia, and as a Rhodes Scholar at Oxford. She was a solicitor for four years, until she joined the Victorian Bar in 1991. She was appointed senior counsel in 2002.

She is a current or past member of various bodies, including the International Commission of Jurists, the Council of Legal Education and the Public Interest Law Clearing House. She is a Senior Fellow at the University of Melbourne, a Fellow of the Australian Academy of Law, and an Honorary Fellow of St Edmund Hall, Oxford.

She has taught judges, practitioners and students in a broad range of subjects, including advocacy, evidence, procedure and judgment writing. Appointed a judge of the Supreme Court of Victoria in 2004, she sits in criminal and civil trials and appeals. She is the Principal Judge in the Criminal Division of the Supreme Court.

Dr Debbie Kirkwood

*Council Member
Nominee of the Minister for Women's Affairs*



Dr Deborah Kirkwood has worked in a range of roles in universities, government and non-government organisations. From 2006 to 2016 Deborah was the Senior Researcher at the Domestic Violence Resource Centre Victoria and during this time she was also Adjunct Research Fellow in the School of Social Sciences at Monash University (2013-2016). Currently, Deborah is a Senior Researcher at the Australian Institute of Family Studies.

Deborah has undertaken extensive research and policy work on family violence related issues including intimate partner homicide, filicide, homicide law reform, the long-term support needs of victim/survivors, service responses to family violence, family dispute resolution, family violence risk assessment and child protection. Deborah has written extensively on family violence topics and presented this information to a broad range of audiences including Victorian Magistrates as part of the Magistrates Family Violence Program. Deborah has been involved in family violence policy developments through membership of Advisory and Steering Committees for the State Government and the Victorian Law Reform Commission.

Professor Christina Mitchell

*(Three year term expired 27 July 2018)
Nominee of the Council of Monash University*



Christina Mitchell is the Vice President and Dean, Faculty of Medicine, Nursing and Health Sciences at Monash University. Christina trained as a physician scientist specialising in Clinical Haematology. She received her medical training from the University of Melbourne and consultant training in Haematology at the Alfred Hospital, Melbourne. Her advanced clinical training in Haematology included a PhD characterising the natural anticoagulants protein C and protein S. Her post-doctoral studies were undertaken in the field of intracellular signalling at Washington University Medical School, St Louis, USA.

In 1999 she was appointed Professor and Head of the Department of Biochemistry and Molecular Biology, Monash University and, in June 2006, was appointed Head of School of Biomedical Sciences at Monash University. In June 2008, she was awarded the position of Sir John Monash Distinguished Professorship in recognition of her contribution to Research at Monash University. In October 2011, she commenced as Dean of the Faculty of Medicine, Nursing and Health Sciences Monash University. Her current research is focussing on characterising novel tumour suppressor genes in breast and prostate cancer that regulate oncogenic PI3-kinase signalling.

Professor John McNeil AO

(term commenced July 2018 – resigned in May 2019)
Nominee of the Council of Monash University



Professor McNeil is Sir John Monash Distinguished Professor at Monash University. He was Head of Monash University's School of Public Health and Preventive Medicine (SPHPM) and Head of the Department of Epidemiology & Preventive Medicine at the Alfred Medical Research Precinct until early 2019. His research activities have involved the application of epidemiological methods to problems in clinical medicine and public health. He is Principal Investigator of the ASPREE study which included over 19,000 healthy elderly participants and demonstrated that low dose aspirin offers no benefit in this age group for primary prevention. In 2019 he was awarded Officer of the Order of Australia in recognition of his services to public health. Professor McNeil resigned from the VIFM Council, subsequent to stepping down as Head of SPHPM.

Mr Neil Robertson PSM

Nominee of the Minister of Police and Emergency Services
Executive and Finance Committee Member
Audit and Risk Management Committee Member

Neil Robertson is currently working as a consultant principally in the areas of justice policy and governance.

Neil previously worked in the Department of Justice for over 20 years in a variety of roles including as Executive Director, Criminal Justice Strategy and Coordination, Deputy Secretary, Emergency Management and inaugural Chief Executive of Emergency Management Victoria, Executive Director, Police and Emergency Management and Director, Criminal Law Policy.



Before joining Justice, Neil was the Manager, Executive Support in the Chief Commissioner of Police's office. Neil has a Bachelor of Arts (Honours) and Bachelor of Laws from Monash University, Graduate Diploma in Business Administration from Swinburne University of Technology, and Executive Masters in Public Administration from the Australian and New Zealand School of Government. He is also a Fellow of the Williamson Community Leadership Program and, from 1993 to 2012, was a Director and Company Secretary of Crime Stoppers Victoria Ltd.

Neil was awarded a Public Service Medal (PSM) in the Queen's Birthday Honours in 2011 "for outstanding public service and leadership through the provision of innovative legal policy in a diverse range of areas". These areas include criminal law reform – particularly relating to family violence, organised crime, counter terrorism and evidence – corrections, and emergency services. His PSM citation also recognised his "exemplary support to Government in responding to and implementing the report of the Bushfires Royal Commission".

Ms Mari-Ann Scott

Executive Officer to Council, Chief Operating Officer, VIFM
Executive and Finance Committee Member

Mari-Ann Scott is the Chief Operating Officer (COO) of the VIFM. She joined the Institute in 2007, and was responsible for securing government funding which saw the doubling of the operating budget for forensic operations, and \$38 million to rebuild the VIFM's facilities.

As COO Mari-Ann reports to, and works in close partnership with the Director. This "two at the top" model means that the VIFM's Director takes the primary responsibility for building the



organisational vision, policy, strategy, service delivery outputs and external relationships.

The COO provides day-to-day leadership of the Institute, as well as supporting and advising the Council and the Executive & Finance Committee on corporate governance and financial and risk management. Mari-Ann is the VIFM Council's Executive Officer (Board Secretary).

Prior to joining the VIFM Mari-Ann held the role of Relationship Manager in the Budget and Financial Management Division of the Department of Treasury and Finance. Before that she worked in a number of other senior roles in government and the health sector. Her areas of expertise and interest include leading and improving operational performance, strategic planning, corporate governance and organisational relationship management.

Mari-Ann is an economist by training. She holds a Master of Philosophy Degree in Health Economics and is a Member of the Australian Institute of Company Directors.

Fellows of the VIFM

VIFM acknowledges the Fellows of the VIFM:

- » Robert Conyers
- » John Phillips AC QC
- » Vernon Plueckhahn AO, OBE
- » Graeme Schofield OBE
- » Gad Trevaks AM
- » Marilyn Warren AC QC

INTRODUCTION

In this era of advanced technology and connectivity it might be expected that Australia has a sophisticated, co-ordinated and national approach to the identification of long-term missing persons. Sadly, until very recently, this has not been the reality. For many decades the timely resolution of missing persons cases has been hampered by the absence of a systematic state and national approach to the investigation of unidentified human remains.

Now however, tangible improvements in the identification of long-term missing persons at state and national levels are underway. Despite these incremental improvements, much more remains to be done to bring comfort to families who have been left in limbo, wondering about the welfare and whereabouts of their missing family member.

As a frontline agency with expertise in death investigation, the VIFM conducts medical examinations of unidentified human remains. The VIFM is working closely with Victoria Police and the Coroners Court of Victoria to bring greater co-ordination to missing person information collected by police (from families who report missing relatives) and by the VIFM (where medical examinations of unidentified human remains are conducted).

38,000 people are reported as missing to police every year. - For many decades the timely resolution of missing persons cases has been hampered by the absence of a systematic state and national approach to the investigation of unidentified human remains.

MISSING

COLLABORATING TO IDENTIFY LONG-TERM MISSING PERSONS

THE IMPACT ON THOSE LEFT BEHIND

All missing persons leave behind a network of family, friends and colleagues who occupy an agonising space between hope and grief – hoping that they will see their missing family member again, but as time passes without any news of them, fearing that they are dead. Families often confront an endless cycle of questions as they navigate unfamiliar police processes and the coronial system. Many families feel a lack of control over the investigation into their loved one's disappearance, which is exacerbated by their unresolved grief.

Families feel simultaneously helpless and hopeless as they cope with the emotional, psychological and financial impacts associated with not knowing the whereabouts of a missing relative. Many families are also tasked with keeping practical aspects of the missing person's life going, in the hope that they will return.

The reasons for a disappearance may be complex and are often misunderstood by the community. Most families struggle to find adequate professional support, and knowing what to say and how to best assist a family in this situation, is a real community challenge. There is currently no model of counselling that adequately addresses the specific needs of families coming to terms with the consequences of not knowing what has happened to their loved one.

In the initial stages of a search for a missing person, police or the family may decide to enlist media assistance in the hope of a speedy resolution. Some families make posters and flyers, use social media or even hire a private investigator if they feel that the police investigation has stalled. Some families say that these actions create a sense of momentum and help to mitigate their feelings of helplessness.

Many families describe being on an emotional rollercoaster as they are left with unanswered questions and struggle to move forward with their lives. Family occasions such as birthdays and special events are put on hold and socialising becomes increasingly challenging, as the daily hope that their loved one will walk through the front door again becomes their primary focus.

THE COMPLEXITY OF MISSING PERSON INVESTIGATIONS

The task of tracing missing persons is complex and very challenging. In Australia more than 38,000 people are reported as missing to police every year, and fortunately the majority safely reappear within a short period of time. Those who are missing for more than three months are deemed 'long-term' missing persons and at present there are more than 2,000 long-term missing persons in Australia.

The VIFM currently houses the unidentified remains of 23 people, and more than 20 unidentified bodies have been buried since 1985. It is certainly possible that families have registered some of these unidentified individuals as missing persons with police around the country. However without a systematic state and national long-term missing persons approach, these registrations may not have been shared with the VIFM, impacting on the likelihood of the Institute making a match with the deaths they are investigating.

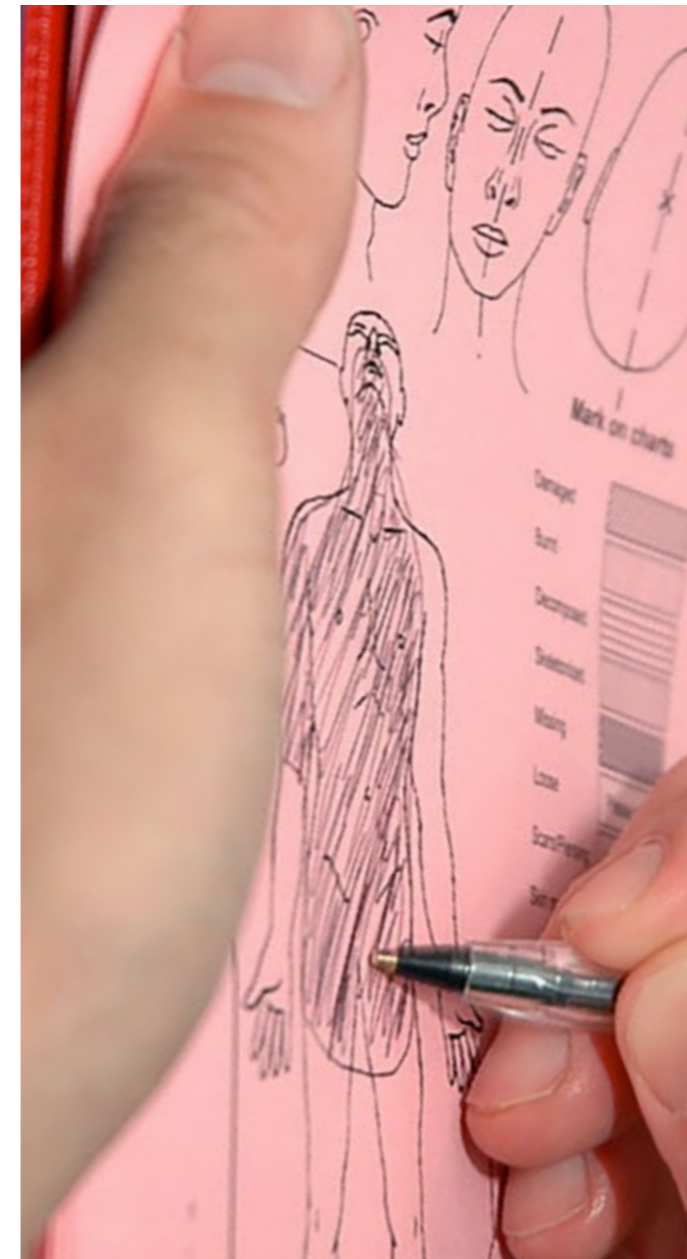
The shortcomings of Victoria's fragmented process for identifying missing persons were clearly demonstrated in the 2006 coronial inquest into the death of Matthew Joseph Bibby. Matthew drowned in the Yarra River on 10 November 1996 and his body was recovered six days later. However his body remained unidentified for almost nine years due to an inability to match the missing persons records held by the police with the forensic medical information held by the VIFM. State Coroner Graeme Johnstone expressed his frustration in his finding:

"Clearly, resources were then, and are now still necessary to ensure that families like the Bibby's are not further traumatised by unnecessary delays in the identification of the bodies of their loved ones. We should be using our technology, investigators and forensic experts to do much of this work. The technology exists; the investigators exist; the expertise exists."

Following the Matthew Bibby finding, Victoria Police ran Operation Belier from 2007 to 2011 which centralised the collation of missing person information and assessed 220 cases of unidentified human remains (including ten exhumations) against 523 missing person cold cases dating from 1960 to 2005. Victoria Police and the State Coroner's Office signed a protocol in 2007 to provide a framework for co-operation between notifications of unidentified human remains and long-term missing person cases where a death is suspected.



The VIFM shares this expertise by teaching Disaster Victim Identification and management of the dead in disasters in Australia and overseas through our strong international program.



THE ROLE OF FORENSIC SCIENCE AND MEDICINE IN IDENTIFYING MISSING PERSONS IN DISASTERS

The successful investigation of long-term missing persons and unidentified human remains relies strongly on scientific and medical expertise. The core of human identification is the reconciliation of information gathered from friends, family and health care providers with post-mortem information gleaned from a thorough forensic medical examination of human remains. These comparisons involve visual identification of belongings or other things associated with the remains, fingerprints, medical records, dental records and DNA profiling.

The VIFM is at the leading edge of forensic medical and scientific practice, and expertise in human identification is a core part of the Institute's service. The Institute's forensic medical and scientific experts in the fields of forensic pathology, radiology, odontology, anthropology, molecular biology (DNA) and toxicology work together to collect, manage, analyse and interpret technical forensic medical ante-mortem and post-mortem data.

The ability of the Institute's experts to identify the deceased comes to the fore where there are multiple victims from one event, such as in a car accident or house fire, and the Institute is required to accurately validate the identification of each individual. The VIFM specialists have developed significant expertise through responding to disasters involving mass loss of life both in Australia and overseas, as the concepts and processes for identification applied in a mass disaster event are essentially the same for missing person investigations.

International deployments are often at the request of the Australian Government, especially when Australian citizens are involved in a disaster event. Each deployment allows the VIFM to explore new ways of working and provides the Institute's experts with critical operational experience.

The VIFM shares this expertise by teaching Disaster Victim Identification (DVI) and management of the dead in disasters in Australia and overseas through its strong international program. Working with colleagues around the world in the Institute's small and highly specialised disciplines ensures that the VIFM maintains and grows its expertise. Today the VIFM is strongly represented at the annual INTERPOL DVI meetings through the Pathology and Anthropology Sub Working Group (PASWG), helping to refine and improve the international systems used to identify the victims of mass fatality incidents.

LESSONS IN IDENTIFICATION LEARNT FROM THE 2009 VICTORIAN BUSHFIRES

Closer to home, 2019 marks ten years since Victoria's devastating heatwave and bushfires. In January 2009 Victoria was gripped by an intense heatwave that resulted in 374 deaths, with more than 100 deaths being reported to the coroner. The heatwave death investigations meant the resources of the Institute were already stretched thin on 7 February 2009 (Black Saturday) when bushfires tore through 78 Victorian townships. The bushfires killed 173 people, injured 390 and destroyed 2,500 homes.

Immediately following the fires the careful and respectful retrieval of the deceased was an urgent priority. Police teams went to 145 sites and generated 300 DVI cases (each case represented possible human remains from one person). The remains were brought to the VIFM where a temporary mortuary had been established for the process of forensic examination and identification.

The INTERPOL DVI process was initiated, and over a period of weeks the VIFM assumed responsibility for nearly 300 DVI cases (representing ultimately 163 deaths, the remaining nine people dying in hospital, and sadly the remains of one person were never found). Three months after Black Saturday, the painstaking process of reconciliation and checking case information was completed, allowing the Identification Board, chaired by the State Coroner, to formally finalise the identification of 163 deceased people. Following identification, the bushfire victims were returned to families for burial. In some cases it was also possible to identify deceased pets and other animals that were found with the human victims.

The 2009 bushfires DVI response called on the VIFM's expertise in methods of identification as many of the deceased were severely compromised by the effects of fire.

The important role of forensic experts at the scene of the death was acknowledged during the debriefing exercise. Police teams were joined by forensic experts (pathologists, odontologists, anthropologists and mortuary scientists) to revisit 86 scenes to ensure that no human remains were overlooked, and generated an additional 56 DVI case numbers. In the ten years since, no remains attributed to Black Saturday have been found and handed into police, indicating that this process of retrieval was very successful.



Immediately following the fires the careful and respectful retrieval of the deceased was an urgent priority. Police teams went to 145 sites and generated 300 DVI cases (each case represented possible human remains from one person).

Forensic radiology proved to be critical to the DVI process and all body bags were subjected to CT scanning prior to being opened. The CT scan provided an immediate and general overview of the deceased and in many cases allowed for rapid determination of sex, age estimation, disease processes, assessment of commingling, as well as the discrimination of animal remains and the location of medical devices or foreign objects.

Forensic odontology played a significant role in validating the identities of many of the bushfire victims through matching post-mortem data with dental records of the missing persons. Forensic odontologists were able to identify dental evidence at the fire sites and to ensure that fragile remains were carefully preserved for transportation. Odontologists also assisted police in the collection of ante-mortem dental records by liaising directly with local dentists to request all relevant documentation for each deceased person.

The VIFM's DNA profile analysis was used in the identification of 67 people despite the challenges of DNA extraction from remains compromised by extreme temperatures. In cases where it was difficult to find close relatives to provide reference samples for comparison, the VIFM's Molecular Biology Laboratory was able to use neonatal screening cards (also known as Guthrie cards). These cards hold a drop of blood taken at birth from most babies born in Victoria since 1966. They are used to screen for disorders such as cystic fibrosis and congenital hypothyroidism.

The 2009 Victorian bushfires DVI response was a catalyst for the development of the Victorian Missing Persons DNA Database, which is a major contributor to the Institute's ability to identify the long-term missing.

CREATION OF THE VICTORIAN MISSING PERSONS DNA DATABASE

A DVI matching software program PlassData, which utilises INTERPOL forms, supported the 2009 bushfires DVI operation. This program is a repository for all ante-mortem and post-mortem information and has the ability to provide matches of the two datasets based on several characteristics, for example, dental restorations or fingerprints.

At the time, whilst PlassData could be used to record vital DNA profiling information, it could not conduct direct or kinship searches to match missing person and unidentified deceased cases. During the 2009 bushfires DVI response the

VIFM was provided with specialised software for DNA kinship and direct matching. This enabled a large number of DNA profiles from the deceased to be compared with reference samples from relatives and Guthrie cards.

Having acquired this capability the VIFM, in collaboration with Victoria Police, established the Victorian Missing Persons DNA Database (VMPDD) to serve as a repository for all DNA profile information for family reference and unknown deceased samples for the state of Victoria. The database facilitates the blind screening of all DNA profiles provided by families of missing persons against all DNA profiles for unknown deceased samples. The system identifies direct or kinship matches for nuclear (nDNA) and mitochondrial (mtDNA) DNA.

Prior to this, reference DNA samples collected from relatives of missing persons were often only processed when there was an investigative lead suggesting that a particular unidentified body might be a match for a missing person. Since September 2010 the Victoria Police has provided the VIFM with family reference samples for missing person cases for nDNA and mtDNA analysis. In addition, the VIFM has conducted DNA analysis on samples from unidentified deceased persons.

There have been three identification successes to date using the VMPDD, including two cold-hits and one targeted match. The VMPDD currently holds DNA profile information for 358 reference samples (corresponding to 228 missing persons) and from 47 unidentified human remains. The VIFM have also received six profiles from unidentified human remains from interstate cases that were searched against the family reference samples in the database at the request of Victoria Police.

The successful operation of the VMPDD in the solving of three cold cases has reinforced the lessons learnt from the 2009 bushfires DVI exercise. DNA evidence, although powerful, can be misleading if used in isolation. The investigation of unidentified remains requires a multidisciplinary approach to determine whether a missing person case and unidentified human remains are one and the same. It requires scientific and medical evidence (DNA, forensic odontology, anthropology and pathology) working together with case intelligence to make evidence-based identifications.

The VMPDD was the first missing persons DNA database of its kind in Australia. It provides a sound foundation for the current transition to a national DNA database.



THE VIFM RESEARCH IS CREATING NEW TECHNOLOGIES FOR IDENTIFICATION

The VIFM is at the forefront of new technologies that assist in the identification of human remains.

The VIFM's Molecular Biology Laboratory is accredited (by the National Association of Testing Authorities) to perform DNA analysis using nDNA and mtDNA profiling techniques. It is one of only two accredited laboratories in Australia that are able to undertake mtDNA analysis to identify human remains. MtDNA profiling is particularly useful in the analysis of compromised samples from long-term missing cases, such as hair or bone, as it is more easily extracted from degraded remains than nDNA.

Recent research conducted by the VIFM's Molecular Biology Laboratory has created techniques that allow successful DNA extraction from toenail clippings and bladder swabs. These techniques have proven pivotal in the identification of decomposed and charred remains in the course of the VIFM's routine work for the coroner.

The next significant advance in DNA profiling at the VIFM will follow the commissioning of the new Massive Parallel Sequencing (MPS) platform. The MPS enables advanced DNA analysis, including genotyping to predict aspects of the physical appearance and bio-geographical ancestry of a deceased person where the remains are incomplete, decomposed or skeletal. It will allow the VIFM to create much more detailed profiles of unidentified deceased persons. For example, DNA scientists will be able to estimate eye and hair colour, as well as whether the person is European, Asian or African. This information will assist in defining possible matches of the deceased person with missing person descriptions.

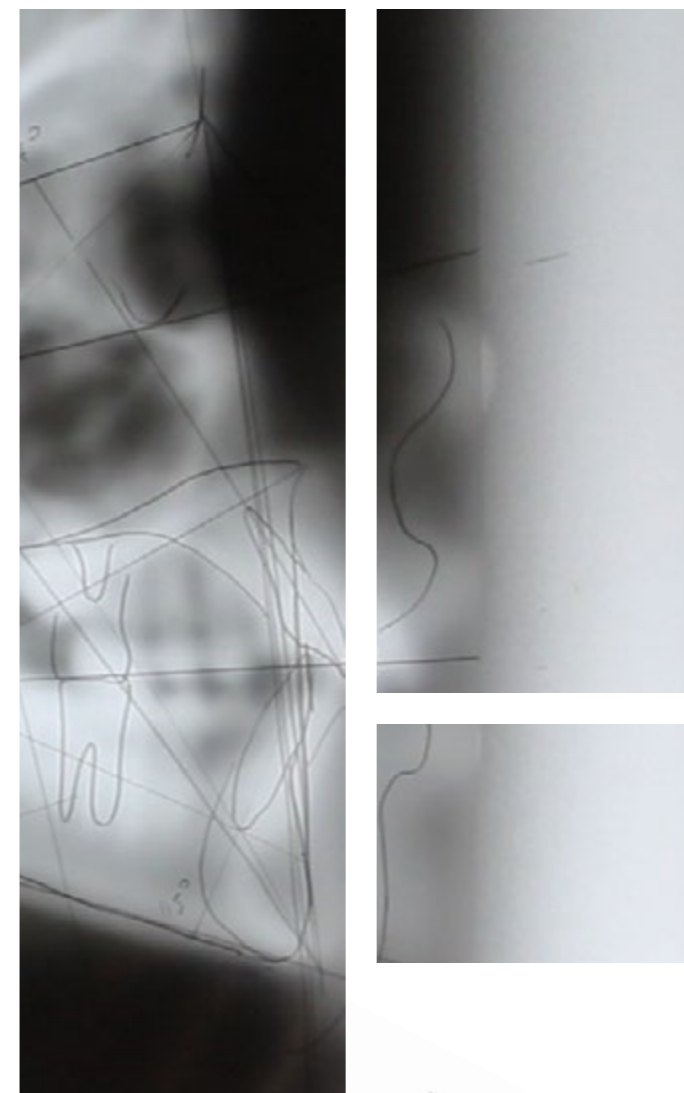
The VIFM is also undertaking and collaborating with the Commonwealth Government, Monash University and Victoria Police in a number of identification-related research projects approved by the VIFM Ethics Committee. It is anticipated that these projects will create innovative approaches to identification using facial recognition technology, forensic genealogy and bomb pulse dating.

The VIFM is undertaking and collaborating with the Commonwealth Government, Monash University and Victoria Police in a number of identification-related research projects approved by the VIFM Ethics Committee. It is anticipated that these projects will create innovative approaches to identification.



+ GENETIC GENEALOGY AND VICTORIA'S UNKNOWN HUMAN REMAINS:

In collaboration with the Victoria Police Forensic Services Department, the VIFM is undertaking a pilot project to evaluate a genetic genealogy approach to identifying a small number of coronial cases where conventional DNA analysis has not provided results. A detailed DNA profile from the unidentified body will be uploaded into a genealogy website, such as GEDmatch, and any kinship matches to DNA profiles provided by other GEDmatch participants are then analysed by a genealogist to attempt to identify a common ancestor and relationships to immediate family members. This technology has been used successfully in the USA to identify alleged offenders, missing persons and the biological parents of adoptees.



+ FACIAL RECOGNITION OF THE DECEASED:

The VIFM is working with Defence and Science Technology (DST) in Australia's Department of Defence to determine the ability of an automated facial recognition system to identify and verify deceased individuals. DST has expertise in developing and testing facial recognition software. This will be the first project to assess its ability to match the image of a deceased person with an ante-mortem photo of that individual. If successful, this type of software may be used in DVI responses involving large numbers of deceased.

+ CT DATABASE AND MACHINE LEARNING:

The VIFM is researching the development of techniques to predict what the face would look like for an unidentified skull using CT scans with machine learning software. This software could potentially be combined with the use of the VIFM's new Massive Parallel Sequencing Capability (hair colour, eye colour, skin tone) to provide more realistic reconstruction of faces of unidentified remains.

+ THE USE OF BOMB PULSE DATING TO DETERMINE YEAR OF BIRTH AND DEATH: WORKING TOWARDS IMPROVING THE INVESTIGATION OF UNIDENTIFIED HUMAN REMAINS IN AN AUSTRALIAN CONTEXT:

The VIFM is assessing the accuracy of bomb pulse dating for estimating year of birth and death in decomposed or skeletonised remains. The atmospheric testing of nuclear weapons during the 1950s and early 1960s produced large amounts of radiocarbon. Different biological tissues (bone, tooth, hair and nail) will be tested at the Australian National University by comparing environmental levels of Carbon-14 (14C) to 14C levels within these tissues to estimate the year of tissue formation.

+ THE LOCATION OF MISSING PERSONS:

The VIFM is directing a research project at the Australian Facility for Taphonomic Experimental Research (AFTER) in Western Sydney. The project will identify techniques or methods that can assist in the location of mass graves in different environments. The detection of clandestine graves in heavily vegetated areas, where conventional satellite imagery is of no use, is challenging. For the first time in the Southern Hemisphere real bodies from body donation programs have been used to create a series of mock mass graves. Baseline environmental data has been collected to monitor and study the effects of decomposition with a limited range of detection techniques over a three-year period. Initial results are promising.



OPPORTUNITIES FOR IMPROVING IDENTIFICATION OF LONG-TERM MISSING PERSONS

At the VIFM a multidisciplinary approach to the identification of human remains is embedded in the Institute's routine practices due to the range and experience of the forensic experts that work together.

Over the last 12 months the VIFM has been working closely with Victoria Police and the Coroners Court of Victoria to identify information gaps in historic missing person cases and to better track the progress of each investigation. Working together has meant an opportunity to now significantly improve the investigation of long-term missing person cases and unidentified human remains.

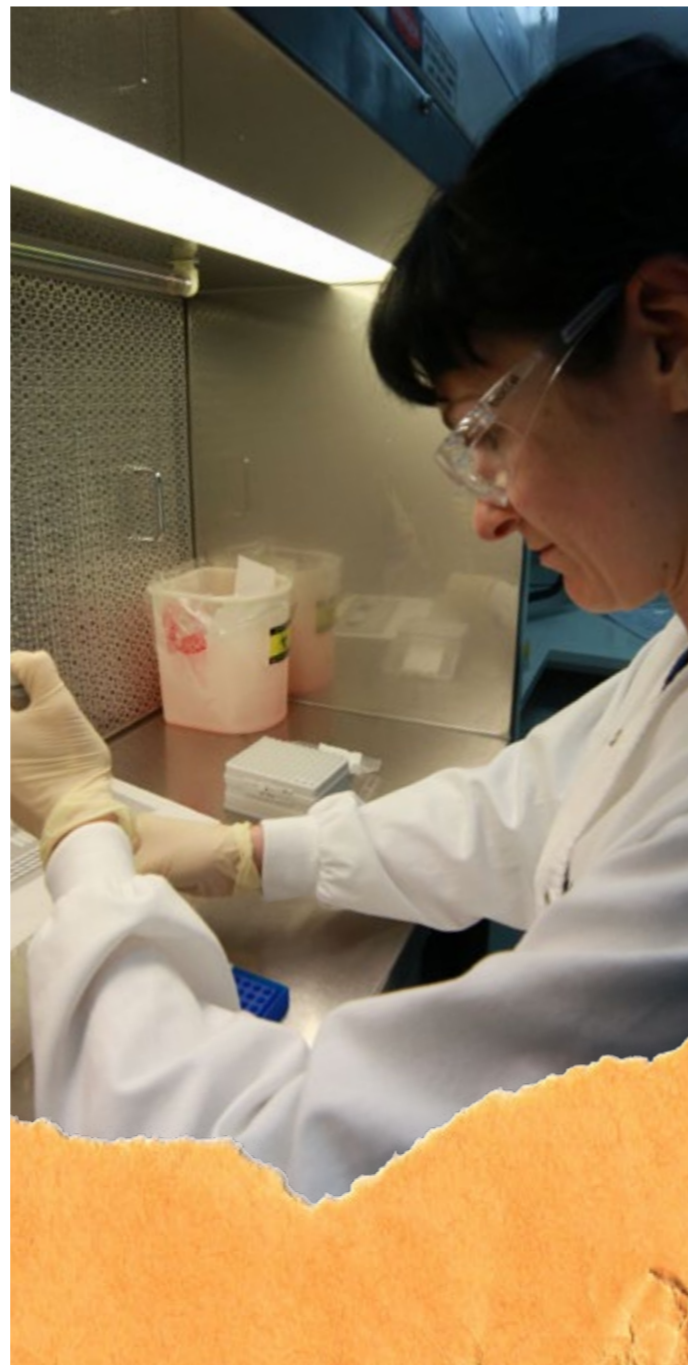
The VIFM is pursuing permanent and systemic changes by establishing a new inter-agency protocol and standard operating procedures for missing person cases. This will ensure that possible matches between long-term missing persons and unidentified bodies are not missed because critical information is sitting unrecognised in a particular agency without being shared.

This year Victoria Police has facilitated the VIFM's access to two critical national databases. The first is the National Missing Persons Victim System (NMPVS) that houses the forensic medical information on long-term missing person cases and unidentified remains. The VIFM is working with Victoria Police to upload forensic medical information to the NMPVS from historic cases. The second database is the National Criminal Investigation DNA Database Integrated Forensic Analysis (NCIDD-IFA) that facilitates kinship and familial searching and allows matching of DNA profiles from deceased persons with those volunteered by family members across all states and territories.

It is anticipated that as states and territories upload DNA profiles to the NCIDD-IFA the VIFM will identify matches for a number of cold cases where the unidentified bodies stored at the VIFM are linked to families interstate. The resolution of these cases is a high priority, given what is known about the traumatic impact on families when someone is missing.

The VIFM is acutely aware that while the identification service can provide some answers to families, it inevitably raises many other questions that the Institute is unable to help with. Nevertheless, the VIFM can give families of long-term missing persons at least part of what they want to know – information about the fate of their loved one and an opportunity to have the body returned for a funeral and final farewell.

Our Molecular Biology Laboratory used Mitochondrial DNA (mitDNA) analysis to determine that the DNA profile from the bones matched with the profile of Daniel's brother and mother, confirming that these remains were Daniel Morcombe.



SOLVED CASES

Daniel Morcombe

Missing_ December 2003

Found_ August 2011

"As a parent, I cannot begin to imagine what it is like to have a child go missing. Every missing person is someone's child. For the family of the missing, we need to ensure we do everything in our power to assist them, using every tool at our disposal to assist in the investigation of these cases. Every family deserves answers, every family deserves no less."

**_Dadna Hartman, Manager,
Molecular Biology Laboratory, VIFM**

Daniel Morcombe was 13 years old when he disappeared in December 2003 while waiting for a bus at Woombye, on the Sunshine Coast. Following the arrest of Brett Cowan in August 2011, bones believed to belong to Daniel were found in bushland in the Sunshine Coast region. The VIFM, as part of a collaborative organisational effort around Australia to identify the human remains, was supplied with samples from the bone as well as samples from Daniel's brother and mother for DNA analysis and comparison. The VIFM's Molecular Biology Laboratory used mitochondrial DNA (mtDNA) analysis to determine that the mtDNA profile from the bones matched with the profile of Daniel's brother and mother, supporting the proposition that these remains were those of Daniel.

MtDNA sequences are passed down along a family's maternal line – that is a mother will pass on her mtDNA to her children, daughters will pass on that same mtDNA to their children, but sons will not. The properties of mtDNA – such as multiple copies per cell – make it more robust than nuclear DNA (nDNA) and provides forensic scientists with a valuable tool for determining the source of DNA recovered from damaged, aged or degraded samples such as skeletal remains of long-term missing persons, where there may be insufficient nDNA to create a profile.

The identification of Daniel's remains finally gave the Morcombe family answers regarding the whereabouts of their son and brother. Daniel's family have spoken about the significance of holding a funeral and the big weight that was lifted afterwards, "His grave helps. It gives us comfort having a place we can go to honour him."

[Left page: Ms Michelle Spiden](#)

Mark Jansen

Missing_ November 1994

Found_ 2014

Mark Jansen, a 31 year old fishmonger, was last seen by his business partner on 12 November 1994 when he left work in Dandenong at around 5pm. Mark failed to join his wife and daughters who were waiting for him at a suburban restaurant. His family reported that it was totally out of character for Mark "to simply up and leave". A police investigation failed to locate Mark and in 2006 Victoria Police featured Mark during National Missing Persons Week, but with no success.

In 2009 the VIFM received a reference sample from Mark's mother for the purposes of DNA testing and inclusion into the Victorian Missing Persons DNA Database (VMPDD). The VIFM's Molecular Biology Laboratory obtained both nDNA and mtDNA, which were added to the VMPDD, however there were no matches with any unidentified human remains at that time.

In 2014, a human skull was unearthed during the machine clearing of thick vegetation to create a firebreak in an isolated area near Marysville. Anthropological analysis established that the skull was that of a Caucasoid adult male aged over 25 years. The VIFM were successful in obtaining both nDNA and mtDNA profiles from the skull. A breakthrough was made when these profiles were added to the VMPDD and a match was found with Mark's mother. Additional reference samples were sought from Mark's daughter and the match was confirmed. A further bone was found following a search of the area where the skull was found. A nDNA profile obtained from a fragment of the femur bone allowed the reconciliation of this bone with the skull.

A chance discovery in bushland ended the Jansen family's 20 year torment of not knowing the whereabouts of their son, brother and father. The family has been left with a complicated mix of feelings – devastation and closure plus a sense of resolution and have stated that, "As bad as it sounds, it was a very good thing that we found him, otherwise we would still be wondering."

UNSOLVED CASES

The "purple scarf man"

Unidentified since 2006

In 2006, human remains were found at Ferny Creek in the Dandenongs Ranges during a tree clearing exercise in preparation for the bushfire season. There was no identifying information on the body. Analysis by the VIFM's forensic anthropologist determined that the body was a Caucasian male in his 20s. His remains were associated with clothing including Country Road "Workwear" brand pants, dark brown footless thermal leggings, a brown "Thinsulate" brand beanie and socks, and "Maseur" brand black rubber sandals with Velcro straps. A noose, which was wrapped in a purple and blue scarf, was found hanging near where the body was discovered.

Since 2006 Victoria Police have made nine targeted enquiries to the VIFM, providing reference samples from families who have reported a missing person. Sadly, none of the DNA profiles generated from the reference samples matched the DNA profile(s) from the body.

The VIFM is hoping that the operation of the national DNA database will provide a resolution of this case, as the Institute will be able to compare the DNA information from this young man with reference samples provided by interstate families who have reported loved ones as missing.

"Someone somewhere has a family member who they have not heard from in 13 years. Regardless of the circumstances that resulted in this young man ending up at Ferny Creek, he deserves to be identified. We hope we can give him his name back and help reconnect him with family and friends."

_Associate Professor Soren Blau, Senior Forensic Anthropologist



Tags from the jumper found in the "purple scarf man" case

The "Sandy Point skeleton"

Unidentified since 2017

On Christmas Day in 2017, a snorkeler swimming at Shallow Inlet at the coastal town of Sandy Point found a skull sitting on the seabed about 25 metres from the shore. The police later discovered the rest of the skeleton buried about 20cm under the sand. It is a remarkably well-preserved skeleton, which is very unusual for a body found at sea. There are no fractures and only a few bones missing. No clothing or personal items were found with the remains.

Analysis by the VIFM's anthropologist, molecular biologist and odontologist has been able to find a few clues to the individual's identity. Together, they established that he is a Caucasian male who was in his 20s when he died and has had distinctive dental work, including a gold filling in his front tooth. The possibility that he is of considerable antiquity cannot be discounted, as it has not been possible to estimate time of death.

The VIFM's Molecular Biology Laboratory has extracted an almost complete nDNA profile, as well as a mtDNA profile, despite the potential for salt water degradation of the bones. However, it has not been possible to match this DNA information with any reference sample on the Victorian Missing Persons DNA Database and police investigations have identified no leads.



The "Sandy Point skeleton"



Highlights & achievements for 2018-19

Reporting against the strategic plan 2016-2019

The VIFM Strategic Plan is our roadmap. It outlines our core priorities, sets parameters for our annual business plans and it articulates the standards against which our achievements will be judged. The 2016-19 plan set out four goals for us to achieve the highest level of service, and to consolidate and enhance our reputation as a pre-eminent forensic medical and scientific institution.

This year we have undertaken staff consultation, environmental scanning and reflection with our Council to develop a new Strategic Plan for 2019-22, with our new goals extending from those on which we report here. What follows is an account of some highlights from this year's achievements in pursuit of our 2016-19 strategic goals.

Goal 1

We will deliver increased service capacity

Our forensic services workload is growing rapidly as deaths reported to the coroner continue to increase. There is further demand for our work in the area of interpersonal violence, especially family violence. Similarly our work in the area of road safety is growing as government and police develop new strategies to tackle drugs and driving. These, and a range of other factors, are creating significant demand pressures across our organisation.

To address these challenges, it is our goal to deliver increased service capacity by developing and incorporating new technologies and processes into our services for greater efficiency. Our strategy is to provide the organisation with the skills and flexibility to focus on what is most important for our clients and to ensure we are meeting all our statutory obligations.

In pursuing our goal of increased service capacity we have achieved:

Establishing massive parallel sequencing services and streamlining workflows in the molecular biology laboratory

This year we have entered a new era in DNA technology by procuring a massive parallel sequencing (MPS) platform for the molecular biology laboratory (MBL). As described in our theme section on the identification of missing persons, the MPS enables advanced DNA analysis by making predictions of physical appearance and bio-geographical

ancestry where deceased remains are compromised. This will allow us to create a much more detailed profile of an unidentified deceased person. Staff training and instrument validation have been completed, with accreditation requirements and implementation for new MPS service delivery expected early in the 2019-20 financial year.

The molecular biology laboratory has also been working to validate direct amplification of casework samples and introduce this approach into DNA analysis workflows, along with use of a new decision-making matrix to ensure the best method is chosen for testing samples. Direct amplification has the potential to eliminate the need for two steps in the current workflow, translating to at least half a day faster turnaround for identifying coronial cases. Where families and police are anxiously waiting for answers, this is a welcome innovation. In cases involving limited samples from crimes scenes, the decision-making matrix will also help to choose the best method and avoid using up the sample before getting the needed result.

Enhancing nursing practice at the VIFM

In 2018-19 we have progressed an ongoing project to recognise and enhance forensic nursing practice by establishing an internal network for the nursing staff working in different roles across the VIFM (in the Family Health Service, Clinical Forensic Medicine, Coronial Admissions and Enquiries and the Donor Tissue Bank of Victoria).

The nursing network is working on documenting the variety of forensic nursing practice, developing policy and minimum standards, and creating opportunities for nursing education, development and training. This project will be further advanced in 2019/20 in collaboration with Dr Olivia Cook from the Monash School of Nursing and Midwifery.

Forensic Services has also worked closely with Victoria Police to support delivery of forensic nursing services across regional Victoria.

Updating and improving toxicology methods

Another significant equipment purchase this year will soon enable greater service capacity for the VIFM. A high resolution liquid chromatograph mass spectrometer (HR-LCMS/QTOF or 'QTOF') has been purchased, installed and commissioned with training to commence in the second half of 2019. When fully operational with methods validated, the QTOF will allow the VIFM toxicology laboratory to analyse samples, picking out unknown elements, in contrast to current methods that rely on targeted screening of known drugs. The QTOF will be a powerful tool to assist with detection of new and emerging drugs including novel psychoactive substances that have taken the lives of young Victorians at festivals and other events, and will enable the VIFM to contribute to prevention efforts in collaboration with hospital clinicians (see Goal 3 below).

Also in the toxicology laboratory, scientists have developed a comprehensive register to track the progress of updating and creating monographs for each of the approximately 400 drugs detected in the laboratory. Monographs (short detailed studies) for each of the drugs reported on give the reader of our toxicology reports the relevant context to understand the significance of the report's findings. For example, a monograph will include a drug's active properties, its availability in Australia and where relevant, its clinical dosage. The new register ensures the laboratory is on top of this essential underpinning for its work, so that monographs are kept up to date with new research on known drugs and emerging side effects. The register will also support prioritisation of new monographs when an overnight toxicology screen detects a novel substance.

Roll out of the electronic content management system

This year we have made considerable progress towards full roll out of the electronic content management system purchased in 2018/19 (as reported in last year's annual report). The design, development and installation of the new system to meet the VIFM's requirements, and the staged training across all the different work areas, has been undertaken by our new Information Manager, Tom Munro. This has been a major project to make the VIFM compliant with records management standards and to improve staff productivity and reduce duplication.

ICT support for increased service capacity

Over the past twenty years, the VIFM, like most modern organisations, has become more and more dependent on its ICT function. In 2018 we commissioned an independent review to assist in developing an updated ICT strategy and roadmap. The new strategy was adopted in October 2018 and implementation has included recruiting a number of key personnel to help deliver on a new operating model. The model is based on quality principles aligned to the VIFM quality framework, the development and implementation of which has been a notable achievement this year.

An initial system change involved business units prioritising ICT backlogged service desk requests to address identified risks and to improve service efficiency. Further initiatives undertaken this year aimed to support increased service capacity include commissioning a review of the internal case management system enterprise architecture to enable a strategic approach to replace and/or improve its functionality across all forensic applications (supporting pathology, Coronial Admissions and Enquiries, clinical forensic medicine and toxicology) and non-forensic applications (HR services and the ICT helpdesk). Another major project that commenced this year is the Desktop Project, which will see the complete PC fleet migrated to Windows 10 and Office 365, with remediation of all the VIFM applications to maintain compatibility. This will be completed by the end of 2019.

In the security space, auditing for compliance with the Victorian Data Protection and Security Standards was undertaken, and the Australian Government Information Security Manual assessment used to identify high priority security issues.

Goal 2

We will consolidate our position as the national centre of expertise in forensic medicine and related sciences

The cycle of service, teaching and research underpins the quality of service provision in forensic medicine and science. The evidence base of our forensic disciplines depends upon a strong research and development culture that is embedded in the work we do. Forensic medicine has traditionally been grounded in the expertise of individual practitioners based on their training and experience. However, with the accumulated knowledge and information contained within the VIFM databases, we can link case conclusions to a robust scientific evidence base, rather than simply providing opinions based on experience. This enables us to expand the types of conclusions we can make and improve outcomes for the justice system and for the community.

This year we have achieved:

New website for the VIFM

This year saw the launch of a new website for the VIFM that better communicates information about who we are and what we do, in a way that is engaging and content rich. The website is an excellent showcase for the Institute, designed with the needs of the people who engage with us in mind – families, clinicians, students, international colleagues. There is a searchable media library, a dedicated area for our research activities and publications, and later in 2019, it will be home to our new web series – where families and the community can get a better understanding of the coronial process and what they can expect in the first 48 hours after a death that is reported to the coroner. There are also episodes on the DTBV and forensic medicine and science.

Academic Programs – Teaching and research

The strategic focus for Academic Programs at the VIFM has been to increase the scope of our teaching program and to clearly define the focus and attract funding for our research program.

This year Academic Programs, which oversees the teaching within the Department of Forensic Medicine, developed a new undergraduate 'Principles of Forensic Medicine

and Science' unit. The unit was fully subscribed with 50 student enrolments, and the prospect of 150 enrolments for 2020, demonstrating the high level of interest in learning about the work we do. A review of the Masters of Forensic Medicine was undertaken and new subject 'streams' established, with two new units added to the options available for Masters students (nursing and radiology). Student numbers for the Masters have increased from 50 to nearly 90. We have also increased engagement with Monash Biomedical Science and science departments to start developing further undergraduate teaching units for forensic science subjects.

Developing connections with Monash IT, Digital Health and creating collaborative research opportunities has seen a number of projects launched in the areas of family violence, machine learning and post-mortem CT. An estimated 12-14 PhD students will be enrolled and undertaking research based at the VIFM by the end of 2019. The learning and outcomes of these projects will contribute directly to the practice of forensic medicine.

Efforts to engage with the Department of Health and Human Services, TAC, VicRoads around our research capabilities and opportunities have been stepped up this year, which we are hopeful will lead to collaborative research projects with outcomes that both consolidate our expertise in forensic medicine and science, and make practical contributions to preventing deaths and injuries in our community.

Updated accreditation

A key underpinning for the VIFM's position as a centre of forensic medical and scientific expertise is maintaining up to date accreditations with the National Association of Testing Authorities (NATA) and the International Organization for Standardizations (ISO). This entails a significant amount of work for our quality team to understand the requirements and to undertake gap analyses and workplans to implement required changes. This year we were successfully re-accredited for the updated 17025 standard for forensic science, including the ISO 9001:2015.

Goal 3

–

We will strengthen and create new partnerships and professional relationships

As a service and academic organisation, partnerships support our work and ensure long term sustainability. Working more closely with the health care sector, the legal sector and other forensic institutions locally and internationally improves our service, teaching and research capacity, and enhances our recognition as a leader in forensic medicine and science. Achieving this goal will ensure our continuing status as a trusted and innovative leader in forensic medicine and science. This year we have achieved:

Increased engagement with criminal law agencies to enhance our expert evidence provision

In 2019 the VIFM established regular meetings and contact with the Office of Public Prosecutions with the aim of working collaboratively to enhance the provision of expert evidence for the courts in which the VIFM's practitioners appear. Initial areas for discussion and action have included: making arrangements for transcripts of our experts' evidence to be sent to the VIFM following their appearances to support review and training; demonstration of the OPP's new court technology that our practitioners will increasingly be using to deliver their evidence; and consideration of cases where medical material provided in the brief could be assisted by a forensic medical review. Initiatives planned for 2019-20 include encouraging pre-hearing meetings with experts or discussion of their reports to improve understanding of the forensic medical issues in dispute. This will be on the agenda with the OPP and with Legal Aid Victoria, with which similar engagement is planned.

Collaborate with the Victoria Police to improve identification of missing persons

This is covered in the theme section

The VIFM Review into the Prevention of Sexual Misconduct by Humanitarian Organisations

In May 2018 the National peak body for non-government aid and humanitarian organisations, the Australia Council for International Development (ACFID),

commissioned the VIFM to undertake an independent review to improve the practice and response of its member organisations in the prevention of, and response to, sexual misconduct. This followed reports of sexual misconduct in the aid and development sector by UK-based charities. The Review project team was led by VIFM Senior Clinical Forensic Medicine physician, Dr Maaïke Moller with research led by A/Professor Lyndal Bugeja and project coordination by Dr Liz Manning. The Review entailed surveys, focus groups, conducting interviews with ACFID members and stakeholders, best practice research, good practice examples, reported incidents data analysis and a field trip to Fiji.

The VIFM Review report was published in November 2018 with ACFID accepting all recommendations. The Review identified serious information gaps in the reporting of sexual misconduct in Australia's international aid sector. The Review recommended that the Australian Charities and Not-for-profits Commission (ACNC), with support from the Commonwealth Government, establish a Reportable Conduct Scheme for Australian charities undertaking international aid work. This would provide the regulator and other interested parties such as the Department of Foreign Affairs and Trade (DFAT) and ACFID access to de-identified data which could inform prevention and response measures.

Rapid clinical toxicology for hospitals

The VIFM has collaborated with the Austin Hospital to establish a protocol for the delivery of samples from the emergency room for rapid testing for unknown substances, especially following drug-related incidents at public events. Ultimately the aims are to better target treatment for overdose/ adverse reactions and hopefully prevent death. This collaboration follows the government's response to the Victorian Parliamentary Inquiry into Drug Law Reform, which endorsed greater information sharing amongst health and law enforcement agencies. The commissioning and implementation of the QTOF/MS technology in toxicology (see Goal 1 above) will allow us to undertake general unknown screening as part of this evaluation for rapid emergency toxicology screening.

Goal 4

–

We will invest in our staff

Our people are our biggest asset. The satisfaction, engagement and wellbeing of our staff are central to our values and to our success. We recognise that communication, professional fulfilment, collaboration and a willingness to innovate is fundamental to the VIFM achieving its strategic goals.

Training and developing our staff is critical to our future success, and for staff to be more efficient, productive and adaptable, new skills are required. These include critical-thinking and problem-solving skills, improved communication, increased collaboration across the organisation, and more creativity and innovation.

It is our goal to provide a workplace with engaged and happy staff who feel emotionally supported and fulfilled, highly motivated and have an appetite to succeed. This year we have achieved:

Peer support network

During this year we established a peer support program to improve workplace resilience and foster wellbeing across the organisation. A network of 23 volunteer peer supporters have undertaken a two day training program and follow-up professional development and are now actively providing support to colleagues in the different work areas within the VIFM. The VIFM peer support Lead, Jeff Lomas (Business Operations Manager in Forensic Services) said "the peer supporters feel like they are making a difference and their approach is starting to reduce the stigma around seeking support when it's needed in the workplace. We are also noticing a positive increase in self-care and awareness".

Mental health awareness

Good mental health for our staff is a high priority at the VIFM. Our efforts to support our staff, especially those who are working at the frontline of the challenging task of death investigation and examination of clinical forensic medical have complemented the peer support program and built on the vicarious trauma training undertaken in 2017-18. All the VIFM managers completed 'Mental health training for managers', to help them to recognise early warning signs from staff who are experiencing mental health issues, know how to initiate conversations, intervene and make appropriate referrals for support.

Workforce planning and training

This year we have focussed on planning to ensure the VIFM has a workforce to meet the expected workload from our increasing and ageing population in Victoria, and ensuring the workforce has the skills needed to meet future challenges. Modelling of workload requirements for pathologists has been undertaken.

A review of management and leadership training has also been undertaken with two of three levels of leadership and management development training (for potential and new managers and emerging leaders) provided to 12 staff members. A third level of 'situational leadership' training will be rolled out in the coming year.

“the peer supporters feel like they are making a difference and their approach is starting to reduce the stigma around seeking support when it's needed in the workplace. We are also noticing a positive increase in self-care and awareness”.



Dr Sanjeev Gaya

Reporting to Government

BP3 statistics table

The Institute reports to the government on its activities via the Budget Paper 3 (BP3) statistics. The information provides an accrued measure against targets for a number of medico-legal investigations, quality of reports, timeliness of body turnaround and final reports. The table below shows these and other outcomes for 2018-19.

Supporting the justice system

	UNIT OF MEASURE	YEAR 2018 /19			COMMENTS
		Target	Actual	% variations	
QUANTITY					
Clinical Forensic Medical services	Number	2,300 - 2,700	2,868	6.2%	Demand is driven by Victoria Police and reflects increased numbers of cases seen by police, with a flow-on effect on clinical forensic services.
Medico-Legal Death Investigations ¹	Number	6,100 - 6,500	6,534	0.5%	The number of deaths reported to the Coroner continues to trend upwards.
Provision of expert forensic medical and scientific evidence in court	Number	150 - 250	216	0.0%	The number of court appearances is dictated by court and prosecution requirements.
QUALITY					
Victorian Institute of Forensic Medicine quality audit ²	%	95	99	4.2%	Performance reflects the high standard of pathology reports of which very few require any follow up action after audit.
TIMELINESS					
Medical and scientific investigations on the body of the deceased completed within two days ³	%	75 - 85	72	(4.0%)	Results fluctuate depending on the complexity of cases and this variation is within the acceptable limit of 5%.
Medico-legal death investigation reports issued within agreed period (VIFM) ⁴	%	60 - 70	66	0.0%	The VIFM met the report turnaround times that are critical for courts to ensure that hearings can be held in a timely manner.

¹ Count of medico-legal death investigations for the Coroners Court of Victoria.

² The percentage of completed case reports found to be satisfactory as a result of a quality audit.

³ The amount of time that the medical investigation requires access to the body of the deceased before return to the family.

⁴ Timeline for completion of an investigation based upon the complexity of the case.



Operational Report

Forensic Services Division

The Forensic Services Division of the VIFM provides high-quality specialist medical and scientific services to support the justice system. Its forensic experts work in the fields of pathology, mortuary science, clinical forensic medicine, toxicology and molecular biology (DNA). The size of the task can be seen by the fact that the division produces over 40,000 forensic reports each year and this workload is increasing with the growing Victorian population.

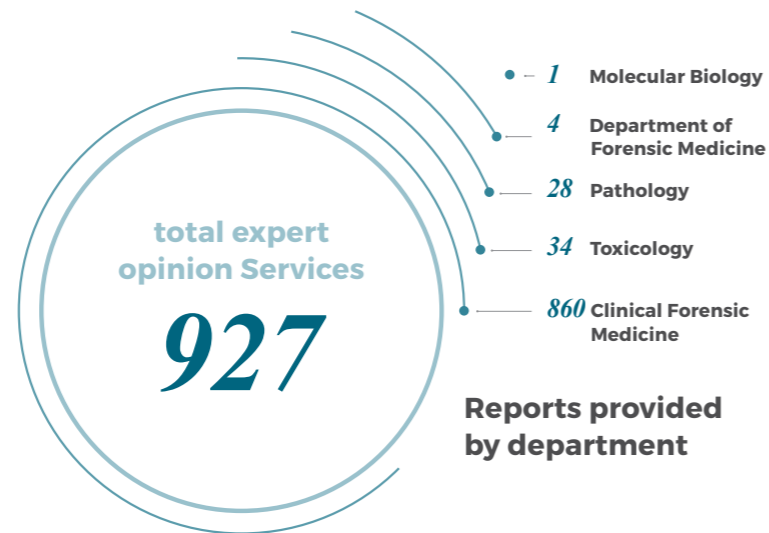
The Forensic Services Division works with a range of justice agencies providing forensic evidence to police, legal practitioners, courts and tribunals. The forensic reports they produce directly enable the criminal and coroners courts to deliver justice services for Victoria where complex medical and scientific issues are at stake.

The Division's doctors, nurses and scientists also actively carry out innovative forensic research that is published in the international scientific literature and is widely referenced in court. As forensic medical and scientific leaders, they are frequently invited to speak at conferences and training seminars.

Expert Opinion Services

The VIFM's expertise in forensic pathology, medicine and science is often requested in the form of expert opinions in interstate and international jurisdictions.

In addition to the forensic medical and scientific work, the forensic specialists provided justice agencies with 927 independent expert medical and scientific opinions on a wide range of topics. Many of these opinions are related to clinical forensic medicine matters where the forensic specialists provide interpretation and explanation of injuries including the ageing of injuries such as bruising and explanation of their likely cause. This is of vital importance in family violence incidents where the absence of independent witnesses means medical corroboration of alleged incidents is critical.



Summary of court appearances for the provision of expert testimony

By court type	Number	Per cent
Childrens	2	1%
Coroners	13	6%
County	29	13%
Magistrates	98	46%
Other	45	21%
Supreme	29	13%
Tribunal	0	0%
Total	216	100%

Summary of court appearances for the provision of expert testimony by court process

By court process	Number	Per cent
Trial	62	29%
Retrial	5	2%
Committal	94	44%
Inquest	11	5%
Other	43	20%
Not entered	1	0%
Total	216	100%

Forensic pathology provision of expert testimony in court - by case type

Forensic pathology cases	Number
Culpable driving	5
Manslaughter	5
Murder	47
Other	14
Total	71

Clinical forensic medicine provision of expert testimony in court - by case type

Clinical forensic medicine cases	Number
Fitness for interview	14
Other	10
Physical assault	51
Police assault	1
Sexual assault	32
Sexual assault - offender	4
Sexual assault - recent	15
Traffic medicine	18
Total	145

Death Investigation

Between 15 and 25 deaths are reported to the coroner each day. The duty pathologist provides the coroner with a preliminary report and advice about each case.

Forensic Pathology

Forensic pathology is the subspecialty of pathology that focuses on the medico-legal cause of death. The Institute's doctors investigate sudden, unexpected deaths from natural disease and injuries. The work of the specialist forensic pathologist includes examining the scene of death, detailed assessment of the body of the deceased, and the performance of a wide range of complex medical and scientific tests. These processes are applied to uncover the cause of death, to determine the intrinsic and extrinsic factors contributing to death, and to assist with the reconstruction of the overall circumstances in which the death occurred.

Between 15 and 25 deaths are reported to the coroner for investigation each day. The duty pathologist provides the coroner with preliminary report and advice about each case, including:

- » an assessment of the medical history
- » an assessment of the circumstances of death
- » interpretation of post-mortem CT scans, and
- » a summary of any family concerns and healthcare issues.

This information assists the coroner in planning the legal and administrative aspects of the ongoing death investigation, including whether they will request the Institute's doctors to undertake an autopsy. Following a direction by the coroner, the forensic pathologist will undertake a full autopsy or external examination of the body. For these cases two statutorily required reports are compiled: a preliminary report and an autopsy or external

* Medical Investigator's Report for femoral fracture cases

** "Body not in" cases referred by the Registrar of Births, Deaths and Marriages.

VIFM medico-legal investigations by year

Year	No. of medico-legal investigations
14/15	6224
15/16	6151
16/17	6129
17/18	6405
18/19	6534

Type of investigation for deaths

Year	Full Autopsy	Partial Autopsy	External examination	MIR*	BNI**
14/15	2917	20	2666	0	621
15/16	2823	31	2840	0	457
16/17	2517	179	3211	0	222
17/18	2549	343	3082	114	317
18/19	2187	639	3136	234	338

examination report. Over the past year, Forensic Pathology Services produced over 10,000 medico-legal reports. In about 10 per cent of deaths reported to the Coroner the deceased has already been buried or cremated. In these cases a review of medical records and statements is undertaken and a report provided to the Coroner.

Forensic pathology medical and technical staff have conducted and collaborated in research on the following projects approved by the VIFM Ethics Committee in 2018-19:

- » Mitral valve prolapse: predictors of arrhythmias and adverse outcomes

- » Incidence and epidemiology of sudden cardiac arrest and death in Victoria, Australia
- » Unexplained Cardiac Death Project
- » Skeletal knee morphology
- » Finite Element Modelling of Non-Accidental Head Injuries in Children

Forensic Radiology

From the mid 2000s whole body CT scans have been performed in all death investigations at the mortuary in Melbourne. The CT scanner provides valuable assistance to pathologists performing the death investigation. CT scans assist in identifying individuals,



Dr Paul Bedford

determining causes of death, preparing for and planning the approach to an autopsy, evaluating potential hazards of the autopsy, and documenting injuries. These images can be later presented in court as evidence. While case numbers continue to grow, the introduction of CT scanning in Victoria has resulted in a sharper focus on those deaths that require an autopsy with a consequent reduction in the overall autopsy rate. Investment in these new techniques for death investigation has improved the time taken to return deceased persons to their families.

The Coronial Admissions and Enquiries Office

The 24-hour Coronial Admissions and Enquiries (CAE) Office is operated by the VIFM. The nursing and administrative staff directly support coroners and pathologists in the earliest stages of the death investigation. This includes coordinating the initial stages of the coronial investigation and the collection of accurate legal and medical information. The VIFM staff work with families providing them with information and support, particularly to those families who need to attend the VIFM in order to view the body of their family member for identification purposes. The CAE team who support the duty coroner and duty pathologist include senior nurses and are supported by

forensic mortuary staff, administrative staff, forensic odontologists, forensic anthropologists, medico-legal executive assistants and the medical liaison nurses.

Forensic Technical Services

The VIFM forensic technical specialists support the forensic pathologists throughout the mortuary component of medico-legal death investigations. They care for the deceased from admission to the mortuary until their release to the family and their work includes the preparation of the deceased for family viewings. Forensic technical staff also assist the forensic pathologist with many aspects of the death investigation, including the collection of forensic specimens, conducting CT scans, angiograms, digital x-rays and photographs. One of the most important aspects of their work is the careful suturing and preparation of the body prior to release to the family-nominated funeral home.

Family Health Information Service

The VIFM Family Health Information Service (FHIS) contributes directly to the health of the community in Victoria. While the coronial death investigation process is undertaken with the primary

purpose of investigating the cause and circumstances of an individual's death, it may also uncover previously unknown medical conditions that may have a genetic basis and therefore be significant to the health care of surviving family members. When such a condition is identified, the case is referred internally to the VIFM Family Health Information Service nurse who then facilitates a referral to an external genetic health service or other medical specialist.

The establishment of close professional relationships, together with numerous formal health care consultations between forensic pathologists and family health nurses in partnership with the Royal Melbourne and Royal Children's Hospitals, has facilitated the diagnosis and family management of conditions such as cardiomyopathies, connective tissue disorders and inherited cardiac arrhythmias. Awareness of these previously unknown health risks has enabled families, with the help of clinical specialists, to plan a health care strategy to prevent premature illness, or death among those family members at risk, and to maximise family health and welfare. In 2018-19 the Family Health Information Service has made 73 specialist referrals to medical specialist services, held 20 family and pathologist meetings and made 53 notifications of cancer diagnosis to the Victorian Cancer Registry.

Forensic Science

Post Mortem Toxicology - Drug Screening Capability

The toxicology laboratory at the VIFM undertakes drug and poison investigations of coronial cases in the state of Victoria. The coronial workload continues to increase from 5946 cases in 2017-2018 to 5956 in 2018-19. Overnight toxicology testing has expanded from a panel of 132 drugs to 327 drugs, a significant advance for drug detection in death investigation. This expansion enables rapid detection of drugs detected in deceased individuals, and also in individuals who may be involved in medico-legal cases, for example, drivers in motor vehicle accidents involving fatalities or drug facilitated crimes. This expansion in drug screening capability also has significance in terms of research and death prevention.

The need for drug detection continues to grow and the staff of the VIFM's forensic toxicology service are constantly involved in the development of new testing methods and improvements in analytical methods. A new method has also been developed for novel psychoactive substances (NPS) detection in hair

Year	Number of medico-legal cases (coronial) received for toxicology testing
14/15	5450
15/16	5595
16/17	5866
17/18	5946
18/19	5956

specimens, thereby expanding the panel of drugs that the VIFM can test for medico-legal death investigations. Alcohol, stimulants, opioids and benzodiazepines continue to be the most frequently detected drugs.

The Toxicology Laboratory also performed 63 drug panel analyses on 191 external hair cases.

Toxicology staff have conducted research on the following projects approved by the VIFM Ethics Committee in 2018-19:

- » Drug and alcohol usage in trauma deaths
- » Delving deeper into the "toxicological nightmare" of post-mortem redistribution
- » Deaths at concerts and festivals in Australia.

Entomology and Photography

The forensic entomologist assists with legal investigations, including the assessment of time since death and the possible movement of deceased persons by others after death. The Institute's forensic photographers provide high-quality digital photographs of casework that forms an essential part of the evidential record.

Histology

Biopsies are a routine part of pathology investigations. In the forensic setting, they allow a pathologist to examine the tissue samples collected at autopsies for the presence of disease or assessment of tissue injury.

Further testing such as specialised stains, frozen sections, and immunohistochemistry may also be performed in the histology laboratory and this has the capacity to further categorise diseases and potentially prevent the death of another member of the community.

A total of 61,532 tissue samples from 3028 autopsies were submitted for histological processing during the 2018-19 year. Paraffin blocks of tissue were produced from each of these samples with stained sections provided to the pathologists to assist in their determination of a cause of death.

Year	Number of histology tissue samples processed
14/15	70,370
15/16	67,823
16/17	61,982
17/18	66,669
18/19	61,532

Human Identification Services – Forensic Odontology, Anthropology and Molecular Biology

The Human Identification Services team is involved in the identification of people. The Coroner must formally identify all individuals whose death is reported to the Court. The team includes forensic anthropologists (skeletal remains) and forensic odontologists (dental identification), whose work is critical where visual identification of the deceased is not possible or is inappropriate. They also provide expert assessment of skeletal and orofacial trauma. This information can be critical in the investigation of injuries in crimes against the person. Human Identification Services provided 82 odontology reports and 18 anthropology reports in 2018-19.

The forensic Molecular Biology Laboratory uses DNA analysis to assist in the identification of deceased persons. DNA is particularly useful where, as a result of severe trauma or decomposition, the deceased cannot be visually identified. These services include the provision of kinship comparisons using nuclear DNA (nDNA) typing platforms, as well as mitochondrial DNA (mtDNA) analysis. The molecular biology team particularly assists with deaths involving drowning, fires, aircraft crashes, or mass fatality events (such as the 2009 Victorian bushfires). This year the DNA laboratory team conducted 238 tests to assist the coroner in the identification of deceased persons.

The VIFM is one of only two accredited laboratories capable of mitochondrial DNA (mtDNA) analysis. As such, the VIFM

also provides DNA analysis services to assist in criminal investigations in other States and Territories. These cases range from long-term missing persons to complex cold case homicide investigations, which require the analysis of large numbers of compromised samples (such as hairs and skeletal elements). This year 32 external cases (corresponding to 122 samples) were referred to our laboratory, with some of the findings assisting in the closure of high-profile investigations across Australia.

Human Identification Services staff have conducted and collaborated in research on the following projects approved by the VIFM Ethics Committee in 2018-19:

- » Evaluating the impact of different formats of evidence in the presentation of skeletal trauma. Evidence in court: A follow up study
- » Differentiating unintentional short falls from non-accidental injury: A pilot study to strengthen the evidence base for paediatric skeletal blunt force trauma interpretation in medico-legal contexts
- » CT facilitated automated facial approximation validated by facial recognition software: A pilot study
- » Using CT scans of deceased children to investigate the impact of mortality bias on interpretations of age and growth in forensic and bioarchaeological applications
- » The use of bomb pulse dating to determine year of birth and death: working towards improving the investigation of unidentified human remains in a modern Australian context
- » Investigating the thickness of bones comprising the human neurocranial cavity: a study to strengthen interpretations of force in cases of blunt head injury
- » Facial reconstruction with deep learning
- » Facial recognition of the deceased
- » Genetic genealogy and Victoria's John and Jane Does
- » Rib fracture patterns and types following paediatric pulmonary resuscitation.

Year	Number of DNA identification tests for the coroner
14/15	232
15/16	233
16/17	176
17/18	198
18/19	238

*These figures include nuclear and mitochondrial DNA tests for the coroner



Associate Professor Soren Blau

Clinical Forensic Medicine

Sexual Assault Examinations

The VIFM forensic clinical medical staff undertake medical examinations of adult sexual assault victims across the state of Victoria. These services are usually provided at the request of Victoria Police investigators, but medical staff will also undertake such examinations for patients and collect forensic specimens 'just in case' they wish to make a complaint to police in the future.

The VIFM forensic clinical medical staff have to balance the forensic needs of investigators and the courts with the medical and health care needs of victims. It is essential that these medical examinations are undertaken in a sensitive and caring manner while still maintaining the forensic rigour required by the courts with regard to evidence collection. This service is provided around the clock across the state including at hospital emergency departments, crisis care units attached to hospitals, and custom examination suites at the Multi-Disciplinary Centres (MDCs) throughout the metropolitan and rural centres. If medically appropriate in cases where the victim may be at a facility such as a nursing home or in custody at a prison, the examination will be undertaken at that location.

Physical Assault Examinations

Victims of physical violence, including victims of family violence, are also patients of the VIFM clinical medical team. As well as providing medical care to these victims, the VIFM doctors collect forensic evidence and document the characteristics and severity of their injuries. This information can assist with determining the causation of the injuries and forms the basis of the expert medical evidence the VIFM staff provide to the courts. Importantly this information is often the

Number of toxicology tests on drug facilitated sexual assaults per year

14/15	153
15/16	188
16/17	195
17/18	180
18/19	227

only independent evidence that can corroborate the statement of victims regarding the nature of the assault they suffered.

While victims of violence are the most frequent patients the clinical service sees, alleged perpetrators may also need to be examined. These examinations provide an opportunity to collect evidential samples for forensic testing and to document injuries that may have occurred as part of the circumstances of an alleged assault.

In cases where there is suspected drug or alcohol involvement in a victim, the examination process includes the collection of toxicology specimens. These specimens are analysed by the VIFM toxicology service and the interpretation of the results are included in the clinical expert opinion statements. Analysis is conducted on samples of blood, urine, hair or other exhibits related to the case. The VIFM analysed 227 such cases in 2018-19.

Total Number of Clinical Forensic Medicine Cases 2018-2019

Adult Sexual Assault Examinations	511
Adult Non-Recent Sexual Assault Examinations	86
Adult Physical Assault Examinations	220
Paediatric Forensic Services	86
Fitness for Interview	568
Fitness for Interview (Phone)	152
Traffic Medicine	281
Expert Opinion	851
Biological Specimen Collection	58
Ethical Standards	9
Court Appearances – CFM	145
Other Specialised Services – CFM	46
Total Cases	3013



Dr Janine Rowse

Forensic Services for Family Violence Victims

The VIFM has been increasingly focussing its clinical services on family violence.

The reforms recommended by the Royal Commission into Family Violence relating to clinical forensic medicine have been actively taken up. The VIFM has increased the range of services undertaken at the Multi-Disciplinary Centre in Dandenong as part of a major pilot working with Victoria Police and a number of health and human services agencies. In addition we are harnessing our training capacity through the Monash University Department of Forensic Medicine to ensure that knowledge of family violence and its forensic assessment is strengthened in the health and justice sectors.

Today the VIFM clinical forensic services are far better connected with other justice agencies, resulting in a more comprehensive response to victims of family violence.

Road Traffic Medicine

The VIFM forensic medical staff provide medical advice to VicRoads and the Commercial Passenger Vehicle Victoria (CPVV) regarding people's fitness to drive. In this role, the VIFM doctors performed 4285 clinical fitness to drive reviews in 2018-19 and discussed 79 cases at the Neurology/Ophthalmology Consultative Committee. The VIFM doctors also attend court as medical experts when drivers challenge licensing decisions.

Doctors from the clinical division also provide expert opinions for Victoria Police, WorkSafe and Department of Health and Human Services on injury interpretation, medical aspects of crash analysis and the effects of medical conditions, drugs and alcohol on driving. These opinions are a vital part of Victoria Police's prosecution efforts for cases of impaired driving.

Biological Sample Collection

The VIFM forensic nurses and doctors provide a comprehensive biological

sample collection service for Victoria. This 24-hour service involves the collection of over 400 samples each year. Blood and urine specimens are collected from suspected intoxicated drivers when required by investigators. The majority of this work forms part of Victoria Police evidence collection processes for traffic incidents and road traffic offences.

Custodial Medicine

The VIFM does not have a direct role in patient care in the custodial setting however, we are called on to assess persons in custody for forensic reasons including evidentiary injury examinations, collection of biological samples and assessments for fitness to be interviewed. These types of cases often involve assessment of the need for ongoing care of follow-up of injuries, intoxications and psychiatric conditions. This work involves liaison with other health services and providers. Details of a detainee's injuries or medical conditions are also of evidentiary importance in subsequent court proceedings.

Fitness for Interview Examinations

When police have concerns as to the fitness for interview of detainees, the VIFM provides a 24-hour service for assessment of these persons. Fitness for interview may be affected by a large number of factors including (among others) mental illness, intoxications, sleep deprivation, and painful injuries. Proper assessment of these detainees is important in ensuring the subsequent admissibility of a police interview in court.

Research

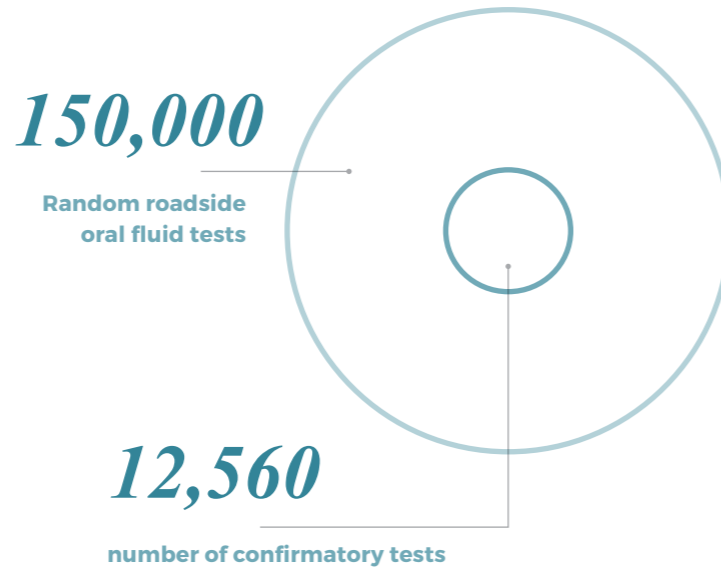
Clinical Forensic Medicine staff have conducted research on the following projects approved by the VIFM Ethics Committee in 2018-19:

- » Analysis and description of findings in clinical assessment of patients undergoing forensic medical examinations after a family violence incident
- » Swipe right – the emergence of dating app facilitated sexual assault.

Drug Testing Services for Victoria Police



The VIFM forensic toxicology laboratory undertakes analysis of road traffic samples for Victoria Police to confirm the presence of these drugs in drivers.



Road Traffic Toxicology

Scientific research conducted at the Institute over many years has shown that certain drugs increase the risk of having a collision on our roads. Work conducted within the VIFM toxicology laboratory led to the initiation of the world's first random drug testing program in Victoria in 2004. Current Victorian legislation allows drivers to be stopped randomly and tested for stimulants (amphetamines and ecstasy) and cannabis.

Number of drug and alcohol toxicology tests on injured driver Cases

14/15	4848
15/16	5225
16/17	5129
17/18	5503
18/19	5946

The VIFM forensic toxicology laboratory undertakes analysis of road traffic samples for Victoria Police to confirm the presence of these drugs in drivers.

In addition to the analyses from randomly tested drivers, the VIFM also undertakes the forensic analyses of samples from drivers injured in road accidents, as well as those suspected of being drug impaired while driving.

In 2018-19 there were approximately 150,000 police roadside random oral fluid drug tests conducted, and eight per cent of these required confirmatory drug testing by the VIFM. More than 5900 injured drivers were analysed for alcohol and drugs in the past year with similar rates of detection to deceased drivers. For example, among the road death cases reported to the coroner, stimulants featured in 19 per cent of all drivers killed on Victorian roads in 2018.

Number of toxicology roadside confirmatory drug test cases

14/15	5633
15/16	9489
16/17	8958
17/18	10153
18/19	12560

Number of toxicology tests on impaired driver cases

14/15	211
15/16	283
16/17	339
17/18	381
18/19	372

Donor Tissue Bank of Victoria

Celebrating 30 years of tissue banking at the DTBV

In 2019 the Donor Tissue Bank of Victoria (DTBV) celebrated 30 years of safely supplying human tissue allografts to the Australian health care system. This no small achievement given the legislative, technological, organisational, funding, research and regulatory changes the DTBV has encountered since it was established in 1989. Initially the DTBV comprised a single desk, a tissue retrieval room and "a good idea". This "good idea" recognised the synergies between tissue banking and autopsy activities and the potential health benefits to the community of providing human tissue products suitable for transplantation.

Over the 30 years many diligent and thoughtful staff have shaped the transplant, donor family co-ordination and tissue retrieval activities of the DTBV. From incredibly basic facilities at the time of providing the first donated cornea in 1991, the DTBV now operates out of a purpose-built facility with world-class laboratories. The highly trained and committed team, manufacture tissue products to Therapeutic Goods Administration (TGA) approved standards, and have successfully provided tens of thousands of safe, high quality bone, skin, tendon and cardiovascular grafts for surgical use.

The performance of the DTBV is highly dependent upon donation rates, which directly affects the availability of human tissue allografts. The lead-time to certify that a tissue is safe to use, can also take up to 15 months due to rigorous laboratory testing and thorough medical record checks.

Overview

The DTBV is Australia's only multi-tissue bank that screens for donors, processes, stores and tests tissues in-house for their safety and efficacy, enabling transplantation of tissues every day in orthopaedic, cardiothoracic, reconstructive surgery and burns care. It also facilitates access to corneas for the Lions Eye Donation Service.

The DTBV holds a TGA manufacturing licence for human tissue retrieval, processing, storage and release for supply, and also as a testing laboratory for product microbiological contamination testing. The DTBV is a prescribed tissue bank under the Victorian Human Tissue Act 1982 and the Donor Tissue Bank Committee oversees its operations, which is a sub-committee of the VIFM Council. (See the appendix for further details).

Recognising the precious gift of tissue

Donated tissue is a crucial resource to the community at large. It both saves lives (burns victims and heart valve recipients) and vastly improves the quality of life for others (recipients of bone, meniscus and tendons). This past 30 years and the future ahead would not be possible without the support of donors and their families and the many health care and tissue banking professionals required to ensure this crucial resource is available to those in need.

Donors and their families are very special people and the support of donors and their families is integral to the DTBV's work. Tissue donation offers relatives of a deceased person the opportunity to salvage something positive from the tragic loss of the one they loved.

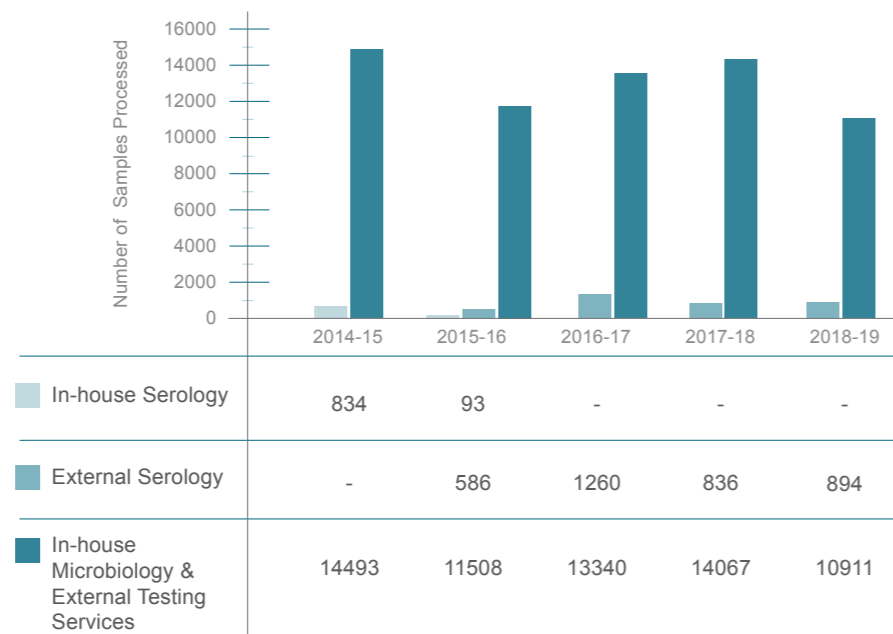
The DTBV hosts an annual afternoon tea called 'Leaf Day' for family members and friends of the donors from the preceding year where each donor, represented as a leaf on the Tree of Life displayed in the DTBV foyer, is recognised and thanked. The DTBV also proudly houses the bronze and steel sculpture called 'The Gift...', which depicts tissue donation as two

hands – one giving and one receiving. The sculpture is sited outside the main entrance of the DTBV at the end of Moore Street in Southbank.

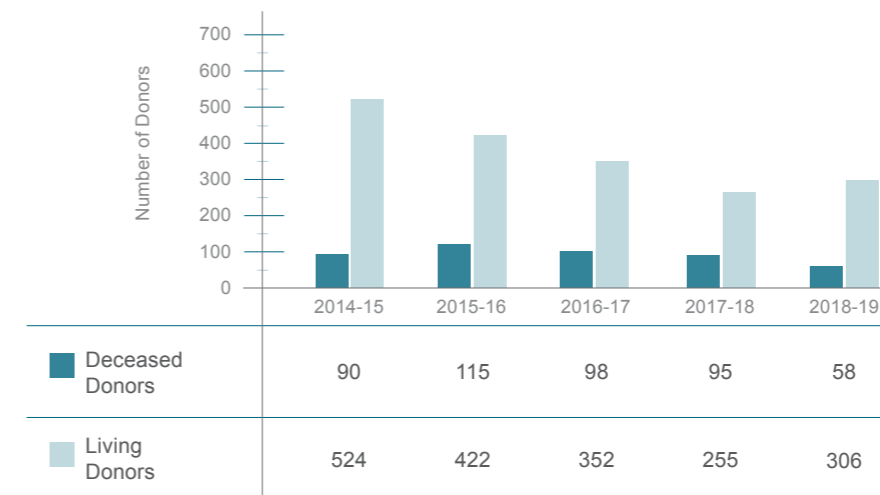
Donation partners

The DTBV donation program operates in collaboration with partners through the DonateLife Network including DonateLife Victoria, DonateLife Tasmania, the Royal Melbourne Hospital and the Lions Eye Donation Service in Melbourne. Tissue is also collected from patients undergoing routine hip replacements (due to worn cartilage). The otherwise discarded bone removed

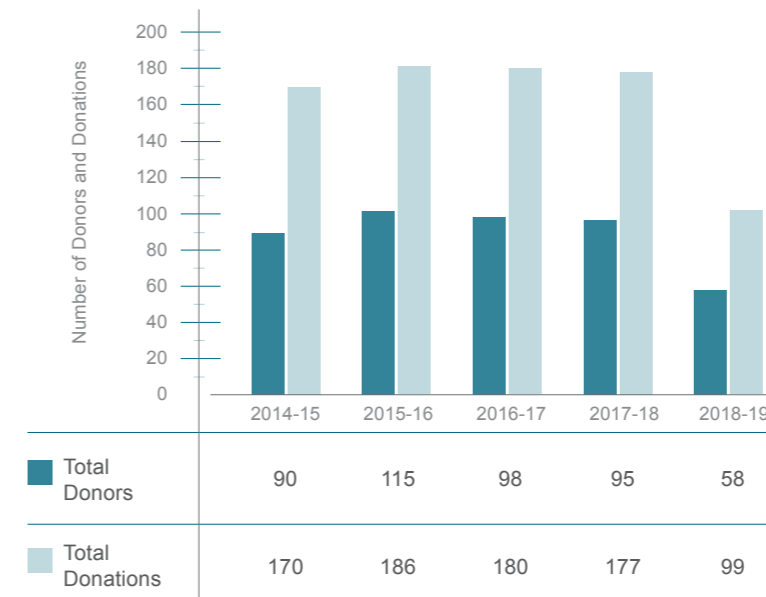
Number of Microbiology Samples Processed



Number of living and deceased donors



Number of deceased donors and donations



during surgery is processed by our scientific and technical team into a variety of tissue products for transplantation. The DTBV also collaborates with the Royal Children's Hospital to collect cardiac valves from heart recipients, as there is a particular shortage of small valves for transplantation into children.

Making the most of the gift of tissue

The performance of the DTBV is highly dependent upon donation rates, which directly affects the availability of human tissue allografts. The lead-time to certify that a tissue is safe to use, can also take up to 15 months due to rigorous laboratory

testing and thorough medical record checks. As such it is important that a healthy stock of products is maintained and that every tissue donated is processed for maximum value to benefit as many recipients as possible.

Donation rates 2018-19

Although the living donor bone program has improved on the previous year, the number of deceased donors and donations has continued to decrease. A combination of factors has reduced donations. These include the need to rebuild and train a new team of Tissue Donation Nurse Specialists who operate the screening program, fewer referrals from external groups such as DonateLife, and fewer suitable donors. This has resulted in a reduction in tissue stock levels, however due to a five-year expiry date, this has not as yet impacted on the ability to supply tissue.

Last year the DTBV tissue supply was similar to previous years, with the exception of skin which saw another extraordinary spike in demand, despite no major burns related events.

New tissue product launched

The launch of Cancellous Bone Matrix (CBM) in late 2018 also marked a major technological step change for the DTBV – the first "secondary" product manufactured from a "primary" product – namely bone. CBM is also the DTBV's first freeze-dried product. It allows hospitals to store bone product on-site and on a shelf – a far more convenient alternative to frozen bone, which must be stored in a freezer and shipped the day before use. To date the DTBV has supplied over 100 bottles of 40cc CBM. The DTBV has also commenced patient follow up and early reports indicate that, where applicable, bone healing, new bone formation, union and bone remodelling has occurred.

The ongoing development of freeze-dried product is a key direction in the product plans. The DTBV recently

extended the CBM volume range from 1cc to 40cc to minimise product wastage and support newer surgical applications such as spinal fusion. Following extensive in-house product development, in early 2019 the TGA approved Demineralised Bone Matrix (DBM). This freeze-dried product is made from cortical bone which is milled, washed and treated with acid to remove the calcium and to expose more of the bone morphogenetic proteins, which signal bone healing and fusion in a variety of orthopaedic procedures. The initial stages of manufacture of DBM has commenced in June 2019.

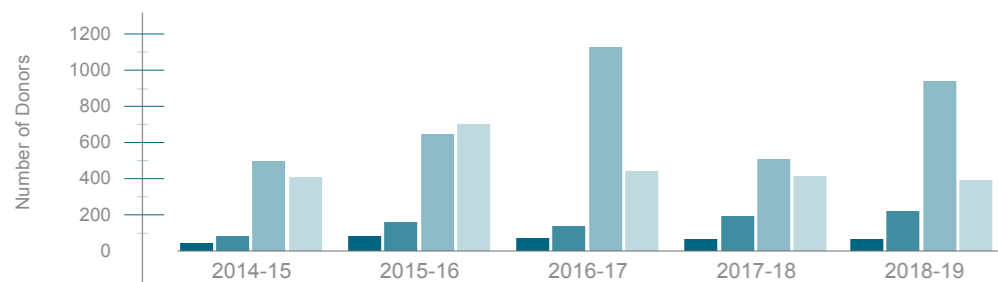
The DTBV website extension

With new products available it has been essential to maintain a web presence not just for DTBV donors but also for surgical customers. In June 2019 the DTBV launched an extension to the website to include pages for health care practitioners to access information about the DTBV product range and to download a product request form. See www.dtbv.org.au

Number and type of donations by deceased donors

	2014-15	2015-16	2016-17	2017-18	2018-19
Total Donors	90	115	98	95	58
Cardiovascular Donations	47	64	48	55	24
Musculoskeletal Tissue Donations	54	47	60	53	35
Skin Tissue Donations	69	75	72	69	40
Total Donations	170	186	180	177	99

Tissue supplied for transplantation by the Donor Tissue Bank of Victoria



Cardiac	37	89	55	53	54
Tendons	78	140	114	169	173
Skin	507	619	1135	512	922
Bones	481	491	449	430	410

Academic Programs

The Academic Programs Division, responsible for the operation of the Department of Forensic Medicine, Monash University (DFM) and its diverse research, teaching and international activities, is well integrated into the fabric of the VIFM. This connection between academia and clinical practice – within the context of the Victorian Public Service and the university environment – is a synergistic relationship that benefits from the significant advantages provided through being embedded in both government (Justice) and the university (Health). At a practical level, this means that the research and teaching done within Academic Programs supports the service delivery carried out by the VIFM. >

Associate Professor Richard Bassed

VIFM report for ACFID

The underlying philosophy of the VIFM is to “learn from the dead to benefit the living” and this drives the prevention focus across the research and teaching programs. The Academic Programs Division is recognised as an important contributor to international forensic medical and scientific teaching and research. It provides vital academic input into the Institute’s day-to-day business and its academic accomplishments underpins the Institute’s credibility in the courts, the justice and health care systems. This collaboration also provides the VIFM practitioners with important avenues for professional development to build their own knowledge and expertise, and to share this expertise through teaching. It is critical that the VIFM staff share their skills and knowledge to train the next generation of forensic practitioners. Academic Programs also contributes to global prevention research and delivers capacity building initiatives to low- and middle-income countries (LMIC) via the Institute’s International Programs.

Associate Professor Richard Bassed has led the Division as the VIFM Deputy Director (Academic Programs) since his appointment in April 2017. He is a member of the Senior Executive Group and the wider VIFM Executive Group, and is the Head of the Department of Forensic Medicine in the School of Public Health and Preventive Medicine at Monash University. The School includes the Department of Forensic Medicine, the Department of Epidemiology and Preventive Medicine, the Michael Kirby Centre for Public Health and Human Rights, and other research groups.

Highlights from the year

It has been another year of growth and expansion for the Division and the Department of Forensic Medicine. We have seen the expansion of our teaching programs and have increased our research services into new areas of forensic medicine and injury prevention.

It has been a pleasure to welcome some new and highly regarded researchers to our team, Associate Professor Bebe Loff, Dr Liz Bishop, Professor (Em.) Raph Grzbieta, Dr George Rechnitzer and Dr Matthew Dimmock.

We have also welcomed a new team of administration staff, Tim Montgomery (Administration Officer, Postgraduate Programs), Sarah Travers (Administration Officer, Undergraduate Programs), and appointed Jen Ryan as Manager, Department of Forensic Medicine.

Practice and Response in the Prevention of Sexual Misconduct in the International Aid Sector

In early 2018 the UK media reported alleged sexual misconduct by staff employed by UK aid organisations and alleged mismanaged responses. The UK aid sector was subsequently affected by widespread reduction in funding and a parliamentary inquiry.

The Australian aid sector, through its peak body, The Australian Council for International Development (ACFID) and the Department of Foreign Affairs and Trade (DFAT) responded by commissioning an independent review into the practice and response in the prevention of sexual misconduct amongst its own organisations. The VIFM was commissioned to conduct this review in a partnership between the Department of Forensic Medicine (Monash), Clinical Forensic Medicine and International Programs. The report was published in November 2018.

A huge amount of work went into this project and the VIFM is very proud to have delivered such a comprehensive report.

National Strategic Directions for Injury Prevention Workshop

Professor Adnan Hyder visited the VIFM from 18-20 September 2018, primarily as the Schofield Orator for 2018. Professor Hyder is the Senior Associate Dean for Research and Professor of Global Health, at the Milken Institute of Public Health, George Washington University, USA. His Oration titled ‘Injury Prevention and Public Health Research in the 21st Century’ focussed largely on the developing world, firstly debunking myths around current approaches, then posing challenges for future work to assist development in low and middle-income countries (LMIC). His challenges to forensic medicine, injury prevention and public health more generally including moving beyond working briefly with LMIC then moving on without building in-country capacity; small interventions with no real potential to be taken to scale; and training professionals from LMICs without also working with trainees and alumni to build stronger institutions in their countries.



Professor Adnan Hyder and Emeritus Professor Joan Ozanne-Smith

Monash Department of Forensic Medicine injury prevention academic and leading researcher, Professor Joan Ozanne-Smith used Professor Hyder’s visit to facilitate a national ‘Strategic Directions for Injury Prevention Workshop’, bringing together experts from the VIFM, the Monash Department of Forensic Medicine (DFM) and the Australasian Injury Prevention Network. It included speakers from the Commonwealth Department of Health, the Australian Institute of Health and Welfare, Flinders University and the DFM and participants from all Australian states and territories and New Zealand. Key research priorities were discussed and agreed.

The Michael Kirby Centre for Public Health and Human Rights

The Michael Kirby Centre for Public Health and Human Rights, which is named in Justice Kirby’s honour is now officially located within the Department of Forensic Medicine at the VIFM. Justice Kirby visited the VIFM in March to discuss some of the projects that are currently underway, as well as plans for the future. These include:

- » An examination of restorative justice as a response to sexual and family violence
- » Physical and chemical restraint of children in chronic and elective treatment settings
- » Doctors as stewards of medical treatment and family wellbeing in resource poor settings.



The Hon. Michael Kirby AC CMG and Associate Professor Bebe Loff with staff from Academic Programs

ICRC Workshop

In February 2019, eight forensic advisors from the International Committee of the Red Cross (ICRC) from across Asia attended a week-long workshop at the VIFM on the Principles and Practice of a Death Investigation system. The course was led by Professor Stephen Cordner and involved many of the VIFM’s professional staff. ICRC Forensic Advisors undertake key roles in helping authorities in their host nations to understand and deliver on their responsibilities under international humanitarian law to the dead victims of armed conflict, and in building local technical capacity for this.

Sam Rowbotham

Over the past four years Dr Sam Rowbotham has undertaken innovative research which culminated in the submission of a doctoral thesis entitled *The Skeletal Blunt Force Trauma Resulting from Fatal Falls: An Anthropological Analysis of Fracture Distribution and Morphology Using Post-Mortem Computed Tomography*.

Dr Soren Blau and Dr Jacqui Hislop-Jambrich supervised Sam and on the 31st August 2018 Sam’s thesis was successfully conferred. From the moment she joined the Department of Forensic Medicine, Sam has been a dynamic, enthusiastic and independent researcher. Sam has fully embraced the opportunities that the VIFM and the Department of Forensic Medicine offer, and not only has she undertaken meaningful research that informs forensic anthropology practice but she is now an important member of the identification team.

Congratulations to Sam for a very well-earned achievement and for her contribution to research and teaching.



Associate Professor Dimitri Gerostamoulos, Dr Samantha Rowbotham and Associate Professor Soren Blau

Dr Nathan Stam

Dr Nathan Stam graduated in May 2019. He was supervised by Dr Jennifer Schumann, Dr Dimitri Gerostamoulos, Professor Olaf Drummer and Associate Professor Karen Smith.

The title of Nathan’s PhD was *Clinical and forensic aspects of heroin related deaths: prevalence, contributors and opportunities for prevention* and the VIFM and DFM congratulate him on this important piece of research.

Richard Fernandez

Dr Richard Fernandez, co-supervised by Adjunct Professor Raphael Grzebieta, graduated in Oct 2018. His thesis topic was *Anatomical and biomechanical considerations for hip protector design and function*.

Richard's research focused on fall induced hip fracture prevention, and improving hip protector design and usage. This led to improved hip protector specifications based more on an individual's anatomy. His research findings also recommend that hip muscle size be maintained in older persons.

Honours students

Three Global Challenge honours students hosted by the Department of Forensic Medicine have successfully completed their project with Professor Joe Ibrahim (YPIRACS) and are writing up their papers for publication.

Over the last year the DFM welcomed three new PhD students:

- » Nick Dempsey who is researching the degree of force and skeletal trauma
- » Eden Johnstone-Belford who is researching Bomb Pulse C 14 dating in skeletal remains to assist in the ID of Long term missing persons
- » Phuong Hua who is researching the impact of exposure to suicide on an individual's risk of suicide in later life.

Research Grants

Congratulations to Associate Professor Lyndal Bugeja

In November, Dr Lyndal Bugeja of the Department of Forensic Medicine was successful in being awarded a Discovery Early Career Research Award (DECRA) grant to support her research in family violence over the next three years. The focus of Lyndal's research is:

Breaking patterns of violence to prevent family homicide. This project aims to quantify the relationship and interdependencies between risk factors and service utilisation among family homicide victims and offenders. These will be identified from an analysis of criminal justice and Coroners' data on family homicide using Bayesian networks. This innovative approach will produce a model to predict the probability of a lethal outcome, and enable resources to be targeted for interventions to parties identified as high risk prior to

escalation that could lead to death. The knowledge from this project will help save the lives of victims, change the life course of offenders and reduce exposure to violence by other family members to break intergenerational patterns of family violence.

Lyndal's research will not only bolster the VIFM family violence service, but will also be invaluable to the broader efforts across the justice and healthcare sectors to combat family violence homicides.

Congratulations to Dr Jennifer Schumann

Dr Jennifer Schumann is part of a team of new chief investigators from University of Sydney, Monash University and University of NSW. In late 2018 it was announced they received an NHMRC grant for the following project:

Health service and medicine utilisation before suicide: optimising suicide prevention using population-based linkage of routinely collected data:

Suicide prevention is a national priority: suicide in Australia is the leading cause of years of potential life lost, the leading cause of death for people aged between 15 and 44, and its prevalence has remained unchanged over the past decade. Health professionals deliver most of our leading suicide prevention strategies via health services, but other efficacious strategies include reducing access to methods of death (means restriction) and public awareness campaigns. Optimising the efficacy of any suicide prevention strategy lies in its delivery – each needs to reach the specific population where it will have the most impact. Currently, we have no population-level data that allows us to determine which individuals in what parts of Australia are likely to utilise our most promising interventions, including most importantly psychotropic medications. Our study will provide this central information, enabling the optimisation of current suicide prevention strategies as well as reporting medicines commonly used in intentional drug overdose.

Suicide prevention is a national priority: suicide in Australia is the leading cause of years of potential life lost, the leading cause of death for people aged between 15 and 44, and its prevalence has remained unchanged over the past decade.

Awards

Professor Raphael Grzebieta, Adjunct Professor with Monash, Department of Forensic Medicine and global road safety expert UNSW Sydney, was awarded the 2019 Kenneth A. Stonex Roadside Safety award in recognition of his lifetime contribution to reducing run-off-road injuries and transport deaths worldwide. The annual award, presented by the US National Academies of Sciences, Engineering and Medicine's Transportation Research Board's (TRB's) Roadside Safety Design Committee AFB20, is given to engineers and road safety experts who have dedicated their career to advancing transportation infrastructure and making roads safer.

Professor Grzebieta was recognised by the TRB's AFB20 Committee for identifying the leading causes of roadside fatalities and injuries and developing mitigation techniques using full-scale crash testing and computer simulation.

Ms Samantha Joubert, toxicologist, was awarded best oral presentation at the June 2019 Forensic and Clinical Toxicology Association (FACTA) conference for her talk, "A series of deaths in Victoria linked to the new synthetic cannabinoid CUMYL-PEGACLONE".

Research Units

Department of Forensic Medicine

The focus for the last year has been the expansion of the research program to focus on a wider variety of forensic and public health subjects, and to increase the effort to translate research findings directly for community benefit. There are now a larger number of research teams within the Division that better reflect the range of expertise that exists within the VIFM. A multi-disciplinary approach has been implemented that brings together the educational, research and clinical expertise within each unit.

In collaboration with Monash Faculty of ICT and Monash Digital health, the Division is also embarking on a new major research initiative in the application of Artificial Intelligence and Machine Learning algorithms. This work will improve the ability to search our large databases for research purposes, as well as improve the VIFM service provision through the development of more automated image processing techniques.

A number of projects are underway in this space, including automatic segmentation of bones and organs from PMCT data, Content Based Image Retrieval for the imaging database, a Machine Learning study on ballistics (trajectory, bullet components, reconstruction of disrupted anatomy) and advanced Augmented Reality visualisation of PMCT data.

Drug Intelligence Unit

Unit Leader: Dr Jennifer Schumann



Dr Jennifer Schumann

Led by forensic toxicologist, Dr Jennifer Schumann, the drug intelligence research unit specialises in the investigation of the harmful outcomes of licit and illicit drug use on the community. Utilising a multidisciplinary approach combining forensic toxicology, public health and injury epidemiology has led directly to changes in Australian public health policy. The unit continues to be a research leader in this field with a focus on death prevention and safer drug use. Over the past year the unit has undertaken the following research:

- » The prevalence of alcohol and other drugs in fatal road crashes in Victoria, Australia 2000-2016 (collaborative study with SPPHM, Alfred Hospital and Burnet Institute)
- » Deaths at concerts and music festivals in Victoria – a collaborative project with the Coroners Court of Victoria and Dr David Caldicott from Australian National University

The drug intelligence research unit specialises in the investigation of the harmful outcomes of licit and illicit drug use on the community.

- » Heroin deaths in Victoria – a collaborative study with the Coroners Court Prevention Unit
- » The involvement of pharmaceutical opioids in coronial deaths in Australia
- » Health service and medicine utilisation before suicide: optimising suicide prevention using population-based linkage of routinely collected data – a collaborative project with University of Sydney and the University of New South Wales.

- » Participated in Australian Vital Statistics Interest Group annual meeting, hosted by the Australian Bureau of Statistics, Brisbane 20-21 November, 2018
- » Participated in Papua New Guinea Institute of Medical Research 50th anniversary program, Goroka PNG, 28-31 August, 2018
- » Invited participant to Commonwealth Data Sharing Workshop (Department of Prime Minister and Cabinet) March 2019
- » Continued to represent the VIFM and the DFM as a partner in the World Health Organisation Collaborating Centre on injuries and violence, hosted at the Monash University Accident Research Centre.

Injury Prevention – Unintentional Injury

Unit Leader: Emeritus Professor Ozanne-Smith



Emeritus Professor Joan Ozanne-Smith

Led by Emeritus Professor Ozanne-Smith, the unintentional injury prevention unit focuses on consumer product safety and injury prevention in low- and middle-income countries. This research unit has contributed to the Senate Inquiry into *The need for regulation of mobility scooters, also known as motorised wheelchairs* 23 July 2018. Emeritus Professor Ozanne-Smith was also consulted by the Commonwealth Treasury Policy Unit, with regard to potential policy changes to the Australian product safety system, Melbourne, April 2019. This unit is also supervising a PhD researcher, Susan Chang whose project is focused on child unintentional injury deaths spanning the years 1968-present, with an emphasis on trends in drowning, road trauma deaths, and poisoning.

PhD program and teaching:

- » Invited to present with Associate Professor Richard Bassed at the Senate Inquiry hearing into *The need for regulation of mobility scooters, also known as motorised wheelchairs* in July 2018
- » Consulted by the Commonwealth Treasury Policy Unit with regard to potential policy changes to the Australian product safety system, Melbourne, April 2019

Violence Investigation, Research and Training Unit

Unit Leaders: Dr Maaïke Moller and Associate Professor Lyndal Bugeja



Dr Maaïke Moller



Associate Professor Lyndal Bugeja

The Violence Investigation, Research and Training Unit (VIRTU) comprises co-leadership by our clinical and research staff, Dr Maaïke Moller, Clinical Forensic Medicine and Associate Professor Lyndal Bugeja, Department of Forensic Medicine. The purpose of VIRTU is to conduct research and training activities that enhance the medico-legal investigation of self-directed and interpersonal violence. By optimising the medico-legal investigation of violence it is intended that public health and legal outcomes can be improved.

The VIRTU was established in 2018 with the initial projects including:

- » Training for Victoria Police's Centre for Family Violence, Foundation Program
- » Development of an enhanced family violence dataset for clinical forensic assessments of abuse, sexual assault and fitness for interview
- » Research on the risk profiles for victims and perpetrators of family violence examined by Clinical Forensic Physicians
- » The Discovery Early Career Research Award (DECRA) grant to support research into breaking patterns of violence to prevent family homicide. This project aims to quantify the relationship and interdependencies between risk factors and service utilisation among family homicide victims and offenders.

Health Law and Ageing Research Unit

Unit Leader: Professor Joseph Ibrahim



Professor Joseph Ibrahim

The Health Law and Ageing Research Unit is a multi-disciplinary team with expertise in public health, forensic investigation, health care, aged care and law. The unit is headed by Professor Joseph Ibrahim with assistance from Associate Professor Lyndal Bugeja.

The unit is focused on delivering a reduction of injury and premature deaths, the promotion of respect for older persons' choices, and developing the workforce providing aged care services.

Research in this area uses existing information from medico-legal death investigations of older people, and applies the results to identify opportunities for improvement, and to inform changes and optimal practice through the development of new resources, policies, procedures and protocols for aged care and health professionals.

It has been a busy year for this unit with some highlights being:

- » The 50th edition of the Residential Aged Care Communiqué was published which is a remarkable achievement. Additionally, all past editions of RAC Communiqué were submitted to the Royal Commission into Aged Care Quality and Safety.
- » Professor Joseph Ibrahim was invited to present evidence on Day 7 (Thursday 16 May 2019) of the third series hearings of the Royal Commission and also produced a comprehensive document for the Commission outlining the work of DFM in aged care.
- » The past 12 months have also seen the team complete projects promoting better management of persons with dementia and chronic disease as well as presentations and education on topics of rights, respecting choice, prevention of elder abuse and neglect and reducing harm from injury.
- » The Global Challenge Honours students in 2018 completed research and presented their finding on the plight of young people in nursing homes to various members of parliament and this research also forms part of the work of the Royal Commission. The students of 2019 are examining prevention of sexual violence in nursing homes.

New Research Collaborations

Recently the VIFM became an industry partner in new research collaboration, HILA GRIP (Human In the Loop Analytics Graduate Research Industry Partnership). This program has enabled the DFM to take on two new PhD students to work on machine learning algorithms to improve both research and practice, specifically the ability to search VIFM's image and CT databases, plus the visualisation of medical imaging. Work on these new projects will start in mid-2019.

The DFM also received funding for a Joint PhD/Research Assistant position with the Monash Faculty of ICT to research machine learning applications for bullet trajectory problems in forensic pathology.

Academic Programs and the Coroners Prevention Unit have had discussions as to how we can undertake greater research collaboration with the Coroners Court of Victoria. These discussions have been very positive and it's anticipated that some agreements will be formalised later this year.



Dr Nicola Cunningham

Education and Teaching

Enrolments in the Masters of Forensic Medicine are now over 85 students, a significant increase from two years ago when enrolments were at 55 students. The DFM is now investigating ways to modernise the course through the use of technology, and to deliver the teaching to a wider audience.

The course underwent a thorough review in the first half of 2019 and out of this we expect to significantly improve the course content and the teaching delivery, including the development of new specialisations in Forensic Nursing and Forensic Radiology.

DFM has a new undergraduate unit in BioMedSci and BHS (Principles of Forensic Medicine and Science) starting in semester 2, 2019. The unit is coordinated by Jo Mazzeo and there is already a high level of interest from students.

DFM has seen continuing success with the Med Law program. This involves 50 tutors teaching all years of medicine at Monash University across all campuses. Thank you to Jo Mazzeo and Sarah Travers for their ongoing management of these units.

Academic Programs has focused on the development of a number of new short courses in areas such as skeletal trauma, restorative justice, forensic aspects of accident investigation, forensic osteology, sexual assault and forensic geriatrics. These courses will be introduced over 2019-20.

The key goals for the year ahead are to increase our teaching offerings, both short courses and formal university programs, to engage more broadly with other universities who are keen to share in the VIFM's unique forensic medical and scientific knowledge, and to increase the research program and research collaborations.

The key goals for the year ahead are to increase our teaching offerings, both short courses and formal university programs, to engage more broadly with other universities who are keen to share in the VIFM's unique forensic medical and scientific knowledge.

The International Program

The VIFM has a long history of engagement with international forensic medical and scientific communities and practitioners. The VIFM develops its capabilities in part through its interaction, collaborations and partnerships with international forensic institutes. The Institute is one of the very few forensic organisations in the world that provides formalised postgraduate forensic medical and scientific professional development programs. Training placements are highly sought after by international clinicians and scientists.

The VIFM's professional expertise in mass casualty management, Disaster Victim Identification (DVI) and the investigation of human rights violations has been used by organisations such as the World Health Organisation (WHO), the International Committee of the Red Cross (ICRC), the United Nations Office on Drugs and Crime (UNODC), Justice Rapid Response (JRR) and the International Criminal Court (ICC). >

Professor Stephen Cordner

The Institute is one of the very few forensic organisations in the world that provides formalised postgraduate forensic medical and scientific professional development programs.

Expert medico-legal death and injury investigations underpin effective justice and public health systems. The VIFM is committed to supporting the development of forensic medical and scientific capacity in resource-poor nations, particularly in South East Asia and the Pacific where the training of specialist forensic doctors is often negligible. For more than 26 years the VIFM has hosted a Sri Lankan forensic medical practitioner for a year-long training placement. This has made a significant contribution to Sri Lanka's forensic medical capability, enhancing the nation's ability to respond to the Easter 2019 terrorist bombings.

Many developing nations in this region have a limited capacity to undertake the day-to-day forensic investigation of suspicious or violent deaths (homicides, suicides, accidents) and injuries (physical and sexual assault of adults and children). They also struggle to cope with identification of mass casualties in the event of natural disasters, terrorist events, a ferry sinking or a plane crash.

Through its work with the Asia Pacific Medico-Legal Agencies (a network of 34 forensic medical institutions from 22 Asia Pacific nations) and the ICRC, the VIFM plays a significant role in enhancing forensic medical capacity and related resource development in this region. This work supports capacity development for forensic medical institutions in the Asia Pacific region, and also strengthens the Institute's capacity to respond to Australian mass casualty events.

The International Program is a central facilitation, coordination and monitoring point for the VIFM's national and international activities – including support for visiting on-site international medical and scientific fellows, students and their families. This includes working with doctors through the Australian Health Practitioner Regulation Agency (AHPRA) medical registration, and the Royal College of Pathologists Australasia (RCPA) approval process and visa requirements. The Program provides support for professional staff engaged in national and international work including improving internal processes such as finance grant acquittal for project staff.

The Program develops funding proposals for national and international work and coordinates responses to national and international project opportunities. National and international project opportunities are considered in an assessment process, which is consultative and considers alignment with the VIFM's strategic goals, impact on and contribution to statutory service delivery, donor funding, key national and international stakeholders, and benefits to the VIFM. The assessment process recognises both monetary and non-monetary benefits such as professional experience, strategic partnerships and research. The Program maintains and develops strategic partnerships and collaborations with national and international organisations and increases awareness of the VIFM's national and international services.

The Missing

The VIFM's International Program makes an active contribution to the identification of the missing nationally and internationally. In the 2018-2019 financial year the VIFM's International Program participated in a number of international initiatives in this field.

Training in Management of the Dead for ASEAN Police First Responders

This project was funded by the Department of Foreign Affairs and Trade (DFAT) through the Australia-ASEAN Council. The Asia Pacific area is the world's most disaster prone region. In the period from 2005 to 2014 the region accounted for 60 per cent of the world's disaster-related deaths and a staggering 80 per cent of disaster-affected populations. The region is prone to floods, typhoons, earthquakes and tsunamis. Other mass casualty events include plane crashes, deaths related to clandestine cross border migration, ferries sinking, building collapses and terrorist attacks.

Some ASEAN nations lack skills in the mass fatality (dead body management) in disaster planning and response. We know that chaotic and disorganised recovery of human remains reduces the chances of identification and causes community distress. One of the critical factors in supporting the identification of the deceased following a disaster is dead body management protocols that facilitate later scientific identification.

Training for first responders is pivotal in being able to do this. In most ASEAN nations police have responsibility for command and control of disaster sites. Police understanding of dead body management guidelines exponentially increases the likelihood of identification. The proper and dignified recovery and storage of dead bodies also reduces stress for surviving families and communities.

The project leveraged the VIFM's significant ASEAN-wide partnerships through the development of training content by expert forensic medical practitioners from the VIFM, the ICRC, Asia Pacific Medico-Legal Agencies (APMLA) member institutions and ASEAN member nations. The training was tested in pilot workshop for Royal Malaysian Police first responders in Kuala Lumpur and then again, following program refinement, with the Philippines National Police in Manila. The final curriculum was submitted to the ASEANAPOL Secretariat in Kuala Lumpur for dissemination and localisation by ASEAN member nation police forces. The VIFM is grateful for the support of the Australia ASEAN Council.

The VIFM contribution to ICRC Missing Persons Standard Setting Project

The impact of disappearances on individuals, families and communities is one of the most damaging and long lasting consequences of armed conflict, civil violence, migration and natural disasters. Forensic standards, guidelines and policies can support the respectful management, recovery and identification of deceased in these circumstances. Families have a right to know the fate and whereabouts of their loved ones.

In 2018 the ICRC launched the Standard Setting for Missing Persons initiative to identify how humanitarian forensic action can be deployed more effectively, particularly in relation to missing migrants, in protracted armed conflicts and in remote and resource-challenged contexts.

In late 2018 the VIFM's International Program Head, Professor Stephen Cordner was commissioned by the ICRC in Switzerland to identify how forensic standards and policies can be improved to prevent and resolve the missing and support the bereaved particularly in large scale disasters. Professor Cordner provided a Report with key recommendations to the ICRC in early 2019.

For more information see www.icrc.org/en/publication/4375-missing-persons-project

Mortuary Management and Disaster Victim Identification Workshop – ICRC Ukraine

In February, 2019 the VIFM's Forensic Technical Service Manager, Dr Jodie Leditschke provided training on mortuary management and logistics to support identification of unknown deceased in large scale disasters at an ICRC workshop for forensic practitioners at the Humanitarian Forensic Training Centre in Dnipro, Ukraine.

International Centre for Humanitarian Forensics, Gujarat Forensic Sciences University (GFSU), India-ICRC consultancy

International Program Head, Professor Stephen Cordner was commissioned by the ICRC to work with the GFSU in planning the initial five-year development framework and service model for the new International Centre for Humanitarian Forensics. This model proposed developing and deploying locally trained expertise and systems to address India's huge number of unidentified deceased which is estimated to be some 40,000 each year.

ICRC Consultancy on proposed changes to the law on inquests into deaths, Sri Lanka

International Program Head, Professor Stephen Cordner made a range of recommendations for medico-death investigation principles and services, many of which were aimed at strengthening the likelihood of identification and communication and liaison with bereaved families.

The VIFM participation in ICRC Asia Pacific Regional Meeting on Forensic Data Management for The Missing

The ICRC has assessed and compared forensic data management systems in this region and determined that the lack of uniformity in data management is a key factor which inhibits identification of the missing both within and, in particular between, national jurisdictions. This is a complex problem because of the diversity of data systems, privacy regulations, languages, terminologies and reasons for data collection and regulations on data sharing.

Data is one of the key tools for the search and identification of missing people. The reconciliation of good quality ante-mortem and post-mortem data is essential to identification of unknown bodies. This can only be achieved if there are agreed frameworks and processes for the collection, storage, protection and verification of this information within and between nations.

Mismanagement of data can compromise forensic best practice and high-level expertise leading to misidentification and errors, causing additional trauma and suffering for families and communities in post-disaster situations.

In June 2019 the VIFM participated in an ICRC Asia Pacific Regional Workshop in Thailand focused on working towards agreed standards for information collection, protection, security and transnational agency cooperation, communication and data sharing.

The VIFM Deputy Director, Professor David Ranson and Senior Forensic Anthropologist Associate Professor Soren Blau spoke about data collection models and the Australian experience in facilitating data sharing on missing persons between state agencies in a federated system.



International Committee of the Red Cross Forensic Advisors
 From left: Prashantha Bhagavath, Rafael de Abreu e Souza, Dina Alejandra Jimenez, Laurel Clegg, Uwom Eze, Jacqueline Rodriguez Gonzalez, Alexandra Starkie and Claudia Garrido Varas

The VIFM participation in Justice Rapid Response (JRR) Forensic Scoping Mission for the Truth, Reconciliation and Reparations Commission (TRRC) in Gambia

In March 2019 the VIFM's Senior Forensic Anthropologist, Associate Professor Soren Blau was commissioned by JRR to work with the Head of the TRRC Research and Investigation Unit in planning and preparing for forensic investigations into extra-judicial killings and disappearances.

Asia Pacific Medico-Legal Agencies (APMLA) Missing Persons Work Group

The VIFM is a participant in the APMLA's Work Group on The Missing which is focused in improving national and international collaboration in the identification of unknown deceased. Many nations in this region experience natural disasters and cross border migrations which can result in the discovery of unidentified deceased. The VIFM attended a Work Group meeting in Malaysia in April 2019.

Following many years of internal conflict Sri Lanka is estimated to have between 16,000 and 20,000 missing persons. The OMP will be responsible for transitional justice processes in relation to searching for and tracing missing persons and providing assistance to affected families.

The VIFM Workshop for ICRC Forensic Advisors from Asia Pacific region on the key principles of death investigation systems

In February 2019 the VIFM provided a five day workshop on the key principles and characteristics of effective death investigation systems for eight ICRC Forensic Advisors from Indonesia, Philippines, Nepal, India, Sri Lanka and Afghanistan. One of the key aspects of the workshop was systems and processes which support the identification of otherwise unknown deceased persons.

Training for Office on Missing Persons Commissioners - Sri Lanka

The VIFM's Senior Forensic Anthropologist Associate Professor Soren Blau was commissioned by the Sri Lanka-based South Asian Centre for Legal Studies to train Commissioners of the recently established Office on Missing Persons (OMP) in June 2019. Following many years of internal conflict Sri Lanka is estimated to have between 16,000 and 20,000 missing persons. The OMP will be responsible for transitional justice processes in relation to searching for and tracing missing persons and providing assistance to affected families.

International and Humanitarian Work and Partnerships

Samoa infant deaths - WHO

In July 2018 the VIFM was requested by the World Health Organisation (WHO) office in Fiji to deploy a forensic pathologist and mortuary technician to Samoa following the sudden and unexpected death of two infants. The VIFM participated in the death investigation process which included liaison with the Health and Justice Departments and the provision of forensic toxicology testing. This case is subject to court proceedings in Samoa.

Fiji - Forensic toxicology service - WHO

In June 2019 the WHO Fiji office in cooperation with the Fiji Health Department asked the VIFM to provide toxicology testing following the sudden and unexpected deaths of two foreign tourists. The VIFM undertook this testing and commissioned other specialist testing by specialist laboratories in Australia in liaison with laboratories in the home country of the deceased.

Mortuary Capacity Enhancement - Sri Lanka ICRC

The VIFM Forensic Technical Services and Mortuary Manager, Dr Jodie Leditschke was commissioned by the ICRC in Sri Lanka to undertake a project to assess and make recommendations for the enhancement of mortuary operations including workflow and related standard operating procedures and information and data management. Dr Leditschke undertook three visits to Sri Lanka in 2018-19 that included workshops with mortuary staff in a project that has resulted in quantifiable improvements.



From left: Professor David Ranson, Professor Noel Woodford, Dr Jorge Pererya and Dr Chris O'Donnell

International Training Placements Hosted by the VIFM

United Arab Emirates (UAE) doctors Essa Saeedi and Khamis Almazrooei were awarded their Royal College of Pathologists of Australasia (RCPA) Fellowships in Forensic Pathology and stayed on for additional case work experience at the VIFM before returning to practice in Abu Dhabi in 2018 after six years with the VIFM. Dr Almazrooei and Dr Saeedi are the first UAE doctors to achieve this qualification.

Other overseas trained doctors and scientists who undertook fellowships at the VIFM in the 2018-19 financial year included:

- Dr Pradeep Bandara (Sri Lanka);
- Dr Tim Luijkx (Netherlands);
- Dr A.Gilkison (New Zealand);
- Dr Norbu Norbu (Bhutan);
- Dr Asser Hedegård Thomsen (Denmark);
- Dr Ameen Izzath (Sri Lanka);
- Dr Jorge Pereyra (Argentina);
- Leanne Gale – final year medical student (United Kingdom)
- and Laure Spark – anthropology PhD student (Canada).

Research Governance at the Victorian Institute of Forensic Medicine



The VIFM promotes responsible research as intrinsic to the operation of the Institute and to the VIFM's academic role as the Department of Forensic Medicine. The research culture at the VIFM demonstrates respect for the donors of tissue for research and the integrity of the coronial investigation. Good governance in research practices promotes high quality research, protects the privacy of individuals and ensures the good stewardship of public resources used to conduct research.

The VIFM has a two-step process for the review and approval of research projects: scientific review by the Research Advisory Committee (RAC) and ethical review by the VIFM Ethics Committee. The RAC and the VIFM Ethics Committee review all research conducted at the VIFM by the Institute's staff, students, interns, registrars, fellows and external researchers, that involve human tissue, live participants and information or data.

The RAC is an internal committee of the VIFM chaired by the Head of Academic Programs with members from different service areas of the VIFM as well as from Alfred Health. Its purpose is to consider all applications for quality assurance and research and to determine the scientific merit of each

proposal. The RAC meets eight times a year and can approve projects that are deemed to be Quality Assurance. All other research applications that are found to have scientific merit are referred to the VIFM Ethics Committee for ethical review. Projects that seek data from the National Coronial Information System are referred to the Justice and Human Research Ethics Committee.

The VIFM Ethics Committee is a standing committee of the VIFM Council and is constituted in compliance with the National Health and Medical Research Council (NHMRC) National Statement on Ethical Conduct in Human Research 2007 (the National Statement) under a Terms of Reference approved by the Council. As a registered Human Research Ethics Committee with the NHMRC, all research approved by the VIFM Ethics Committee must comply with the requirements of the National Statement. The VIFM Ethics Committee reports annually to the NHMRC for monitoring purposes.

In the 2018-19 year, the VIFM Ethics Committee considered and approved 27 research applications. The type of research can be categorised as follows:

Ethics approved research application categories 2018-19

Type of research	No. of applications
Access to the body of a deceased person	0
Use of fresh tissue (tissue taken for a research purpose)	0
Use of stored tissue (tissue taken for the purpose of an autopsy)	3
Information collected or generated	21
Live participants – surveys	2
Live participants – tissue	1

Significant Events

The Hon. John Cain Snr.

The VIFM/Monash University 2018 Graeme Schofield Oration – Injury Prevention and Public Health

The biennial VIFM Monash University Graeme Schofield Oration provides an opportunity for policy makers, regulators, academics, researchers, students and funders to better understand the national and international public health applications of forensic medicine and science. The event is named for the late Emeritus Professor Graeme Schofield, the former Professor of Community Medicine at Monash University who was one of the founders of the VIFM. Professor Schofield was an eminent and respected medical researcher and a charismatic and inspirational teacher. The Schofield family has supported the event through a bequest to Monash University.

On 19 September 2018 the VIFM hosted the biennial VIFM Monash University Graeme Schofield Oration focussing on injury prevention and public health research in the 21st Century. Guest Orator, United States-based Professor Adnan A. Hyder, is one of the world's foremost injury prevention researchers. He has served as Professor and Director of the Health Systems Program, and Associate Chair in the Department of International Health, Bloomberg School of Public Health at Johns Hopkins University and has now been appointed to a new role as Senior Associate Dean for Research and Professor of Global Health at the Milken Institute School of Public Health, George Washington University, USA. The Oration was held before an audience of 180, including members of the Schofield family, in the Clemenger Auditorium at the National Gallery of Victoria and was followed by a dinner for 110 in the NGV Garden Restaurant.

The redevelopment of the VIFM John Harber Phillips Library into an Education and Training Centre

The VIFM has launched the John Harber Phillips Library as an education and training centre to deliver the teaching programmes and short courses for Monash University, Victoria Police and others. The centre supports the delivery of distance education and video conference participation. Associate Professor Richard Basset has been instrumental in making the vision for the centre become a reality.

Official celebration of 30 Years of the VIFM and Coronial Services Centre

The 30-year anniversary of the opening of the Coronial Services Centre and the establishment of the VIFM was celebrated on December 5, 2018. Former Premier of Victoria The Hon. John Cain Snr. was the guest speaker. Premier Cain

was instrumental in establishing the Institute in 1988 on the recommendation of the late Attorney-General, The Hon. Jim Kennan SC, and Chief Justice, The Hon. John Phillips QC, for whom the VIFM library is named. Mr Cain spoke with passion about the then spirit of bipartisanship which, along with the drive and vision of John Phillips, Graeme Schofield and Vern Plueckhahn, ensured that the people of Victoria and more broadly would be the beneficiaries of a world-class forensic pathology and science facility.

Chair of the VIFM Council The Hon. John Coldrey reflected on the Institute's service to the justice system and to its work internationally. Stephen Cordner paid tribute to staff, the court and to stakeholders who have supported the VIFM's work and ongoing development over the past 30 years.



From left: The Hon. John Cain Snr., Professor Noel Woodford, The Hon. John Coldrey and Professor Stephen Cordner



From left: Professor Stephen Cordner, The Hon. Marilyn Warren, The Hon. John Cain Snr, The Hon. John Coldrey, Professor Noel Woodford

Commemoration of the Black Saturday bushfires

On 8 February 2019 The Hon. Linda Dessau AC, Governor of Victoria and her husband Anthony Howard visited the VIFM and CCOV. The Governor is the Patron for the tenth-anniversary commemorations of the Black Saturday bushfires and she visited the Institute to learn more about its role in this tragic event in which the VIFM identified 163 bushfire victims in 90 days.

The Governor and her husband met a number of staff and toured the court, the homicide room, the CT scanner, CAE and through to the car park to understand the set-up of the temporary mortuary.



From left: Acting State Coroner Iain West, Mr Anthony Howard, Her Excellency The Hon. Linda Dessau, The Hon. John Coldrey and Professor Noel Woodford

The Hon. Michael Kirby visit to the VIFM

On 28 February 2019 The Hon. Michael Kirby AC CMG and former Justice of the High Court of Australia, visited The Michael Kirby Centre for Public Health and Human Rights, which is named in his honour and now located within the Department of Forensic Medicine. The team at the Centre discussed current projects as well as plans for the future.

"Afterlife" - Law Week event at Monash Law Chambers

On 13 and 15 May 2019 the VIFM participated in Law Week with a Q&A style event called "Afterlife", focusing on the first 48 hours after a death. This year saw the Institute again collaborate with the CCOV. The Monash Law School was invited to partner, and two sold out shows were held at the Monash Law Chambers in the city.

A highlight of the event was the debut of the first episode from the VIFM's new web series also called "Afterlife", as well

as a teaser for the rest of the series. The episode was well received with many commenting that they had no idea of what actually happened behind the walls of 65 Kavanagh Street. The panel of experts from both the VIFM and the CCOV – Richard Basset, Linda Iles, David Ranson, Jodie Leditschke, Ally O'Dell, Hayley Philpot and Caitlin English – answered audience questions during the Q&A session of the evening.



Dr Linda Iles and Mr Brian Nankervis



Sports Brain Bank of Australia

On 19 June 2019 La Trobe University concussion researcher Associate Professor Alan Pearce launched the Melbourne branch of the Australian Sports Brain Bank (ASBB) in conjunction with the VIFM. It is part of a Global Brain Bank initiative, to improve understanding of head impacts in sport through autopsy. The Australian Sports Brain Bank is calling on Victorians who have played sports at any level to pledge their brains to the Victorian arm of the Australian Sports Brain Bank where researchers will investigate the effect of head impacts and concussion. The VIFM will provide brain retrieval facilities for donated brains, all of which will be assessed in the ASBB's dedicated brain diagnostic laboratory with formal reports sent to donors' nominated doctors. The VIFM is pleased to join with the Australian Sports Brain Bank and other global agencies to provide forensic pathology services to assist with the important research for the community.

VIFM Staff

Ms Joanne Hanna

Recognition and Awards

Staff Recognition Program

The VIFM staff recognition program is based on the VIFM's values of Respect, Openness, Service, Integrity, and Innovation (ROSII). The ROSII Awards acknowledge and celebrate the outstanding work of individuals and teams. In 2018-19 the ROSII Award recipients were:

- Maaike Moller – Service and Innovation*
- Elizabeth Manning – Service and Innovation*
- Megan Osborne – Innovation*



Dr Maaike Moller and Dr Elizabeth Manning



Professor Noel Woodford and Ms Megan Osborne

Order of Australia

This year's Australia Day Honours list was a very auspicious occasion for the VIFM and the Department of Forensic Medicine. Three people who have made extraordinary contributions to the Institute and DFM over many years were rightly acknowledged for their efforts. Their names and citations are:

- » The Honorable John Coldrey QC, Chair of the VIFM Council. For significant service to the law, and to the judiciary, to legal reform, and to the community.
- » Professor Olaf Drummer, Professor in Forensic Medical Science, Department of Forensic Medicine, Monash University. For distinguished service to medicine in the field of forensic toxicology, to medical education, and to professional groups.

- » Professor John McNeil AM. Head of the School of Public Health and Preventive Medicine, Monash University, and member of the VIFM Council (to May 2019). For distinguished service to medicine in the fields of clinical epidemiology, and cardiovascular research, and to public health.

Staff Service Awards

30 years →

David Ranson, Jodie Leditschke

25 years →

Matthew Lynch, Rebecca Owen

20 years →

Joanna Hanna

15 years →

Angela Williams, Melynda Hargreaves, Michael Pais, Natalia George, Noel Woodford

10 years →

Dadna Hartman, Danielle Stevens, Gaie Russell, Jeffrey Lomas, Lauren Murton, Melissa Baker, Nicola Cunningham, Stefan Poniatowski, Tham Vu, Tyra Rees

Investing in Staff - building leadership capability

To support the VIFM's strategic goal of Investing in Staff, 21 staff have completed the Potential and New Managers Program, and seven staff have completed the Emerging Leaders Program, both facilitated by the Department of Justice and Community Safety, which further develops and embeds management and leadership capabilities at the VIFM.



RCPA President Associate Professor Bruce Latham and Dr Melanie Archer, Image credit: ARThomas Photos.

Dr Melanie Archer completed her training in forensic pathology at the Institute this year and following her success in her final examination was admitted as a Fellow of the Royal College of Pathologists of Australasia (FRCPA). She is now qualified as a specialist in Forensic Pathology and has joined our pathology team.



Financial Performance

Image credit: Australian Broadcasting Corporation

Report of Operations - Financial Performance

Five-year Financial Summary

\$ thousand

Year	2014/15	2015/16	2016/17	2017/18	2018/19
Income from Government	27,575	30,747	34,918	36,771	41,486
Total income from transactions	31,759	35,608	38,632	40,439	47,143
Total expenses from transactions	31,762	34,380	39,297	41,121	45,241
Net result from transactions	(3)	1,226	(665)	(682)	1,902
Net result for the period	(114)	1,172	(901)	(617)	1,516
Net cashflow from operating activities	797	2,077	(320)	(107)	2,142
Total assets	14,843	173,301	178,370	178,922	202,641
Total liabilities	8,533	9,466	10,058	11,237	12,806

Current year financial review



Financial performance - operating statement

A summary of financial performance in 2018-19 is set out in the table. Full financial details for 2018-19 are outlined in the Financial Statements.

The Institute's principal output against appropriation income is for forensic pathology and related scientific services resources for medico-legal death investigations. Other outputs against income from government include clinical forensic medicine services and toxicology services for drug and alcohol testing performed for Victoria Police under a Service Level Agreement. Government funded activity related to medico-legal death investigation and work undertaken for other government agencies such as Victoria Police, produces a balanced operating result, other than the effect of specific asset funding identified below.

Income from transactions is improved on 2017-18 by \$6.7M and drives the surplus reported in the net result from transactions of \$1.9M. This includes an amount of \$1.3M for the purchase of assets classified as assets received free of charge. These are related to contractual arrangements for the expansion of roadside drug testing for Victoria Police and are considered as an extraordinary item. Revenue is also improved due to increased operating funds provided through the SLA arrangements for services to Victoria Police of \$2.1M and increased appropriation funding from Government which included additional funding of \$5M for the 2018-19 financial year and Treasurer's Advances of \$1.6M. Other revenues from the sale of services including revenue generated through the Donor Tissue Bank of Victoria were also higher.

The net result for the period was a surplus of \$1.5M. Removing the impact of the assets received free of charge reduces the net result for the year to a surplus of \$0.216M compared to a deficit of \$0.617M reported for the 2017-18 financial year.

Financial position - balance sheet

In 2018-19 total assets have increased by \$23.72 million.

Increases in financial assets of \$5.1M relate to funds held in the Department of Treasury and Finance consolidated fund, where funding provided specifically for non-cash depreciation expenses cannot be utilised for any other purpose causing VIFM's SAU account to increase annually.

Total non-financial assets have increased by \$18.6M as a result of management revaluations of land and buildings undertaken to ensure assets are reported at fair value in accordance with Accounting Standard AASB13.

Intangible assets, property, plant and equipment are all reported net of annual depreciation reducing the impact of the revaluation increase. In 2018-19, the Institute received funding from the Department of Justice and Community Safety for the purchase of scientific laboratory equipment in Toxicology and Molecular Biology. In addition, total assets increased due to the funding received for the expansion of roadside drug testing of \$1.3M (detailed in the operating statement).

Total liabilities increased by \$1.57M due to increases in provisions for employee leave, such as annual and long service leave entitlements. Leave balances were impacted by a new enterprise bargaining agreement for Forensic Pathologists and Physicians.

Cash flows

Although the operating cash balance is \$2,142M, the positive inflow, generated through receipts from government, include funds which were provided specifically for the purchase of physical assets described above as assets received free of charge. The end of year cash balance of \$1.419M for the 2018-19 financial year is a decrease of \$0.134M compared to 2017-18. The drawdown of trust cash reserves was used to fund the VIFM Trust operations.

A full copy of the 2018-19 financial statements and audit opinion are included at the end of the Annual Report of Operations and can also be found at www.vifm.org

Legislative and Statutory Reporting

Image credit: Australian Broadcasting Corporation

Diversity Reporting

All areas of the VIFM are conscious of the cultural and religious practices surrounding death that are of primary importance to the families of the deceased. The Institute's staff members work with the Coroners Court of Victoria to accommodate the cultural and religious requirements of the families of the deceased. When required, the Institute provides for extended periods of attendance by families.

Skeletal remains from indigenous communities require special handling and consideration of cultural beliefs. The Institute works with Aboriginal Affairs Victoria to ensure that remains and related documentation are managed appropriately and sensitively.

The Institute continues to foster workplace diversity and demonstrates its commitment through a variety of initiatives.

Legislation

Financial Management Act 1994

The VIFM is responsible for the preparation and fair presentation of the financial report in accordance with Australian Accounting Standards (including the Australian Accounting Interpretations) and the financial reporting requirements of the *Financial Management Act 1994*.

Public Administration Act 2004

Section 7 of the *Public Administration Act 2004* outlines the values that public sector employees should demonstrate. They are:

- » Responsiveness
- » Integrity
- » Impartiality
- » Accountability
- » Respect
- » Leadership
- » Human rights

The Institute is committed to the public sector values and employment principles. These values and principles underpin the work of the Institute's Human Resources and Organisational Development department. It applies merit and equity principles when appointing new employees. The selection process ensures that applicants are assessed and evaluated fairly and equitably based on the key selection criteria and other accountabilities without discrimination.

Protected Disclosure Act 2012

Statement of support for protected disclosures

The VIFM is committed to the aims and objectives of the *Protected Disclosure Act 2012*. The Institute does not tolerate improper conduct by our employees, officers or members, or the taking of reprisals against those who come forward to disclose such conduct. The Institute recognises the value of transparency and accountability in its administrative and management practices, and supports the making of disclosures that reveal corrupt conduct, conduct involving a substantial mismanagement of public resources, or conduct involving a substantial risk to public health and safety, or the environment.

Reporting system and contact persons for the VIFM

Disclosures of improper conduct or detrimental action by the VIFM or its employees should be made to:

Independent broad-based anti-corruption commission (IBAC)
Tel: 1300 735 135, www.ibac.vic.gov.au

VIFM Protected Disclosure Coordinator:
Ms Helen McKelvie, Senior Legal Counsel and Internal Consultant

Incidence of protected disclosures 2018-19

There were no disclosures in this reporting period.

Freedom of Information Act 1982

The Institute is subject to the *Freedom of Information Act 1982* (FOI Act). In the 2018-19 year the Institute received three applications for the release of information pursuant to the FOI Act. Two applicants were provided with all the documents as requested in their applications, and one application was abandoned.

Freedom of Information Officer:
Ms Margaret Craddock, Coronial Services Relationship & Compliance Manager

Privacy and Data Protection Act 2014

The VIFM must deal with identified personal and health information in accordance with the relevant provisions of the *Victorian Institute of Forensic Medicine Act 1985* ('the VIFM Act'), the *Human Tissue Act 1982* and both the *Privacy and Data Protection Act 2014* and the *Health Records Act 2001*. The VIFM must also follow the Coroners Court rules in relation to distribution of reports provided to the coroner. Compliance with these legislative provisions ensures that the VIFM respects the privacy of individuals whose personal and health information it holds.

During 2018-19 the VIFM continuous improvement system recorded 10 privacy related incidents, the majority of which were low risk. These incidents were investigated and risk assessments were undertaken. Internal processes were amended and strengthened as a result. Further measures around training and education are being implemented to address the root causes, increase staff awareness and minimise reoccurrence.

The activities and membership of the VIFM Privacy Committee is provided in Appendix A of this report. Further information regarding the VIFM Privacy Statement is available on our website at www.vifm.org

Privacy Officer:
Ms Margaret Craddock, Coronial Services Relationship & Compliance Manager

Building Act 1993

The Minister for Finance guidelines, pursuant to section 220 of the *Building Act 1993*, promote better standards for buildings owned by the Crown and public authorities, and require entities to report on achievements.

The building is managed within the Department of Justice and Community Safety portfolio, with maintenance of the building managed by the VIFM. No building development has occurred during the reporting year.

Behaviour and Culture

An organisation is defined by its culture. A good workplace culture improves morale, boosts productivity and safeguards an organisation's reputation. The VIFM and its employees share a mutual responsibility to work together by:

- » Delivering responsive public services
- » Earning the community's trust in the public sector, and
- » Supporting the government of the day in serving Victorians.

The Victorian Public Service (VPS) Code of Conduct

The Victorian Public Service (VPS) Code of Conduct guides behaviour within the VIFM, and is a public statement of how the VIFM and its employees interact with the government, community and each other. The code promotes adherence to the public sector values and is binding on any person to whom it applies. Breaching the code may constitute misconduct.

During induction all new employees are made aware of their rights and responsibilities in relation to privacy and confidentiality, discrimination, sexual harassment and bullying (respect in the workplace).

The induction also includes Occupational Health and Safety, the VPS Code of Conduct, Information Security

Carers Recognition Act 2012

The *Carers Recognition Act 2012* does not have direct application to the operation of the VIFM, however the Coronial Admissions and Enquiries Office will take into account the views of a carer where that person is the senior next-of-kin for the deceased person.

Victorian Industry Participation Policy Act 2003

The VIFM has not awarded any contracts valued at \$1 million or more during the 2017-18 financial year, and has therefore not been required to comply with the *Victorian Industry Participation Policy Act 2003*.

Statement of Compliance with National Competition Policy

The Institute continues to comply with the requirements of the National Competition Policy. This includes compliance with the requirements of the policy statement Competitive Neutrality: A Statement of Victorian Government Policy, the Victorian Government Timetable for the Review of Legislative Restrictions on Competition and any subsequent reforms.

and Social Media Policies. The Institute takes a proactive approach to education and promotion of policies to eliminate discrimination, harassment and bullying within the workplace.

Grievances

In the 2018-19 reporting period, there were no grievances recorded.

Employee Relations Statement

The Institute employs a wide-range of expert staff including medical specialists, forensic pathologists, forensic odontologists, forensic physicians, forensic medical officers and forensic nurse examiners. The VIFM also employs scientists and medical research officers who are covered under the *Public Administration Act 2004* and terms and conditions of the *Victorian Public Service Enterprise Agreement 2016*.

The Institute offers its employees excellent benefits and a fulfilling career and is committed to helping employees balance their careers with their personal commitments through a range of work/life balance initiatives.

Workforce Statistics

As at June 30, 2019, the Institute employed a total of 226 staff compared to 193 at June 30, 2018.

This increase in part is due to additional staff in the Toxicology department, due to the expansion of the Random Roadside Drug Testing program, and the implementation of the ICT Strategy during 2018-19. There has also been a further increase due to Department of Forensic Medicine staff transitioning from Monash University to the VIFM.

Employment Status by Category

		Ongoing Employees		Fixed Term Employees		Total	
		Full time (headcount)	Part time (headcount)	Full time (headcount)	Part time (headcount)	Employees (headcount)	FTE
	2017-18	116	48	22	7	193	173.43
VPS	2018-19	118	40	22	9	189	169.63
Non VPS	2018-19	15	7	12	3	37	32.07
Total	2018-19	133	47	34	12	226	201.70

Status of all Employees (VPS and Non VPS) in current positions - Headcount and FTE

	Ongoing (headcount)	Ongoing (FTE)	Fixed Term (headcount)	Fixed Term (FTE)	Total (headcount)	Total (FTE)
Men	59	57.72	18	14.99	77	72.71
Women	121	105.92	28	23.07	149	128.99
Self-described	0	0	0	0	0	0
Total	180	163.64	46	38.06	226	201.70

Executive Contracts

	At 30 June 2018	At 30 June 2019
Executive level employees	1	1

Workforce Demographics

Age Bracket	M (men)	W (women)	S (self-described)	Total	Per cent	FTE
15-24	3	13	0	16	7%	13.07
25-34	13	30	0	43	19%	39.95
35-44	23	54	0	77	34%	67.85
45-54	19	31	0	50	22%	46.96
55-64	11	17	0	28	13%	25.17
65+	8	4	0	12	5%	8.70
Total	77	149	0	226	100%	201.70

Workforce Classification Breakdown (Headcount)

Classification	Total
VPS Grade 1	0
VPS Grade 2	21
VPS Grade 3	62
VPS Grade 4	46
VPS Grade 5	38
VPS Grade 6	21
Senior Technical Specialist / VPS Grade 7	1
Executive Officer	1
VIFM Appointees	36
Total	226

The Institute employs a wide-range of expert staff including medical specialists, forensic pathologists, forensic odontologists, forensic physicians, forensic medical officers and forensic nurse examiners.

Disclosure of Consultancies

Details of consultancies (valued at \$10,000 or greater)

In 2018-19, there were 6 consultancies where the total fees payable to the consultants was \$10,000 or greater. The total expenditure incurred during 2018-19 in relation to this consultancy is \$212,226 (excl. GST). Details of the individual consultancy are outlined below.

Consultant	Purpose of consultancy	Start date	End date	Total approved project fee (excl. GST)	Expenditure 2018-19 (excl. GST)
Pricewaterhouse Coopers	Market Analysis Report	1/01/2019	31/03/2019	\$45,000	\$45,000
Pricewaterhouse Coopers	Contract Negotiation	1/04/2019	31/08/2019	\$49,000	\$49,000
#Data3	Migration to Windows 10 (I.C.T.)	3/05/2019	1/10/2019	\$47,736	\$47,736
DXC	Migration to Windows 10 (I.C.T.)	1/06/2019	31/08/2019	\$30,250	\$30,250
Five Nines	iCMS Plus Project (I.C.T.)	1/10/2018	30/11/2018	\$30,240	\$30,240
Toyota Motor Corporation	Quality Improvement Program	1/03/2018	31/08/2018	\$10,000	\$10,000

Details of consultancies under \$10,000

In 2018-19, there were no consultancies engaged during the year, where the total fees payable to the individual consultancies was less than \$10,000.

Disclosure of Major Contracts

The Institute has not entered into any contracts greater than \$10 million in the 2018-19 financial year.

Energy and Water Efficiency

Year	Gas (MJ)	Electricity (kWh)	Water (kl)
2016-17	8475416	3819036	3769
2017-18	8385760	3875606	4214
2018-19	8232090	3800371	5302
Percentage change from previous year	-1.8%	-1.9%	25.8%

Government Advertising Expenditure

There was no government advertising expenditure with a campaign greater than \$100,000 during the 2018-2019 financial year.

Occupational Health and Safety

The VIFM continued its commitment to provide a safe workplace and improve its system for managing health and safety. A number of initiatives were implemented as part of VIFM's expansion of its wellbeing program.

The VIFM Health Promotion Team took an active role to organise events for staff such as *Boys Night In*, which raised funds for Movember and *Girls Night In* which raised funds for the Jean Hailes Foundation.

The VIFM continued its focus on mental health awareness with a number of training sessions. A guest speaker from Beyond Blue presented at a lunchtime seminar on their experience with mental illness and a peer support worker from an allied organisation presented a case study on their peer support program. Eighty staff from across the VIFM participated in vicarious trauma training and all executives, managers and senior staff completed 'Mental Health in the Workplace' training.

A focus for 2018-19 has been the update of the VIFM's risk assessments pertaining to plant/equipment and chemicals. The plant/equipment risk assessments have

Details of ICT Capital Expenditure

BAU ICT Expenditure	Non-BAU ICT expenditure	Operational expenditure	Capital expenditure
Total	Total = A + B	A	B
2,892,039	231,880	193,626	38,254

Type and Number of Incidents Reported by Staff in 2018-19 compared to previous year

Type of Incident	2016-17	2017-18	2018-19
Biological exposures	3	0	1
Burn	0	0	1
Bruise	3	0	4
Chemical	5	1	3
Cut or puncture	5	5	8
Equipment	3	0	0
Fatigue	0	0	0
Fire	0	0	0
Near Miss/Hazard Identification	1	8	6
Needle-stick	2	3	1
Other	2	1	0
Personal Health	0	0	4
Personal Safety Threat	0	1	3
Psychological	0	1	1
Repetitive Strain Injury	1	4	1
Slip/Trip	6	5	2
Splash	2	2	0
Strain/Sprain	3	0	1
Vehicle Accident	0	0	0
Total	36	31	36

been completed and the chemical risk assessment updates will be completed by the end of 2019. Chemical handling and storage training was undertaken by all relevant staff.

The Occupational Health and Safety (OHS) Committee met four times this year to manage the OHS program activities. The Department of Justice and Community Safety conducted an external OHS audit of the VIFM with particular attention

made to the storage and handling of chemicals. The audit recommendations are being finalised. No major non-conformances were identified.

Occupational Health and Safety Incident Reporting

In 2018-19 there were 36 incidents reported, a slight increase compared to 2017-18 (31 incidents).

The number of reported incidents each month fluctuates throughout the year. There were no incidents recorded in November 2018, December 2018 and March 2019, however this deficit was reversed by a high number of incidents recorded in August 2018 (8) and June 2019 (6) and a new category of incidents recorded classified as personal health events (4).

Personal health events are defined as a personal health issue that occurs in the workplace that is not directly related to the workplace. The recording of these events enables management to fulfil its obligations to provide relevant workplace adjustments where appropriate to minimise risk to the staff member. The personal health events are recorded as near miss incidents to demonstrate proactive reporting.

In August 2018 there was a notable increase in breach of skin injuries (cut or needle stick) incidents within the mortuary from new mortuary staff members. This prompted a review of mortuary personnel induction program and a sharps handling and PPE policy refresher training delivered to all mortuary staff.

There were ten near miss incidents reported in 2018-19, an increase of three in 2017-18 (seven incidents). Staff reporting near miss incidents indicates a positive awareness of their obligation to report and a mature OHS management system. Injured staff are supported by the VIFM to manage their injury. First Aid assistance is provided and time is afforded to allow staff time to attend medical appointments, injury management assessments and follow up care. Support is also provided to staff in the event of a non-work related injury or an injury that does not involve a Work Cover claim. This support assists in appropriately managing injury to avoid any further exacerbation of pre-existing injuries.

There were no notifiable incidents requiring notification to the regulator WorkSafe in 2018-19. All incidents reported were investigated and corrective actions implemented where appropriate.

Financial Management Compliance Attestation Statement

I Robert Conyers, on behalf of the VIFM Council, certify that the Victorian Institute of Forensic Medicine has complied with the applicable Standing Directions 2018 under the *Financial Management Act 1994* and instructions.

Signed 
Robert Conyers
Chairman Audit and Risk Management Committee

Dated 16/07/2019



Financial Statements

For the financial year ended 30 June 2019

**VICTORIAN INSTITUTE OF FORENSIC MEDICINE
FINANCIAL STATEMENTS FOR YEAR ENDED 30 JUNE 2019**

How this report is structured The Victorian Institute of Forensic Medicine has presented its audited general purpose financial statements for the financial year ended 30 June 2019 in the following structure to provide users with the information about the Institute's stewardship of resources entrusted to it.

Financial statements
Comprehensive operating statement
Balance sheet
Cash flow statement
Statement of changes in equity

Notes to the financial statements

1. About this report
The basis on which the financial statements have been prepared and compliance with reporting regulations

2. Funding delivery of our services
Revenue recognised from sales of goods and services and other sources

2.1 Income from transactions

3. The cost of delivering our services
Operating expenses of the Institute

3.1 Employee benefits in the comprehensive operating statement
3.2 Other operating expenses

4. Key assets available to support output delivery
Land, property and intangible assets accounted for using the equity method, other financial assets

4.1 Total property, plant and equipment
4.2 Intangible assets

5. Other assets and liabilities
Working capital balances and other key assets and liabilities

5.1 Receivables
5.2 Payables

6. How we financed our operations
Borrowings, cash flow information and leases

6.1 Borrowings
6.2 Cash flow information and balances
6.3 Commitments for expenditure

7. Risks, contingencies and valuation judgements
Financial risk management, contingent assets and liabilities as well as fair value determination

7.1 Financial instruments specific disclosures
7.2 Contingent assets and contingent liabilities
7.3 Fair value determination

8. Other disclosures

8.1 Other economic flows included in net result
8.2 Non-current assets held for sale
8.3 Responsible persons
8.4 Remuneration of executives
8.5 Related parties
8.6 Remuneration of auditors
8.7 Subsequent events
8.8 Other accounting policies
8.9 Australian Accounting Standards issued that are not yet effective
8.10 Glossary of technical terms
8.11 Style conventions

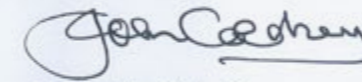
DECLARATION IN THE FINANCIAL STATEMENTS

The attached financial statements for the Victorian Institute of Forensic Medicine have been prepared in accordance with Direction 5.2 of the Standing Directions of the Assistant Treasurer under the *Financial Management Act 1994*, applicable Financial Reporting Directions, Australian Accounting Standards including Interpretations and other mandatory professional reporting requirements.


We further state that, in our opinion, the information set out in the comprehensive operating statement, balance sheet, cash flow statement, statement of changes in equity and accompanying notes, presents fairly the financial transactions during the year ended 30 June 2019 and financial position of the Institute at 30 June 2019.

At the time of signing, we are not aware of any circumstance which would render any particulars included in the financial statements to be misleading or inaccurate.

We authorise the attached financial statements for issue on 17 September 2019.


The Hon. John Coldrey QC
Chair, VIFM Council
Victorian Institute of Forensic Medicine

Melbourne


Adjunct Prof David Ranson
Acting Director
Victorian Institute of Forensic Medicine

Melbourne


Mr Peter Ford
Chief Finance Officer
Victorian Institute of Forensic Medicine

Melbourne

Independent Auditor's Report

To the Council of the Victorian Institute of Forensic Medicine

Opinion I have audited the financial report of the Victorian Institute of Forensic Medicine (the institute) which comprises the:

- balance sheet as at 30 June 2019
- comprehensive operating statement for the year then ended
- statement of changes in equity for the year then ended
- cash flow statement for the year then ended
- notes to the financial statements, including significant accounting policies
- declaration in the financial statements.

In my opinion the financial report presents fairly, in all material respects, the financial position of the institute as at 30 June 2019 and their financial performance and cash flows for the year then ended in accordance with the financial reporting requirements of Part 7 of the *Financial Management Act 1994* and applicable Australian Accounting Standards.

Basis for Opinion I have conducted my audit in accordance with the *Audit Act 1994* which incorporates the Australian Auditing Standards. I further describe my responsibilities under that Act and those standards in the *Auditor's Responsibilities for the Audit of the Financial Report* section of my report.

My independence is established by the *Constitution Act 1975*. My staff and I are independent of the institute in accordance with the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants* (the Code) that are relevant to my audit of the financial report in Victoria. My staff and I have also fulfilled our other ethical responsibilities in accordance with the Code.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Council's responsibilities for the financial report The Council of the institute is responsible for the preparation and fair presentation of the financial report in accordance with Australian Accounting Standards and the *Financial Management Act 1994*, and for such internal control as the Council determines is necessary to enable the preparation and fair presentation of a financial report that is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the Council is responsible for assessing the institute's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it is inappropriate to do so.


Auditor's responsibilities for the audit of the financial report As required by the *Audit Act 1994*, my responsibility is to express an opinion on the financial report based on the audit. My objectives for the audit are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

As part of an audit in accordance with the Australian Auditing Standards, I exercise professional judgement and maintain professional scepticism throughout the audit. I also:

- identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the institute's internal control
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Council
- conclude on the appropriateness of the Council's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the institute's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the institute to cease to continue as a going concern.
- evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.

I communicate with the Council regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

MELBOURNE
 18 September 2019



Charlotte Jeffries
 as delegate for the Auditor-General of Victoria

Comprehensive operating statement For the financial year ended 30 June 2019

	Notes	2019 \$	2018 \$
Continuing operations			
Income from transactions			
Sale of goods and services	2.1.1	4,356,613	3,668,609
Grants	2.1.2	41,486,338	36,770,546
Other Grants	2.1.3	1,300,198	-
Total income from transactions		47,143,149	40,439,155
Expenses from transactions			
Employee expenses	3.1	(30,441,351)	(27,616,299)
Depreciation and impairment	4.1.1	(4,318,518)	(4,198,795)
Interest expense	6.1	(5,677)	(6,032)
Other operating expenses	3.2	(10,475,225)	(9,300,173)
Total expenses from transactions		(45,240,771)	(41,121,299)
Net result from transactions (net operating balance)		1,902,378	(682,144)
Other economic flows included in net result			
Net gain/(loss) on financial instruments ^(a)	8.1	80,698	(33,411)
Other gain/(loss) from other economic flows	8.1	(466,898)	98,917
Total other economic flows included in net result		(386,200)	65,506
Net result		1,516,178	(616,638)
Comprehensive result		1,516,178	(616,638)

The accompanying notes form part of these financial statements.

Note:

(a) 'Net gain/(loss) on financial instruments' includes bad and doubtful debts from other economic flows.

Balance sheet As at 30 June 2019

	Notes	2019 \$	2018 \$
Assets			
Financial assets			
Cash and deposits	6.2	1,419,640	1,553,658
Receivables	5.1	22,781,259	17,524,993
Total financial assets		24,200,899	19,078,651
Non-financial assets			
Inventories at cost		5,495	6,185
Non-financial physical assets classified as held for sale	8.2	-	9,502
Property, plant and equipment	4.1	177,619,563	159,000,534
Intangible assets	4.2	714,142	750,998
Prepayments		100,703	76,098
Total non-financial assets		178,439,903	159,843,317
Total assets		202,640,802	178,921,968
Liabilities			
Payables	5.2	2,762,648	2,429,997
Borrowings	6.1	121,591	140,527
Employee related provisions	3.1.1	9,892,902	8,319,289
Prepaid revenue		28,865	347,320
Total liabilities		12,806,006	11,237,133
Net assets		189,834,796	167,684,835
Equity			
Accumulated surplus/(deficit)		(3,562,107)	(5,078,285)
Physical asset revaluation surplus		26,023,415	5,378,240
Contributed capital		167,373,488	167,384,880
Net worth		189,834,796	167,684,835

The accompanying notes form part of these financial statements.

Cash flow statement For the financial year ended 30 June 2019

	Notes	2019 \$	2018 \$
Cash flows from operating activities			
Receipts			
Receipts from Government		37,668,424	32,228,170
Receipts from other entities		3,980,702	3,142,884
Total receipts		41,649,126	35,371,054
Payments			
Payments to suppliers and employees		(39,501,126)	(35,472,197)
Interest and other costs of finance paid		(5,677)	(6,032)
Total payments		(39,506,803)	(35,478,229)
Net cash flows from/(used in) operating activities	6.2.1	2,142,323	(107,175)
Cash flows from investing activities			
Purchases of non-financial assets		(2,246,015)	(911,466)
Proceeds from disposal of non-financial assets		(11,390)	-
Net cash flows from/(used in) investing activities		(2,257,405)	(911,466)
Cash flows from financing activities			
Repayment of borrowings and finance leases		(18,936)	(13,500)
Net cash flows from/(used in) financing activities		(18,936)	(13,500)
Net increase/(decrease) in cash and cash equivalents		(134,017)	(1,032,141)
Cash and cash equivalents at beginning of the financial year		1,553,658	2,585,799
Cash and cash equivalents at end of the financial year	6.2	1,419,640	1,553,658
Non-cash transactions		-	-

The accompanying notes form part of these financial statements.

Statement of changes in equity For the financial year ended 30 June 2019

	Physical asset revaluation surplus \$	Accumulated surplus \$	Contributions by owner \$	Total \$
Balance at 1 July 2017	5,378,240	(4,461,648)	167,395,505	168,312,096
Net result for the year	-	(616,638)	-	(616,638)
Equity transfers to other Government Entities (Fixed Assets)	-	-	(10,625)	(10,625)
Balance at 30 June 2018	5,378,240	(5,078,285)	167,384,880	167,684,835
Net result for the year	-	1,516,178	-	1,516,178
Equity transfers to other Government Entities (Fixed Assets)	-	-	(11,392)	(11,392)
Other comprehensive income for the year	20,645,175	-	-	20,645,175
Balance at 30 June 2019	26,023,415	(3,562,107)	167,373,488	189,834,796

The accompanying notes form part of these financial statements.

Notes to the financial statements For the financial year ended 30 June 2019

1. ABOUT THIS REPORT

The Victorian Institute of Forensic Medicine (the Institute) is established under the Victorian Institute of Forensic Medicine (VIFM) Act 1985 operating under the auspices of the Department of Justice and Community Safety and reporting to Parliament through the Attorney-General.

Its principal address is:
65 Kavanagh Street
Southbank VIC 3006

A description of the nature of its operations and its principal activities is included in the **Report of Operations**, which does not form part of these financial statements.

Basis of preparation

These financial statements are in Australian dollars and the historical cost convention is used unless a different measurement basis is specifically disclosed in the note associated with the item measured on a different basis.

The accrual basis of accounting has been applied in preparing these financial statements, whereby assets, liabilities, equity, income and expenses are recognised in the reporting period to which they relate, regardless of when cash is received or paid.

Consistent with the requirements of AASB 1004 *Contributions*, contributions by owners (that is, contributed capital and its repayment) are treated as equity transactions and, therefore, do not form part of the income and expenses of the Institute.

Additions to net assets which have been designated as contributions by owners are recognised as contributed capital. Other transfers that are in the nature of contributions to or distributions by owners have also been designated as contributions by owners.

Judgements, estimates and assumptions are required to be made about financial information being presented. The significant judgements made in the preparation of these financial statements are disclosed in the notes where amounts affected by those judgements are disclosed. Estimates and associated assumptions are based on professional judgements derived from historical experience and various other factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates.

Revisions to accounting estimates are recognised in the period in which the estimate is revised and also in future periods that are affected by the revision. Judgements and assumptions made by management in applying AAS that have significant effects on the financial statements and estimates are disclosed in the notes under the heading: 'Significant judgement or estimates'.

These financial statements cover the Victorian Institute of Forensic Medicine as an individual reporting entity.

Compliance information

These general purpose financial statements have been prepared in accordance with the *Financial Management Act 1994* (FMA) and applicable Australian Accounting Standards (AAS), which include Interpretations, issued by the Australian Accounting Standards Board (AASB). In particular, they are presented in a manner consistent with the requirements of the AASB 1049 *Whole of Government and General Government Sector Financial Reporting*.

Where appropriate, those AAS paragraphs applicable to not-for-profit entities have been applied. Accounting policies selected and applied in these financial statements ensure that the resulting financial information satisfies the concepts of relevance and reliability, thereby ensuring that the substance of the underlying transactions or other events is reported.

Notes to the financial statements For the financial year ended 30 June 2019

2. FUNDING DELIVERY OF OUR SERVICES

Introduction

The Institute works predominantly in accordance with three pieces of legislation: the VIFM Act 1985, the Coroners Act 2008 and the Human Tissue Act 1982. The VIFM Act 1985 provides that the objectives of the Institute are:

- to provide, promote and assist in the provision of forensic pathology and related services in Victoria and, as far as practicable, oversee and co-ordinate those services in Victoria;
- to promote, provide and assist in the post-graduate instruction and training of trainee specialist pathologists in the field of forensic pathology in Victoria;
- to promote, provide and assist in the post-graduate instruction and training of persons qualified in biological sciences in the field of toxicological and forensic science in Victoria;
- to provide training facilities for doctors, medical undergraduates and such other persons as may be considered appropriate by the Council to assist in the proper functioning of the Institute;
- to conduct research in the fields of forensic pathology, forensic science, clinical forensic medicine and associated fields as approved by the Council;
- to provide, promote and assist in the provision of clinical forensic medicine and related services to Victoria Police and government bodies;
- to promote, provide and assist in under-graduate and post-graduate instruction in the field of clinical forensic medicine in Victoria;
- to promote, provide and assist in the teaching of and training in clinical forensic medicine within medical, legal, general health and other education programs; and
- to contribute to reducing the number of preventable deaths and to promote public health and safety and the administration of justice;
- to provide tissue banking facilities and services referred to in section 64(4);
- to promote and assist in the performance by the Coroners Court of its functions.

The Coroners Act 2008 regulates the reporting and investigating of certain deaths by coroners, including by directing medical investigators at the VIFM to undertake medical examinations of deceased persons.

The Human Tissue Act 1982 regulates the donation of human tissue by living persons and after death. It provides authority for post-mortem examinations, prohibits the trading in human tissue and gives a definition of death.

To enable the Institute to fulfil its objective and provide outputs as described above, it receives income (predominantly accrual based parliamentary appropriations). The Fee for Service Fund and the Donor Tissue Bank income represents services rendered to clients which are recognised when the service is provided.

Income is recognised to the extent it is probable the economic benefits will flow to the Institute and the income can be reliably measured at fair value. Where applicable, amounts disclosed as income are net of returns, allowances, duties and taxes.

2.1 Income from transactions

2.1.1 Sale of goods and services

	2019	2018
	\$	\$
Distribution of goods - Donor Tissue Bank	2,905,857	2,425,497
Rendering of services	1,450,756	1,243,112
Total sale of goods and services	4,356,613	3,668,609

Income from the **sale of goods** is recognised when:

- the Institute no longer has any of the significant risks and rewards of ownership of the goods transferred to the buyer
- the Institute no longer has continuing managerial involvement to the degree usually associated with ownership, nor effective control over the goods sold;
- the amount of income, and the costs incurred or to be incurred in respect of the transactions, can be reliably measured; and
- it is probable that the economic benefits associated with the transaction will flow to the Institute.

Income from the **supply of services** is recognised by reference to the stage of completion of the services being performed. The income is recognised when:

- the amount of the income, stage of completion and transaction costs incurred can be reliably measured; and
- it is probable that the economic benefits associated with the transaction will flow to the Institute.

2.1.2 Grants

	2019	2018
	\$	\$
Section 29 receipts	13,177,038	11,030,146
Department of Justice and Community Safety	28,309,300	25,740,400
Total grants	41,486,338	36,770,546

Grant income arises from transactions in which a party provides goods or assets (or extinguishes a liability) to the Institute without receiving approximately equal value in return. While grants may result in the provision of some goods or services to the transferring party, they do not provide a claim to receive benefits directly of approximately equal value (and are termed 'non-reciprocal' transfers). Receipt and sacrifice of approximately equal value may occur, but only by coincidence. For non-reciprocal grants, the Institute recognises revenue when the grant is receivable or received.

2.1.3 Other Grants

	2019	2018
	\$	\$
Assets		
Plant and equipment	1,300,198	-
Total fair value of assets received free of charge or for nominal consideration	1,300,198	-

VIFM has a Service Level Agreement with Victoria Police to perform confirmatory roadside drug testing. In 2018-19, the Roadside Drug Testing program was expanded and funding was provided to purchase assets to meet the increased workload. The assets are recorded as received as free of charge.

Notes to the financial statements For the financial year ended 30 June 2019

3. THE COST OF DELIVERING OUR SERVICES

Introduction

This section provides an account of the expenses incurred by the Institute in delivering services and outputs. Section 2 discloses aggregated information in relation to the income and expenses by output.

3.1 Employee benefits in the comprehensive operating statement

	2019	2018
	\$	\$
Defined contribution superannuation expense	2,257,241	2,069,543
Defined benefit superannuation expense	97,921	98,768
Salaries, wages, annual leave and long service leave	26,466,164	23,912,704
Termination benefits	-	51,595
Other on-costs (fringe benefits tax, payroll tax and workcover levy)	1,620,025	1,483,689
Total employee expenses	30,441,351	27,616,299

Employee expenses include all costs related to employment including wages and salaries, fringe benefits tax, leave entitlements, termination payments and WorkCover premiums.

The amount recognised in the comprehensive operating statement in relation to superannuation is employer contributions for members of both defined benefit and defined contribution superannuation plans that are paid or payable during the reporting period. The Institute does not recognise any defined benefit liabilities because it has no legal or constructive obligation to pay future benefits relating to its employees. Instead, the Department of Treasury and Finance (DTF) discloses in its annual financial statements the net defined benefit cost related to the members of these plans as an administered liability (on behalf of the State as the sponsoring employer).

Termination benefits are payable when employment is terminated before normal retirement date, or when an employee accepts an offer of benefits in exchange for the termination of employment. Termination benefits are recognised when the Institute is demonstrably committed to terminating the employment of current employees according to a detailed formal plan without possibility of withdrawal or providing termination benefits as a result of an offer made to encourage voluntary redundancy. Benefits falling due more than 12 months after the end of the reporting period are discounted to present value.

3.1.1 Employee benefits in the balance sheet

Provision is made for benefits accruing to employees in respect of wages and salaries, annual leave and long service leave (LSL) for services rendered to the reporting date and recorded as an expense during the period the services are delivered.

	2019	2018
	\$	\$
Current provisions:		
Annual leave		
Unconditional and expected to settle within 12 months	1,777,009	1,543,852
Unconditional and expected to settle after 12 months	290,266	290,323
Long service leave		
Unconditional and expected to settle within 12 months	538,673	475,975
Unconditional and expected to settle after 12 months	5,060,599	4,118,832
Provisions for on-costs		
Unconditional and expected to settle within 12 months	496,000	448,799
Unconditional and expected to settle after 12 months	870,604	712,880
Total current provisions for employee benefits	9,033,151	7,590,661
Non-current provisions:		
Employee benefits	679,209	567,066
On-costs	106,546	87,566
Other provisions	73,996	73,996
Total non-current provisions for employee benefits	859,751	728,628
Total provisions for employee benefits	9,892,902	8,319,289

Reconciliation of movement in on-cost provision

	On-costs 2019 \$	Other provisions 2019 \$	Total 2019 \$
Opening balance	1,249,246	73,996	1,323,242
Additional provisions recognised	223,905	-	223,905
Closing balance	1,473,151	73,996	1,547,147
Current	1,366,605	-	1,366,605
Non-current	106,546	73,996	180,542
	1,473,151	73,996	1,547,147

Wages and salaries, annual leave and sick leave

Liabilities for wages and salaries (including non-monetary benefits, annual leave and on-costs) are recognised as part of the employee benefit provision as current liabilities, because the Institute does not have an unconditional right to defer settlements of these liabilities.

The liability for salaries and wages are recognised in the balance sheet at remuneration rates which are current at the reporting date. As the Institute expects the liabilities to be wholly settled within 12 months of reporting date, they are measured at undiscounted amounts.

The annual leave liability is classified as a current liability and measured at the undiscounted amount expected to be paid, as the Institute does not have an unconditional right to defer settlement of the liability for at least 12 months after the end of the reporting period.

No provision has been made for sick leave, as all sick leave is non-vesting and it is not considered probable that the average sick leave taken in the future will be greater than the benefits accrued in the future. As sick leave is non-vesting, an expense is recognised in the comprehensive operating statement as it is taken.

Employment on-costs such as payroll tax, workers compensation and superannuation are not employee benefits. They are disclosed separately as a component of the provision for employee benefits when the employment to which they relate has occurred.

Unconditional LSL is disclosed as a current liability, even where the Institute does not expect to settle the liability within 12 months because it will not have the unconditional right to defer the settlement of the entitlement should an employee take leave within 12 months.

The components of this current LSL liability are measured at:

- undiscounted value - if the Institute expects to wholly settle within 12 months; and
- present value - if the Institute does not expect to wholly settle within 12 months.

Conditional LSL is disclosed as a non-current liability. There is an unconditional right to defer the settlement of the entitlement until the employee has completed the requisite years of service. This non-current LSL is measured at present value.

Any gain or loss following revaluation of the present value of non-current LSL liability is recognised as a transaction, except to the extent that a gain or loss arises due to changes in bond interest rates for which it is then recognised as an 'other economic flow' in the net result.

3.1.2 Superannuation contributions

Employees of the Institute are entitled to receive superannuation benefits and the Institute contributes to both defined benefit and defined contribution plans. The defined benefit plan(s) provides benefits based on years of service and final average salary.

As noted before, the defined benefit liability is recognised in DTF as an administered liability. However, superannuation contributions paid or payable for the reporting period are included as part of employee benefits in the comprehensive operating statement of the Institute.

There are no outstanding superannuation contributions at year end.

Fund	Paid contribution for the year	
	2019 \$	2018 \$
Defined benefit plans ^(a)		
State Superannuation Fund - revised and new	97,921	98,768
Defined contribution plans		
VicSuper	1,098,403	1,050,877
Other	1,158,838	1,018,666
Total	2,355,162	2,168,311

Note:

(a) The bases for determining the level of contributions is determined by the various actuaries of the defined benefit superannuation plans.

There are no superannuation contributions outstanding as at 30 June 2019 or 30 June 2018.

3.2 Other operating expenses

	2019 \$	2018 \$
Supplies and services		
Purchase of supplies	4,917,131	4,874,768
Purchase of services (including remuneration of auditors)	3,370,345	2,424,622
Other operating expenses		
Maintenance	2,187,749	2,000,783
Total other operating expenses	10,475,225	9,300,173

Other operating expenses generally represent the day-to-day running costs incurred in normal operations. It also includes bad debts expense from transactions that are mutually agreed.

Supplies and services are recognised as an expense in the reporting period in which they are incurred. The carrying amounts of any inventories held for distribution are expensed when the inventories are distributed.

Notes to the financial statements
For the financial year ended 30 June 2019

4. KEY ASSETS AVAILABLE TO SUPPORT OUTPUT DELIVERY

Introduction

The Institute controls infrastructure and other investments that are utilised in fulfilling its objectives and conducting its activities. They represent the resources that have been entrusted to the Institute to be utilised for delivery of those outputs.

Fair value measurement

Where the assets included in this section are carried at fair value, additional information is disclosed in Note 7.3 in connection with how those fair values were determined.

4.1 Total property, plant and equipment

	Gross carrying amount		Accumulated depreciation		Net carrying amount	
	2019	2018	2019	2018	2019	2018
	\$	\$	\$	\$	\$	\$
Land at fair value	92,363,205	82,210,240	-	-	92,363,205	82,210,240
Buildings at fair value	88,923,016	78,245,000	(9,196,152)	(6,128,054)	79,726,864	72,116,946
Plant and equipment at fair value	14,509,656	13,105,439	(9,101,245)	(8,562,990)	5,408,411	4,542,449
Plant and equipment under finance lease at fair value	178,616	215,580	(57,532)	(84,681)	121,084	130,900
Net carrying amount	195,974,493	173,776,259	(18,354,929)	(14,775,725)	177,619,563	159,000,534

Initial recognition: Items of property, plant and equipment are measured initially at cost and subsequently revalued at fair value less accumulated depreciation and impairment. Where an asset is acquired for no or nominal cost, the cost is its fair value at the date of acquisition. Assets transferred as part of a machinery of government change are transferred at their carrying amount.

The cost of leasehold improvements is capitalised and depreciated over the shorter of the remaining term of the lease or their estimated useful lives.

The initial cost for non-financial physical assets under a finance lease is measured at amounts equal to the fair value of the leased asset or, if lower, the present value of the minimum lease payments, each determined at the inception of the lease.

Subsequent measurement: Property, plant and equipment (PPE) are subsequently measured at fair value less accumulated depreciation and impairment. Fair value is determined with regard to the asset's highest and best use (considering legal or physical restrictions imposed on the asset, public announcements or commitments made in relation to the intended use of the asset) and is summarised below by asset category.

Specialised land and buildings

The market approach is also used for specialised land, although is adjusted for the community service obligation (CSO) to reflect the specialised nature of the land being valued.

The CSO adjustment is a reflection of the valuer's assessment of the impact of restrictions associated with an asset to the extent that the CSO adjustment is also equally applicable to market participants.

For the Institute's specialised building, the current replacement cost method is used, adjusting for the associated depreciation.

An independent valuation of the Institute's specialised land and specialised buildings was performed by the Valuer-General Victoria. The valuation was performed using the market approach adjusted for CSO. The effective date of the valuation is 30 June 2016.

Vehicles are valued using the current replacement cost method. The Institute acquires new vehicles and at times disposes of them before the end of their economic life. The process of acquisition, use and disposal in the market is managed by experienced fleet managers in the Department of Justice and Community Safety who set relevant depreciation rates during use to reflect the utilisation of the vehicles.

Fair value for **plant and equipment** that are specialised in use (such that it is rarely sold other than as part of a going concern) is determined using the current replacement cost method.

Refer to Note 7.3 for additional information on fair value determination of property, plant and equipment.

Impairment of property, plant and equipment

The recoverable amount of primarily non-cash-generating assets of not-for-profit entities, which are typically specialised in nature and held for continuing use of their service capacity, is expected to be materially the same as fair value determined under AASB 13 Fair Value Measurement, with the consequence that AASB 136 does not apply to such assets that are regularly revalued.

4.1.1 Depreciation and amortisation

Charge for the period	2019	2018
	\$	\$
Buildings	3,068,098	3,064,027
Plant, equipment and vehicles	1,146,852	1,047,526
Intangible produced assets	103,568	87,242
Total depreciation and amortisation	4,318,518	4,198,795

All infrastructure assets, buildings, plant and equipment and other non-financial physical assets that have finite useful lives, are depreciated. The exceptions to this rule include items under operating leases, assets held for sale, land and investment properties.

Depreciation is generally calculated on a straight line basis, at rates that allocate the asset's value, less any estimated residual value, over its estimated useful life. Typical estimated useful lives for the different asset classes for current and prior years are included in the table below:

Asset	Useful life
Specialised buildings	30 to 60 years (40 years)
Leasehold buildings	2 to 60 years
Plant and equipment (including leased assets)	3 to 15 years
Software	2 to 5 years

The estimated useful lives, residual values and depreciation method are reviewed at the end of each annual reporting period, and adjustments made where appropriate.

Leasehold improvements are depreciated over the shorter of the lease term and their useful lives.

In the event of the loss or destruction of an asset, the future economic benefits arising from the use of the asset will be replaced (unless a specific decision to the contrary has been made).

Indefinite life assets: Land, which is considered to have an indefinite life, is not depreciated. Depreciation is not recognised in respect of this asset because its service potential has not, in any material sense, been consumed during the reporting period.

4.1.2 Carrying values by "purpose" groups

Property, plant and equipment are classified primarily by the 'purpose' for which the assets are used, according to one of six purpose groups based upon Government Purpose Classifications. VIFM assets are classified as 'Public safety and environment'. All assets in a purpose group are further sub-categorised according to the asset's 'nature' (i.e. buildings, plant and equipment), with each sub-category being classified as a separate class of asset for financial reporting purposes.

A managerial revaluation of land and buildings was undertaken as consolidated land and building indices were over 10%. Fair value assessments have been performed for all classes of assets in this purpose group and the decision was made that changes were not material for a full revaluation. The next scheduled revaluation for this purpose group will be conducted in 2021.

4.2 Intangible assets

	Computer Software	
	2019	2018
	\$	\$
Gross carrying amount		
Opening balance	870,681	645,579
Additions	66,712	225,102
Closing balance	937,393	870,681
Accumulated amortisation		
Opening balance	(119,683)	(32,441)
Amortisation of intangible produced assets ^(a)	(103,568)	(87,242)
Closing balance	(223,251)	(119,683)
Net book value at end of financial year	714,142	750,998

Note:

(a) The consumption of intangible produced assets is included in 'depreciation' line item, where the consumption of the intangible non-produced assets is included in 'net gain/(loss) on non-financial assets' line item on the comprehensive operating statement.

An **internally generated intangible asset** arising from development (or from the development phase of an internal project) is recognised if, and only if, all of the following are demonstrated:

- the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- an intention to complete the intangible asset and use or sell it;
- the ability to use or sell the intangible asset;
- the intangible asset will generate probable future economic benefits;
- the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset;
- the ability to measure reliably the expenditure attributable to the intangible asset during its development.

Subsequent measurement

Intangible produced assets with finite useful lives, are depreciated as an 'expense from transactions' on a straight line basis over their useful lives. Produced intangible assets have useful lives of between 3 and 5 years.

Intangible non-produced assets with finite lives are amortised as an 'other economic flow' on a straight line basis over their useful lives. The amortisation period is 3 to 5 years.

Impairment of intangible assets

Goodwill and intangible assets with indefinite useful lives (and intangible assets not yet available for use) are tested annually for impairment and whenever there is an indication that the asset may be impaired. Intangible assets with finite useful lives are tested for impairment whenever an indication of impairment is identified.

The policy in connection with testing for impairment is outlined in section 4.1.

4.1.3 Reconciliation of movements in carrying amount of property, plant and equipment

	Land at fair value		Buildings at fair value		Plant and equipment at cost		Plant and equipment under finance lease at cost		Total	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Opening balance	82,210,240	82,210,240	72,116,946	75,180,973	4,542,449	4,901,837	130,900	152,800	159,000,535	162,445,850
Additions	-	-	185,806	-	1,989,023	658,653	25,366	27,712	2,200,195	686,364
Disposals	-	-	-	-	(11,392)	(10,625)	-	-	(11,392)	(10,625)
Transfer to assets classified as held for sale	-	-	10,492,210	-	-	-	-	(9,502)	20,645,175	(9,502)
Revaluation	10,152,965	-	(3,088,098)	(3,064,027)	(1,111,669)	(1,007,416)	(35,182)	(40,110)	(4,214,949)	(4,111,553)
Depreciation	-	-	(3,088,098)	(3,064,027)	-	-	(35,182)	(40,110)	(4,214,949)	(4,111,553)
Closing balance	92,363,205	82,210,240	79,726,864	72,116,946	5,408,411	4,542,449	121,084	130,900	177,619,563	159,000,534

Note:

A managerial revaluation of land and buildings was undertaken as consolidated land and building indices were over 10%. Fair value assessments have been performed for all other classes of assets in this purpose group and the decision was made that changes were not material (less than or equal to 10%) for a full revaluation. The next scheduled revaluation for this purpose group will be conducted in 2021.

Notes to the financial statements
For the financial year ended 30 June 2019

5. OTHER ASSETS AND LIABILITIES

Introduction

This section sets out those assets and liabilities that arose from the Institute's controlled operations.

5.1 Receivables

	2019	2018
	\$	\$
Contractual		
Sale of goods and services	1,054,075	996,719
Provision for doubtful contractual receivables	(45,661)	(126,459)
Statutory		
Amount owing from Department of Justice and Community Safety	21,772,845	16,654,733
Total receivables	22,781,259	17,524,993
Represented by		
Current receivables	21,995,505	16,870,361
Non-current receivables	785,754	654,632

Contractual receivables are classified as financial instruments and categorised as 'financial assets at amortised costs'. They are initially recognised at fair value plus any directly attributable transaction costs. The Institute holds the contractual receivables with the objective to collect the contractual cash flows and therefore subsequently measured at amortised cost using the effective interest method, less any impairment.

Statutory receivables do not arise from contracts and are recognised and measured similarly to contractual receivables (except for impairment), but are not classified as financial instruments for disclosure purposes. The Institute applies AASB 9 for initial measurement of the statutory receivables and as a result statutory receivables are initially recognised at fair value plus any directly attributable transaction cost. Amounts recognised from the Victorian Government represent funding for all commitments incurred and are drawn from the Consolidated Fund as the commitments fall due.

5.2 Payables

	2019	2018
	\$	\$
Contractual		
Supplies and services	2,678,410	2,339,116
Amounts payable to government and agencies	66,856	70,634
Statutory		
Fringe benefits tax payable	17,382	20,247
Total payables	2,762,648	2,429,997
Represented by		
Current payables	2,762,648	2,429,997

Payables consist of:

- **contractual payables** classified as financial instruments and measured at amortised cost. Accounts payable represent liabilities for goods and services provided to the Institute prior to the end of the financial year that are unpaid; and
- **statutory payables** that are recognised and measured similarly to contractual payables, but are not classified as financial instruments and not included in the category of financial liabilities at amortised cost, because they do not arise from contracts.

Payables for supplies and services have an average credit period of 30 days. No interest is charged on the 'other payables'. The terms and conditions of amounts payable to the government and agencies vary according to the particular agreements and as they are not legislative payables, they are not classified as financial instruments.

Maturity analysis of contractual payables ^(a)

	Carrying amount	Nominal amount	Less than 1 month	Maturity dates		
				1 to 3 months	3 months to 1 year	1 to 5 years
	\$	\$	\$	\$	\$	\$
2019						
Supplies and services	2,678,410	2,678,410	2,654,929	20,690	2,791	-
Amounts payable to government and agencies	66,856	66,856	16,255	50,588	-	13
Total	2,745,266	2,745,266	2,671,184	71,278	2,791	13
2018						
Supplies and services	2,339,116	2,339,116	2,266,948	45,698	26,470	-
Amounts payable to government and agencies	70,634	70,634	70,634	-	-	-
Total	2,409,750	2,409,750	2,337,582	45,698	26,470	-

(a) Maturity analysis is presented using the contractual undiscounted cash flows.

Notes to the financial statements
For the financial year ended 30 June 2019

6. HOW WE FINANCED OUR OPERATIONS

Introduction

This section provides information on the sources of finance utilised by the Institute during its operations, along with interest expenses the cost of borrowings) and other information related to financing activities of the Institute.

This section includes disclosures of balances that are financial instruments (such as borrowings and cash balances).

6.1 Borrowings

	2019 \$	2018 \$
Current borrowings		
Finance lease liabilities ^(a)		
Non-PPP related finance lease liabilities	54,657	96,438
Total current borrowings	54,657	96,438
Non-current borrowings		
Finance lease liabilities		
Non-PPP related finance lease liabilities	66,934	44,089
Total non-current borrowings	66,934	44,089
Total borrowings	121,591	140,527

(a) Secured by the assets leased. Finance leases are effectively secured as the rights to the leased assets revert to the lessor in the event of default.

'Borrowings' refer to finance leases. Borrowings are classified as financial instruments. All interest bearing borrowings are initially recognised at the fair value of the consideration received less directly attributable transaction costs. The measurement basis subsequent to initial recognition depends on whether the Institute has categorised its interest bearing liabilities as either 'financial liabilities designated at fair value through profit or loss', or financial liabilities at 'amortised cost'. The classification depends on the nature and purpose of the interest bearing liabilities. The Institute determines the classification of its interest bearing liabilities at initial recognition.

Maturity analysis of borrowings

	Carrying amount \$	Nominal amount \$	Maturity dates			
			Less than 1 month \$	1 to 3 months \$	3 months to 1 year \$	1 to 5 years \$
2019						
Finance lease liabilities	121,591	126,069	22,914	18,473	15,953	68,729
Total	121,591	126,069	22,914	18,473	15,953	68,729
2018						
Finance lease liabilities	140,527	143,954	44,875	4,829	49,006	45,244
Total	140,527	143,954	44,875	4,829	49,006	45,244

Interest expense

	2019 \$	2018 \$
Interest on finance leases	4,582	5,195
Other interest expense	1,095	837
Total interest expense	5,677	6,032

6.2 Cash flow information and balances

Cash and deposits, comprise cash on hand and cash at bank.

	2019 \$	2018 \$
Total cash and deposits disclosed in the balance sheet	1,419,640	1,553,658
Balance as per cash flow statement	1,419,640	1,553,658

Due to the State of Victoria's investment policy and government funding arrangements, the Institute does not hold a large cash reserve in their bank accounts. Cash received by the Institute from the generation of revenue is generally paid into the State's bank account, known as the Public Account. Similarly, any expenditure by the Institute, including those in the form of cheques drawn by the Institute for the payment of goods and services to its suppliers and creditors are made via the Public Account. The process is such that, the Public Account would remit cash required for the amount drawn on the cheques. This remittance by the Public Account occurs upon the presentation of the cheques by the Institute's suppliers or creditors.

6.2.1 Reconciliation of net result for the period to cash flow from operating activities

	2019 \$	2018 \$
Net result for the period	1,516,178	(616,638)
Non-cash movements		
Depreciation and amortisation of non-current assets	4,318,518	4,198,795
Allowance for doubtful debts	(80,798)	33,411
Movements in assets and liabilities		
(Increase)/decrease in receivables	(5,175,468)	(4,893,693)
(Increase)/decrease in inventories	690	4,385
(Increase)/decrease in prepayments	(24,606)	(26,098)
(Decrease)/increase in payables	332,651	744,756
(Decrease)/increase in provisions	1,573,613	622,313
(Decrease)/increase in other liabilities	(318,456)	(174,407)
Net cash flows from/(used in) operating activities	2,142,323	(107,175)

6.3 Commitments for expenditure

There are no capital or other expenditure commitments. (2018 - Nil).

Notes to the financial statements For the financial year ended 30 June 2019

7. RISKS, CONTINGENCIES AND VALUATION JUDGEMENTS

Introduction

The Institute is exposed to risk from its activities and outside factors. In addition, it is often necessary to make judgements and estimates associated with recognition and measurement of items in the financial statements. This section sets out financial instrument specific information, (including exposures to financial risks) as well as those items that are contingent in nature or require a higher level fair value determination.

7.1 Financial instruments specific disclosures

Introduction

Financial instruments arise out of contractual agreements that give rise to a financial asset of one entity and a financial liability or equity instrument of another entity. Due to the nature of the Institute's activities, certain financial assets and financial liabilities arise under statute rather than a contract. Such assets and liabilities do not meet the definition of financial instruments in AASB 132 *Financial Instruments: Presentation*.

From 1 July 2018, the Institute applies AASB 9 and classifies all of its financial assets based on the business model for managing the assets and the asset's contractual terms.

Categories of financial assets under AASB 9

Financial assets at amortised cost

Financial assets are measured at amortised costs if both of the following criteria are met and the assets are not designated as fair value through net result:

- the assets are held by the Institute to collect the contractual cash flows, and
- the assets' contractual terms give rise to cash flows that are solely payments of principal and interests.

These assets are initially recognised at fair value plus any directly attributable transaction costs and subsequently measured at amortised cost using the effective interest method less any impairment.

The Institute recognises the following assets in this category:

- cash and deposits
- receivables (excluding statutory receivables)

Categories of financial assets previously under AASB 139

Loans and receivables and cash are financial instrument assets with fixed and determinable payments that are not quoted on an active market. These assets and liabilities are initially recognised at fair value plus any directly attributable transaction costs. Subsequent to initial measurement, loans and receivables are measured at amortised cost using the effective interest method (and for assets, less any impairment). The Institute recognises the following assets in this category:

- cash and deposits
- receivables (excluding statutory receivables)

Available-for-sale financial instrument assets are those designated as available-for-sale or not classified in any other category of financial instrument asset. Such assets are initially recognised at fair value. Subsequent to initial recognition, they are measured at fair value with gains and losses arising from changes in fair value, recognised in 'Other economic flows – other comprehensive income' until the investment is disposed. Movements resulting from impairment and foreign currency changes are recognised in the net result as other economic flows. On disposal, the cumulative gain or loss previously recognised in 'Other economic flows – other comprehensive income' is transferred to other economic flows in the net result.

Categories of financial liabilities under AASB 9 and previously under AASB 139

Financial assets and liabilities at fair value through net result are categorised as such at trade date, or if they are classified as held for trading or designated as such upon initial recognition. Financial instrument assets are designated at fair value through net result on the basis that the financial assets form part of a group of financial assets that are managed based on their fair values and have their performance evaluated in accordance with documented risk management and investment strategies. Financial instruments at fair value through net result are initially measured at fair value; attributable transaction costs are expensed as incurred. Subsequently, any changes in fair value are recognised in the net result as other economic flows unless the changes in fair value relate to changes in the Institute's own credit risk. In this case, the portion of the change attributable to changes in the Institute's own credit risk is recognised in other comprehensive income with no subsequent recycling to net result when the financial liability is derecognised.

Financial liabilities at amortised cost are initially recognised on the date they are originated. They are initially measured at fair value plus any directly attributable transaction costs. Subsequent to initial recognition, these financial instruments are measured at amortised cost with any difference between the initial recognised amount and the redemption value being recognised in profit and loss over the period of the interest bearing liability, using the effective interest rate method. The Institute recognises the following liabilities in this category:

- payables (excluding statutory payables); and
- borrowings (including finance lease liabilities).

Offsetting financial instruments: Financial instrument assets and liabilities are offset and the net amount presented in the consolidated balance sheet when, and only when, the Institute concerned has a legal right to offset the amounts and intend either to settle on a net basis or to realise the asset and settle the liability simultaneously.

Some master netting arrangements do not result in an offset of balance sheet assets and liabilities. Where the Institute does not have a legally enforceable right to offset recognised amounts, because the right to offset is enforceable only on the occurrence of future events such as default, insolvency or bankruptcy, they are reported on a gross basis.

Derecognition of financial assets: A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is derecognised when:

- the rights to receive cash flows from the asset have expired; or
- the Institute retains the right to receive cash flows from the asset, but has assumed an obligation to pay them in full without material delay to a third party under a 'pass through' arrangement; or
- the Institute has transferred its rights to receive cash flows from the asset and either:
 - has transferred substantially all the risks and rewards of the asset; or
 - has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

Where the Institute has neither transferred nor retained substantially all the risks and rewards or transferred control, the asset is recognised to the extent of the Institute's continuing involvement in the asset.

Derecognition of financial liabilities: A financial liability is derecognised when the obligation under the liability is discharged, cancelled or expires.

When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised as an 'other economic flow' in the comprehensive operating statement.

7.1.1 Financial instruments: Categorisation

	Contractual financial assets - loans and receivables and cash	Contractual financial liabilities at amortised cost	Total
	\$	\$	\$
2019			
Contractual financial assets			
Cash and deposits	1,419,640	-	1,419,640
Receivables^(a)			
Sale of goods and services	1,008,413	-	1,008,413
Total contractual financial assets	2,428,053	-	2,428,053
Contractual financial liabilities			
Payables			
Supplies and services	-	2,678,410	2,678,410
Amounts payable to government and agencies	-	66,856	66,856
Borrowings			
Finance lease liabilities	-	121,591	121,591
Total contractual financial liabilities	-	2,866,857	2,866,857

Note:

(a) The total amounts disclosed here exclude statutory amounts (e.g. amounts owing from Victorian Government and taxes payable).

	Contractual financial assets - loans and receivables and cash	Contractual financial liabilities at amortised cost	Total
	\$	\$	\$
2018			
Contractual financial assets			
Cash and deposits	1,553,658	-	1,553,658
Receivables^(a)			
Sale of goods and services	870,260	-	870,260
Total contractual financial assets	2,423,918	-	2,423,918
Contractual financial liabilities			
Payables			
Supplies and services	-	2,339,116	2,339,116
Amounts payable to government and agencies	-	70,634	70,634
Borrowings			
Finance lease liabilities	-	140,527	140,527
Total contractual financial liabilities	-	2,550,277	2,550,277

Note:

(a) The total amounts disclosed here exclude statutory amounts (e.g. amounts owing from Victorian Government and taxes payable).

7.1.2 Financial instruments - Net holding gain/(loss) on financial instruments by category

	Total interest expense
	\$
2019	
Contractual financial liabilities	
Financial liabilities at amortised cost	4,582
Total contractual financial liabilities	4,582
	Total interest expense
	\$
2018	
Contractual financial liabilities	
Financial liabilities at amortised cost	5,195
Total contractual financial liabilities	5,195

Note:

Amounts disclosed in this table exclude holding gains and losses related to statutory financial assets and liabilities.

The net holding gains or losses disclosed are determined as follows:

- for cash and cash equivalents and receivables, the net gain or loss is calculated by taking the interest income; and
- for financial liabilities measured at amortised cost, the net gain or loss is calculated by taking the interest expense.

7.1.3 Financial risk management objectives and policies

As a whole, the Institute's financial risk management program seeks to manage these risks and the associated volatility of its financial performance.

Details of the significant accounting policies and methods adopted, including the criteria for recognition, the basis of measurement, and the basis on which income and expenses are recognised, with respect to each class of financial asset, financial liability and equity instrument above are disclosed in Note 7.3 to the financial statements.

The main purpose in holding financial instruments is to prudentially manage the Institute's financial risks within the government policy parameters.

The Institute's main financial risks include credit risk, liquidity risk and interest rate risk. The Institute manages these financial risks in accordance with its financial risk management policy.

The Institute uses different methods to measure and manage the different risks to which it is exposed. Primary responsibility for the identification and management of financial risks rests with the Executive and Finance Committee.

Financial instruments: Credit risk

Credit risk refers to the possibility that a borrower will default on its financial obligations as and when they fall due. The Institute's exposure to credit risk arises from the potential default of a counter party on their contractual obligations resulting in financial loss to the Institute. Credit risk is measured at fair value and is monitored on a regular basis.

Provision of impairment for contractual financial assets is recognised when there is objective evidence that the Institute will not be able to collect a receivable. Objective evidence includes financial difficulties of the debtor, default payments and debts that are more than 60 days overdue.

There has been no material change to the Institute's credit risk profile in 2018-19.

Financial instruments: Liquidity risk

Liquidity risk arises from being unable to meet financial obligations as they fall due. The Institute operates under the Government fair payments policy of settling financial obligations within 30 days and in the event of a dispute, making payments within 30 days from the date of resolution.

The Institute's exposure to liquidity risk is deemed insignificant based on prior periods' data and current assessment of risk.

Financial instruments: Market risk

The Institute's exposure to market risk is deemed insignificant based on prior periods' data and current assessment of risk.

7.2 Contingent assets and contingent liabilities

There were no contingent assets or liabilities at balance date not provided for in the balance sheet. (2018 - Nil)

7.3 Fair value determination

Significant judgement: Fair value measurements of assets and liabilities

Fair value determination requires judgement and the use of assumptions. This section discloses the most significant assumptions used in determining fair values. Changes to assumptions could have a material impact on the results and financial position of the Institute.

This section sets out information on how the Institute determined fair value for financial reporting purposes. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

The following assets and liabilities are carried at fair value:

- financial assets and liabilities at fair value through operating result;
- available-for-sale financial assets; and
- land, buildings, infrastructure, plant and equipment.

In addition, the fair values of other assets and liabilities that are carried at amortised cost, also need to be determined for disclosure purposes. The Institute determines the policies and procedures for determining fair values for both financial and non-financial assets and liabilities as required.

Fair value hierarchy

In determining fair values a number of inputs are used. To increase consistency and comparability in the financial statements, these inputs are categorised into three levels, also known as the fair value hierarchy. The levels are as follows:

- Level 1 – quoted (unadjusted) market prices in active markets for identical assets or liabilities;
- Level 2 – valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable; and
- Level 3 – valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

The Institute determines whether transfers have occurred between levels in the hierarchy by reassessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

The Institute, in conjunction with the Valuer General Victoria (VGV) and the Department of Justice and Community Safety monitors changes in the fair value of each asset and liability through relevant data sources to determine whether revaluation is required.

For those assets and liabilities for which fair values are determined, the following disclosures are provided:

- carrying amount and the fair value (which would be the same for those assets measured at fair value);
- which level of the fair value hierarchy was used to determine the fair value; and
- in respect of those assets and liabilities subject to fair value determination using Level 3 inputs:
 - a reconciliation of the movements in fair values from the beginning of the year to the end; and
 - details of significant unobservable inputs used in the fair value determination.

This section is divided between disclosures in connection with fair value determination for financial instruments (refer to Note 7.3.1) and non-financial physical assets (refer to Note 7.3.2).

7.3.1 Fair value determination of financial assets and liabilities

The fair values and net fair values of financial assets and liabilities are determined as follows:

- Level 1 – the fair value of financial instrument with standard terms and conditions and traded in active liquid markets are determined with reference to quoted market prices;
- Level 2 – the fair value is determined using inputs other than quoted prices that are observable for the financial asset or liability, either directly or indirectly; and
- Level 3 – the fair value is determined in accordance with generally accepted pricing models based on discounted cash flow analysis using unobservable market inputs.

The Institute currently holds a range of financial instruments that are recorded in the financial statements where the carrying amounts are a reasonable approximation of fair value, either due to their short-term nature or with the expectation that they will be paid in full by the end of the 2018-19 reporting period.

These financial instruments include:

<u>Financial assets</u>	<u>Financial liabilities</u>
Cash and deposits	Payables:
Receivables:	• For supplies and services
• Sale of goods and services	• Amounts payable to government and agencies
• Other receivables	• Other payables
• Amounts owing from government and agencies	

There have been no transfers between levels during the period.

The fair value of the financial assets and liabilities is included at the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale.

7.3.2 Fair value determination: Non-financial physical assets

Fair value measurement hierarchy

All assets are classified as Level 3.

There have been no transfers between levels during the period.

Specialised land and buildings: The Institute operates in a shared facility with the Coroners Court of Victoria. The market approach is also used for specialised land, although is adjusted for the community service obligation (CSO) to reflect the specialised nature of the land being valued.

The CSO adjustment is a reflection of the valuer's assessment of the impact of restrictions associated with an asset to the extent that is also equally applicable to market participants. This approach is in light of the highest and best use consideration required for fair value measurement, and takes into account the use of the asset that is physically possible, legally permissible, and financially feasible. As adjustments of CSO are considered as significant unobservable inputs, specialised land would be classified as Level 3 assets.

For the Institute's specialised building, the current replacement cost method is used, adjusting for the associated depreciations. As depreciation adjustments are considered as significant, unobservable inputs in nature, specialised buildings are classified as Level 3 fair value measurements.

An independent valuation of the Institute's specialised land and specialised buildings was performed by the Valuer-General Victoria. The valuation was performed using the market approach adjusted for CSO. The effective date of the valuation is 30 June 2016.

Plant and equipment is held at fair value. When plant and equipment is specialised in use, such that it is rarely sold other than as part of a going concern, fair value is determined using the current replacement cost method. There were no changes in valuation techniques throughout the period to 30 June 2019. For all assets measured at fair value, the current use is considered the highest and best use.

Reconciliation of Level 3 fair value movements

	Specialised land	Specialised buildings	Plant and equipment
	\$	\$	\$
2019			
Opening balance	82,210,240	72,444,672	4,556,846
Purchases (sales)	-	185,806	1,989,023
Gains or losses recognised in net result			
Depreciation	-	(3,068,098)	(1,111,669)
Gains or losses recognised in other economic flows - other comprehensive income			
Revaluation	10,152,965	10,492,210	-
Closing balance	92,363,205	80,054,590	5,434,200
	Specialised land	Specialised buildings	Plant and equipment
	\$	\$	\$
2018			
Opening balance	82,210,240	75,508,699	4,905,609
Purchases (sales)	-	-	658,653
Gains or losses recognised in net result			
Depreciation	-	(3,064,027)	(1,007,416)
Closing balance	82,210,240	72,444,672	4,556,846

Description of significant unobservable inputs to Level 3 valuations

2019 and 2018	Valuation technique	Significant unobservable inputs	Range (weighted average) %	Sensitivity of fair value measurement to changes in significant unobservable inputs
Specialised land	Market approach	Community service obligation (CSO) adjustment	20%	A significant increase or decrease in the CSO adjustment would result in a significantly higher or lower valuation.
Specialised building	Current replacement cost	Useful life of specialised building	30-60 years (40 years)	A significant increase or decrease in the estimated useful life of the asset would result in a significantly higher or lower valuation.
Plant and equipment	Current replacement cost	Cost per unit ^(a)	\$5,000 to \$1,780,000	A significant increase or decrease in cost per unit would result in a significantly higher or lower fair value.
Plant and equipment		Useful life of plant and equipment	3 to 15 years	A significant increase or decrease in the estimated useful life of the asset would result in a significantly higher or lower valuation.

Note:

(a) The cost and type of plant and equipment is so varied that a unit cost cannot be reliably calculated. An average unit cost does not provide a meaningful figure.

The significant unobservable inputs have remained unchanged from 2018.

Notes to the financial statements
For the financial year ended 30 June 2019

8. OTHER DISCLOSURES

Introduction

This section includes additional material disclosures required by accounting standards or otherwise, for the understanding of this financial report.

8.1 Other economic flows included in net result

Other economic flows are changes in the volume or value of an asset or liability that do not result from transactions. Other gains/(losses) from other economic flows include the gains or losses from:

- the revaluation of the present value of the long service leave liability due to changes in the bond interest rates

	2019	2018
	\$	\$
Net gain/(loss) on financial instruments		
Impairment of loans and receivables ^(a)	80,698	(33,411)
Total net gain/(loss) on financial instruments	80,698	(33,411)
Other gain/(loss) from other economic flows		
Net gain/(loss) arising from revaluation of long service leave liability ^(b)	(466,898)	98,917
Total other gain/(loss) from other economic flows	(466,898)	98,917

Notes:

(a) Including increase/(decrease) in provision for doubtful debts and bad debts from other economic flows - refer to Note 5.1.

(b) Revaluation gain/(loss) due to changes in bond rates.

8.2 Non-current assets held for sale

	2019	2018
	\$	\$
Transfer to assets classified as held for sale	-	9,502
Total non-current assets classified as held for sale	-	9,502

8.3 Responsible persons

In accordance with the Ministerial Directions issued by the Minister for Finance under the *Financial Management Act 1994*, the following disclosures are made regarding responsible persons for the reporting period.

Names

The persons who held positions of Ministers and Accountable Officers in the Institute are as follows:

Attorney-General	The Hon. Martin Pakula, MP The Hon. Jill Hennessy, MP	1 July 2018 to 28 November 2018 29 November 2018 to 30 June 2019
Acting Attorney-General	The Hon. Benjamin Carroll, MP	6 April 2019 to 14 April 2019
Council Members of the Institute		
Chairperson of the Victorian Institute of Forensic Medicine and Nominee of the Attorney-General	The Honourable John Coldrey QC	1 July 2018 to 30 June 2019
Director of the Victorian Institute of Forensic Medicine (Accountable Officer)	Prof. Noel Woodford	1 July 2018 to 30 June 2019
During the year the following people held the position of Acting Director	A/Prof David Ranson	6 August 2018 to 23 August 2018 2 January 2019 to 11 January 2019 18 February 2019 to 28 February 2019 28 March 2019 to 5 April 2019
Nominee of the Attorney-General	Prof. Robert Conyers	1 July 2018 to 30 June 2019
Nominee of the Chief Commissioner of Police	Mr Luke Cornelius	1 July 2018 to 30 June 2019
Nominee of the Chief Justice	Justice Elizabeth Hollingworth	1 July 2018 to 30 June 2019
Nominee of the Council of Monash University	Prof. Christina Mitchell	1 July 2018 to 27 July 2018
Nominee of the Council of Monash University	Prof. John McNeil	11 September 2018 to 21 May 2019
Nominee of the Minister for Health	Dr Lee Hamley	1 July 2018 to 30 June 2019
Nominee of the Minister for Women	Dr Deborah Kirkwood	1 July 2018 to 30 June 2019
Nominee of the Minister of Community Services	Ms Tracy Beaton	1 July 2018 to 30 June 2019
Nominee of the Minister of Police	Mr Neil Robertson	1 July 2018 to 30 June 2019
State Coroner	Judge Sara Hinchey	1 July 2018 to 30 June 2019
The following persons held the position of Acting State Coroner during the absence from the role of Judge Hinchey	Deputy State Coroner Iain West Deputy State Coroner Caitlin English	17 August 2018 to 16 April 2019 16 April 2019 to 30 June 2019
Nominee of the Chairman	Mr Tim Fitzmaurice	1 July 2018 to 30 June 2019
Nominee of the Council of University of Melbourne	Prof. Glenn Bowes	1 July 2018 to 30 June 2019

Remuneration

Total remuneration received or receivable by the Accountable Officer in connection with their position as a responsible person during the reporting period was \$518,487 (\$501,996 in 2017-18). As per the Governor in Council appointment, members of the VIFM Council are not remunerated.

Income Band of the VIFM Council	Total Remuneration	
	2019 No.	2018 No.
\$0	15	12*
\$1 to \$10,000	-	-
\$500,000 to \$509,999	-	1
\$510,000 to \$520,000	1	-
Total	16	13

* Amended from the 2017-18 Annual Report (11).

8.4 Remuneration of executives

The number of executive officers, other than ministers and accountable officers, and their total remuneration during the reporting period are shown in the table below. Total annualised employee equivalents provides a measure of full time equivalent executive officers over the reporting period.

Remuneration comprises employee benefits in all forms of consideration paid, payable or provided by the entity, or on behalf of the entity, in exchange for services rendered, and is disclosed in the following categories.

Short-term employee benefits include amounts such as wages, salaries, annual leave or sick leave that are usually paid or payable on a regular basis, as well as non-monetary benefits such as allowances and free or subsidised goods or services.

Post-employment benefits include pensions and other retirement benefits paid or payable on a discrete basis when employment has ceased.

Other long-term benefits include long service leave, other long service benefits or deferred compensation.

Termination benefits include termination of employment payments, such as severance packages.

Remuneration of executive officers including Key Management Personnel (disclosed in note 8.5)

	2019	2018
	\$	\$
Short-term employee benefits	197,083	207,398
Post-employment benefits	19,076	19,736
Other long-term benefits	1,780	5,393
Termination benefits	-	-
Total remuneration	217,939	232,527
Total number of executives	1	1
Total annualised employee equivalents ^(a)	1.0	1.0

Note:

(a) Annualised employee equivalent is based on the time fraction worked over the reporting period.

8.5 Related parties

The Institute is established under the Victorian Institute of Forensic Medicine (VIFM) Act 1985 operating under the auspices of the Department of Justice and Community Safety and reporting to Parliament through the Attorney-General.

Related parties of the Institute include;

- all key management personnel and their close family members and personal business interests (controlled entities, joint ventures and entities they have significant influence over);

All related party transactions have been entered into on an arm's length basis.

Key management personnel of the Institute include members of the VIFM Council, the Senior Executive team and the Chief Finance Officer.

The Honourable John Coldrey QC	Chairperson of the Victorian Institute of Forensic Medicine and Nominee of the Attorney-General
Prof. Robert Conyers	Nominee of the Attorney-General
Mr Luke Cornelius	Nominee of the Chief Commissioner of Police
Justice Elizabeth Hollingworth	Nominee of the Chief Justice
Vacant	Nominee of the Council of Monash University
Dr Lee Hamley	Nominee of the Minister for Health
Dr Deborah Kirkwood	Nominee of the Minister for Women
Ms Tracy Beaton	Nominee of the Minister of Community Services
Mr Neil Robertson	Nominee of the Minister of Police
Deputy State Coroner Caitlin English	Acting State Coroner
Mr Tim Fitzmaurice	Nominee of the Chairman
Prof. Glenn Bowes	Nominee of the Council of University of Melbourne
Professor Noel Woodford	Director, VIFM
Ms Mari-Ann Scott	Chief Operating Officer, VIFM
Adjunct Professor David Ranson	Deputy Director, Head of Forensic Services, VIFM
Associate Professor Richard Bassed	Deputy Director, Head of Academic Programs, VIFM
Mr Peter Ford	Chief Finance Officer, VIFM

The compensation detailed below excludes the salaries and benefits the Portfolio Minister receives. The Minister's remuneration and allowances is set by the *Parliamentary Salaries and Superannuation Act 1968* and is reported within the Department of Parliamentary Services' Financial Report.

Compensation of KMPs	2019	2018
	\$	\$
Short-term employee benefits	1,557,769	1,528,898
Post-employment benefits	147,735	148,216
Other long-term benefits	28,584	30,640
Total ^(a)	1,734,088	1,707,754

Notes:

(a) Note that KMPs are also reported in the disclosure of remuneration of executives. (Note 8.4).

8.6 Remuneration of auditors

	2019	2018
	\$	\$
Victorian Auditor-General's Office		
Audit or review of the financial statements	27,000	26,300
Total remuneration of auditors	27,000	26,300

8.7 Subsequent events

There are no subsequent events to disclose.

8.8 Other accounting policies

Contributions by owners

Consistent with the requirements of AASB 1004 *Contributions*, contributions by owners (that is, contributed capital and its repayment) are treated as equity transactions and, therefore, do not form part of the income and expenses of the Institute.

Additions to net assets that have been designated as contributions by owners are recognised as contributed capital. Other transfers that are in the nature of contributions to or distributions by owners have also been designated as contributions by owners.

8.9 Australian Accounting Standards issued that are not yet effective

The following AASs become effective for reporting periods commencing after 1 July 2019:

- AASB 16 *Leases*;
- AASB 15 *Revenue from Contract with Customers*; and
- AASB 1058 *Income of Not-for-Profit Entities*.

Leases

AASB 16 *Leases* replaces AASB 117 *Leases*, AASB Interpretation 4 *Determining whether an Arrangement contains a Lease*, AASB Interpretation 115 *Operating Leases-Incentives* and AASB Interpretation 127 *Evaluating the Substance of Transactions Involving the Legal Form of a Lease*.

AASB 16 sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to account for all leases on the balance sheet by recording a Right-Of-Use (RoU) asset and a lease liability except for leases that are shorter than 12 months and leases where the underlying asset is of low value (deemed to be below \$10,000).

AASB 16 also requires the lessees to separately recognise the interest expense on the lease liability and the depreciation expense on the right-of-use asset, and remeasure the lease liability upon the occurrence of certain events (e.g. a change in the lease term, a change in future lease payments resulting from a change in an index or rate used to determine those payments). The amount of the remeasurement of the lease liability will generally be recognised as an adjustment to the RoU asset.

Lessor accounting under AASB 16 is substantially unchanged from AASB 117. Lessors will continue to classify all leases using the same classification principle as in AASB 117 and distinguish between two types of leases: operating and finance leases.

The effective date is for annual reporting periods beginning on or after 1 January 2019. The Institute intends to adopt AASB 16 in 2019-20 financial year when it becomes effective.

The Institute will apply the standard using a modified retrospective approach with the cumulative effect of initial application recognised as an adjustment to the opening balance of accumulated surplus at 1 July 2019, with no restatement of comparative information.

Various practical expedients are available on adoption to account for leases previously classified by a lessee as operating leases under AASB 117. The Institute will elect to use the exemptions for all short-term leases (lease term less than 12 months) and low value leases (deemed to be below \$10,000).

In addition, AASB 2018-8 – Amendments to Australian Accounting Standards – Right-of-Use Assets (RoU) of Not-for-Profit Entities allows a temporary option for not-for-profit entities to not measure RoU assets at initial recognition at fair value in respect of leases that have significantly below-market terms, since further guidance is expected to be developed to assist not-for-profit entities in measuring RoU assets at fair value. The Standard requires an entity that elects to apply the option (i.e. measures a class or classes of such RoU assets at cost rather than fair value) to include additional disclosures. The Institute intends to choose the temporary relief to value the RoU asset at the present value of the payments required (at cost).

The Institute has performed a detailed impact assessment of AASB 16 and the potential impact in the initial year of application has been determined to not be material.

Revenue and Income

AASB 15 supersedes AASB 118 *Revenue*, AASB 111 *Construction Contracts* and related Interpretations and it applies, with limited exceptions, to all revenue arising from contracts with its customers.

AASB 15 establishes a five-step model to account for revenue arising from an enforceable contract that imposes a sufficiently specific performance obligation on an entity to transfer goods or services. AASB 15 requires entities to only recognise revenue upon the fulfilment of the performance obligation. Therefore, entities need to allocate the transaction price to each performance obligation in a contract and recognise the revenue only when the related obligation is satisfied.

To address specific concerns from the 'not-for-profit' sector in Australia, the AASB also released the following standards and guidance:

- AASB 2016-8 *Amendments to Australian Accounting Standards – Australian implementation guidance for NFP entities* (AASB 2016-8), to provide guidance on application of revenue recognition principles under AASB 15 in the not-for-profit sector.
- AASB 2018-4 *Amendments to Australian Accounting Standards – Australian Implementation Guidance for Not-for-Profit Public-Sector Licensors* (2018-4), to provide guidance on how to distinguish payments receive in connection with the access to an asset (or other resource) or to enable other parties to perform activities as tax and non-IP licence. It also provides guidance on timing of revenue recognition for non-IP licence payments.
- AASB 1058 *Income of Not-for-Profit Entities*, to supplement AASB 15 and provide criteria to be applied by not-for-profit entities in establishing the timing of recognising income for government grants and other types of contributions previously contained within AASB 1004 Contributions.

AASB 15, AASB 1058 and the related guidance will come into effect for not-for-profit entities for annual reporting periods beginning on or after 1 January 2019. The Institute intends to adopt these standards in 2019-20 financial year when it becomes effective.

The Institute will apply the standard using a modified retrospective approach with the cumulative effect of initial application recognised as an adjustment to the opening balance of accumulated surplus at 1 July 2019, with no restatement of comparative information.

The Institute has performed a detailed impact assessment of AASB 15 and AASB 1058 and the potential impact for each major class of revenue and income in the initial year of application. The impact is not material.

8.10 Glossary of technical terms

The following is a summary of the major technical terms used in this report.

Amortisation is the expense that results from the consumption, extraction or use over time of a non-produced physical or intangible asset. This expense is classified as an 'other economic flow'.

Borrowings refers to interest bearing liabilities mainly raised from public borrowings raised through the Treasury Corporation of Victoria, finance leases and other interest bearing arrangements. Borrowings also include non-interest bearing advances from government that are acquired for policy purposes.

Commitments include those operating, capital and other outsourcing commitments arising from non-cancellable contractual or statutory sources.

Comprehensive result is the amount included in the operating statement representing total change in net worth other than transactions with owners as owners.

Controlled item generally refers to the capacity of a department to benefit from that item in the pursuit of the entity's objectives and to deny or regulate the access of others to that benefit.

Current grants are amounts payable or receivable for current purposes for which no economic benefits of equal value are receivable or payable in return.

Depreciation is an expense that arises from the consumption through wear or time of a produced physical or intangible asset. This expense is classified as a 'transaction' and so reduces the 'net result from transaction'.

Effective interest method is the method used to calculate the amortised cost of a financial asset and of allocating interest income over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset or, where appropriate, a shorter period.

Employee benefits expenses include all costs related to employment including wages and salaries, fringe benefits tax, leave entitlements, redundancy payments, defined benefits superannuation plans, and defined contribution superannuation plans.

Financial asset is any asset that is:

- (a) cash;
- (b) an equity instrument of another entity;
- (c) a contractual right:
 - to receive cash or another financial asset from another entity; or
 - to exchange financial assets or financial liabilities with another entity under conditions that are potentially favourable to the entity; or
- (d) a contract that will or may be settled in the entity's own equity instruments and is:
 - a non-derivative for which the entity is or may be obliged to receive a variable number of the entity's own equity instruments; or
 - a derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the entity's own equity instruments.

Financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Financial liability is any liability that is:

- (a) a contractual obligation:
 - to deliver cash or another financial asset to another entity; or
 - to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavourable to the entity; or
- (b) a contract that will or may be settled in the entity's own equity instruments and is:
 - a non-derivative for which the entity is or may be obliged to deliver a variable number of the entity's own equity instruments; or
 - a derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the entity's own equity instruments. For this purpose, the entity's own equity instruments do not include instruments that are themselves contracts for the future receipt or delivery of the entity's own equity instruments.

Financial statements comprises:

- (a) a balance sheet as at the end of the period;
- (b) a comprehensive operating statement for the period;
- (c) a statement of changes in equity for the period;
- (d) a cash flow statement for the period;
- (e) notes, comprising a summary of significant accounting policies and other explanatory information;
- (f) comparative information in respect of the preceding period as specified in paragraph 38 of AASB 101 *Presentation of Financial Statements*; and
- (g) a statement of financial position as at the beginning of the preceding period when an entity applies an accounting policy retrospectively or makes a retrospective restatement of items in its financial statements, or when it reclassifies items in its financial statements in accordance with paragraphs 41 of AASB 101.

Grant expenses and other transfers are transactions in which one unit provides goods, services, assets (or extinguishes a liability) or labour to another unit without receiving approximately equal value in return. Grants can either be operating or capital in nature.

While grants to governments may result in the provision of some goods or services to the transferor, they do not give the transferor a claim to receive directly benefits of approximately equal value. For this reason, grants are referred to by the AASB as involuntary transfers and are termed non-reciprocal transfers. Receipt and sacrifice of approximately equal value may occur, but only by coincidence. For example, governments are not obliged to provide commensurate benefits, in the form of goods or services, to particular taxpayers in return for their taxes.

Grants can be paid as general purpose grants, which refer to grants that are not subject to conditions regarding their use. Alternatively, they may be paid as specific purpose grants, which are paid for a particular purpose and/or have conditions attached regarding their use.

General government sector comprises all government departments, offices and other bodies engaged in providing services free of charge or at prices significantly below their cost of production. General government services include those that are mainly non-market in nature, those that are largely for collective consumption by the community and those that involve the transfer or redistribution of income. These services are financed mainly through taxes, or other compulsory levies and user charges.

Interest expense represents costs incurred in connection with borrowings. It includes interest on advances, loans, overdrafts, bonds and bills, deposits, interest components of finance lease repayments, and amortisation of discounts or premiums in relation to borrowings.

Interest income includes unwinding over time of discounts on financial assets and interest received on bank term deposits and other investments.

Leases are rights to use an asset for an agreed period of time in exchange for payment. Leases are classified at their inception as either operating or finance leases based on the economic substance of the agreement so as to reflect the risks and rewards incidental to ownership. Leases of infrastructure, property, plant and equipment are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership from the lessor to the lessee. All other leases are classified as operating leases.

Net acquisition of non-financial assets (from transactions) are purchases (and other acquisitions) of non-financial assets less sales (or disposals) of non-financial assets less depreciation plus changes in inventories and other movements in non-financial assets. Includes only those increases or decreases in non-financial assets resulting from transactions and therefore excludes write-offs, impairment write-downs and revaluations.

Net financial liabilities is calculated as liabilities less financial assets, other than equity in public non-financial corporations (PNFC) and public financial corporations (PFC). This measure is broader than net debt as it includes significant liabilities, other than borrowings (e.g. accrued employee liabilities such as superannuation and long service leave entitlements). For the PNFC and PFC sectors, it is equal to negative net financial worth.

Net financial worth is equal to financial assets minus liabilities. It is a broader measure than net debt as it incorporates provisions made (such as superannuation, but excluding depreciation and bad debts) as well as holdings of equity. Net financial worth includes all classes of financial assets and liabilities, only some of which are included in net debt.

Net lending/borrowing is the financing requirement of government, calculated as the net operating balance less the net acquisition of non-financial assets. It also equals transactions in financial assets less transactions in liabilities. A positive result reflects a net lending position and a negative result reflects a net borrowing position.

Net operating balance or net result from transactions is a key fiscal aggregate and is revenue from transactions minus expenses from transactions. It is a summary measure of the ongoing sustainability of operations. It excludes gains and losses resulting from changes in price levels and other changes in the volume of assets. It is the component of the change in net worth that is due to transactions and can be attributed directly to government policies.

Net result is a measure of financial performance of the operations for the period. It is the net result of items of revenue, gains and expenses (including losses) recognised for the period, excluding those classified as 'other non-owner movements in equity'.

Net worth is calculated as assets less liabilities, which is an economic measure of wealth.

Non-financial assets are all assets that are not financial assets. It includes inventories, land, buildings, infrastructure, road networks, land under roads, plant and equipment, cultural and heritage assets, intangibles and biological assets such as commercial forests.



Non-produced assets are assets needed for production that have not themselves been produced. They include land, subsoil assets, and certain intangible assets. Non-produced intangibles are intangible assets needed for production that have not themselves been produced. They include constructs of society such as patents.

Operating result is a measure of financial performance of the operations for the period. It is the net result of items of revenue, gains and expenses (including losses) recognised for the period, excluding those that are classified as 'other non-owner movements in equity'. Refer also 'net result'.

Other economic flows included in net result are changes in the volume or value of an asset or liability that do not result from transactions. In simple terms, other economic flows are changes arising from market remeasurements. They include gains and losses from disposals, revaluations and impairments of non-current physical and intangible assets; fair value changes of financial instruments and agricultural assets; and depletion of natural assets (non-produced) from their use or removal.

Other economic flows - other comprehensive income comprises items (including reclassification adjustments) that are not recognised in net result as required or permitted by other Australian Accounting Standards. They include changes in physical asset revaluation surplus; share of net movement in revaluation surplus of associates and joint ventures; and gains and losses on remeasuring available-for-sale financial assets.

Payables includes short and long-term trade debt and accounts payable, grants, taxes and interest payable.

Produced assets include buildings, plant and equipment, inventories, cultivated assets and certain intangible assets. Intangible produced assets may include computer software, motion picture films and research and development costs (which does not include the start-up costs associated with capital projects).

Receivables include amounts owing from government through appropriation receivable, short and long-term trade credit and accounts receivable, accrued investment income, grants, taxes and interest receivable.

Sales of goods and services refers to income from the direct provision of goods and services and includes fees and charges for services rendered, sales of goods and services, fees from regulatory services and work done as an agent for private enterprises. It also includes rental income under operating leases and on produced assets such as buildings and entertainment, but excludes rent income from the use of non-produced assets such as land. User charges includes sale of goods and services income.

Supplies and services generally represent cost of goods sold and the day to day running costs, including maintenance costs, incurred in the normal operations of the Institute.

Transactions are those economic flows that are considered to arise as a result of policy decisions, usually an interaction between two entities by mutual agreement. They also include flows into an entity such as depreciation, where the owner is simultaneously acting as the owner of the depreciating asset and as the consumer of the service provided by the asset. Taxation is regarded as mutually agreed interactions between the government and taxpayers. Transactions can be in kind (e.g. assets provided/given free of charge or for nominal consideration) or where the final consideration is cash. In simple terms, transactions arise from the policy decisions of the Government.

8.11 Style conventions

The financial statements and notes are presented based on the illustration for a government department in the 2018-19 Model Report for Victorian Government Departments. The presentation of other disclosures is generally consistent with the other disclosures made in earlier publications of the Institute's annual reports.

Appendices

Mr Alex Gillard

A: Disclosure Index

The annual report of the Institute is prepared in accordance with all relevant Victorian legislation and pronouncements. This index has been prepared to facilitate identification of the Institute's compliance with statutory disclosure requirements.

Legislation	Requirement	Page Reference
Standing Directions & Financial Reporting Directions		
Report of operations		

Charter and purpose

FRD 22H	Manner of establishment and the relevant Ministers	Page 5
FRD 22H	Purpose, functions, powers and duties	Page 131
FRD 22H	Key initiatives and projects	Page 37
FRD 22H	Nature and range of services provided	Page 6

Management and structure

FRD 22H	Organisational structure	Page 134
---------	--------------------------	----------

Financial and other information

FRD 10A	Disclosure index	Page 129
FRD 22H	Employment and conduct principles	Page 83
FRD 22H	Occupational health and safety policy	Page 87
FRD 22H	Summary of the financial results for the year	Page 79
FRD 22H	Significant changes in financial position during the year	Page 80
FRD 22H	Major changes or factors affecting performance	Page 80
FRD 22H	Subsequent events	Page 123
FRD 22H	Application and operation of <i>Freedom of Information Act 1982</i>	Page 82
FRD 22H	Compliance with building and maintenance provisions of <i>Building Act 1993</i>	Page 83
FRD 22H	Statement on National Competition Policy	Page 83
FRD 22H	Application and operation of the <i>Protected Disclosure Act 2012</i>	Page 82
FRD 22H	Application and operation of the <i>Carers Recognition Act 2012</i>	Page 83
FRD 22H	Details of consultancies over \$10 000	Page 86
FRD 22H	Details of consultancies under \$10 000	Page 86
FRD 22H	Disclosure of government advertising expenditure	Page 86
FRD 22H	Disclosure of ICT expenditure	Page 87
FRD 22H	Statement of availability of other information	Page 80
FRD 24D	Reporting of office based environmental impacts	Page 86
FRD 29C	Workforce Data disclosures	Page 84
SD 5.2	Specific requirements under Standing Direction 5.2	Page 90

Compliance attestation and declaration

SD 5.4.1	Attestation for compliance with Ministerial Standing Direction	Page 88
----------	--	---------

SD 5.2.3	Declaration in report of operations	Page 1
----------	-------------------------------------	--------

Financial statements

Declaration

SD 5.2.2	Declaration in financial statements	Page 91
----------	-------------------------------------	---------

Other requirements under Standing Directions 5.2

SD 5.2.1(a)	Compliance with Australian accounting standards and other authoritative pronouncements	Page 90
SD 5.2.1(a)	Compliance with Standing Directions	Page 90

Other disclosures as required by FRDs in notes to the financial statements (a)

FRD 11A	Disclosure of Ex gratia Expenses	Page 121
FRD 21C	Disclosures of Responsible Persons, Executive Officers and other Personnel (Contractors with Significant Management Responsibilities) in the Financial Report	Page 121
FRD 103H	Non Financial Physical Assets	Page 95
FRD 110A	Cash Flow Statements	Page 96
FRD 112D	Defined Benefit Superannuation Obligations	Page 102
FRD 114C	Financial Instruments – general government entities and public non-financial corporations	Page 112

Legislation

<i>Freedom of Information Act 1982</i>	Page 82
<i>Building Act 1993</i>	Page 83
<i>Protected Disclosure Act 2012</i>	Page 82
<i>Carers Recognition Act 2012</i>	Page 83
<i>Financial Management Act 1994</i>	Page 82

Note:

(a) References to FRDs have been removed from the Disclosure Index if the specific FRDs do not contain requirements that are of the nature of disclosure.

B: The VIFM's Services and Obligations at a Glance

The VIFM serves the courts and community in accordance with the Institute's statutory objects and functions as set out in the *Victorian Institute of Forensic Medicine Act 1985*. The following is an overview of the services provided by the VIFM:

SERVICE	SUMMARY	THE VIFM ACT 1985 PROVIDES THAT THE OBJECTS AND FUNCTIONS OF THE INSTITUTE ARE:	
Medico-Legal Death Investigation Services	<p>The provision of expert medico-legal reports to the courts, including the Coroners Court of Victoria, families of deceased persons, Victoria Police, legal and medical practitioners and private and public agencies.</p>	<p>SECTION 64 (2)</p> <ul style="list-style-type: none"> » (a) to provide, promote and assist in the provision of forensic pathology and related services in Victoria and as far as practicable, oversee and co-ordinate those services in Victoria. » (j) to promote and assist in the performance by the Coroners Court of its functions. <p>SECTION 66 (1)</p> <ul style="list-style-type: none"> » (a) to provide facilities and staff for the conduct of examinations in relation to deaths investigated under the <i>Coroners Act 2008</i>; » (ab) to receive a report of a reportable death or a reviewable death for referral to a coroner or the State Coroner (as appropriate) under Part 3 of the <i>Coroners Act 2008</i>; » (ac) to receive a request for an investigation by the coroner into a fire under Division 2 of Part 4 of the <i>Coroners Act 2008</i> and refer that request to the coroner; » (ad) on behalf of a coroner, to request and receive information about a death or fire that a coroner is investigating; » (ae) to provide assistance and guidance in respect of whether a death is a reportable death or reviewable death to a person who has an obligation to report deaths of that kind under Part 3 of the <i>Coroners Act 2008</i>; » (e) to properly document and record findings and results of investigations and examinations; » (f) to provide reports to coroners about the medical causes of deaths and the findings and results of investigations and examinations; » (g) to gather information to assist a coroner to identify the senior next of kin of a deceased person; » (h) to provide information to, and obtain information from, family members of a deceased person for the purposes of a medical examination and the coronial process generally; to properly document and record findings and results of investigations and examinations. » (i) to receive a request on behalf of a coroner for an autopsy to be performed on a body in the control of a coroner; » (j) to take possession of a body on behalf of a coroner and to provide for the release of a body following an order made by a coroner under section 47 of the <i>Coroners Act 2008</i>; » (k) to request and receive ante-mortem specimens from hospitals in respect of reportable deaths for the purposes of medical examinations; » (l) to provide information to, and discuss with, the senior next of kin of a deceased person, the coronial process and in particular explain any medical examination to be performed on the deceased as part of the investigation process; » (m) to assist the principal registrar of the Coroners Court to provide information prescribed for the purposes of section 21 of the <i>Coroners Act 2008</i> regarding the coronial process to the senior next of kin of a deceased person and any other person the principal registrar considers to have a sufficient interest in the investigation under section 21(b) of that Act. <p>SECTION 66 (3)</p> <ul style="list-style-type: none"> » The Institute also has a function to investigate, assess and instigate appropriate responses in respect of— » (a) the health or safety of a living sibling of a deceased child; and » (b) the health of a parent of a deceased child— » where the death of that child constitutes a reviewable death. 	<p>SECTION 64 (2)</p> <ul style="list-style-type: none"> » (f) to provide, promote and assist in the provision of clinical forensic medicine and related services to Victoria Police and government bodies; » (g) to promote, provide and assist in under-graduate and post-graduate instruction in the field of clinical forensic medicine in Victoria; » (h) to promote, provide and assist in the teaching of and training in clinical forensic medicine within medical, legal, general health and other education programs; <p>SECTION 66 (2)</p> <ul style="list-style-type: none"> » The Institute also has a function to ensure the provision of clinical forensic medical services to Victoria Police and government bodies in accordance with agreements for services between those bodies and the Institute. <p>SECTION 64 (2)</p> <ul style="list-style-type: none"> » (a) to provide, promote and assist in the provision of forensic pathology and related services in Victoria and, as far as practicable, oversee and co-ordinate those services in Victoria; <p>SECTION 66 (1)</p> <ul style="list-style-type: none"> » (b) to conduct chemical, microscopic, serological, toxicological and other examinations of tissue and fluids taken from deceased persons coming under the jurisdiction of coroners in Victoria; » (c) to identify by radiological or odontological examination or other means the remains of deceased persons whose deaths are being investigated under the <i>Coroners Act 2008</i>; » (d) to conduct other appropriate investigations or examinations in relation to the cause of death of any person;
		<p>Clinical Forensic Medicine Services</p> <p>Medico-legal examination of victims of crime and alleged perpetrators, and the provision of expert reports to the courts, Victoria Police, legal and medical practitioners and private and public agencies.</p>	<p>Forensic Sciences</p> <p>Forensic scientific analysis of samples received from forensic pathologists, clinical forensic physicians and the Victoria Police and the provision of expert reports to the courts, Victoria Police, legal and medical practitioners and private and public agencies.</p>
		<p>Donor Tissue Bank of Victoria</p> <p>The provision of safe tissue to Australian surgeons for transplantation in orthopaedic, cardiothoracic, burns and reconstructive surgery. Tissue is also provided to authorised researchers for the completion of ethically approved research projects.</p>	<p>SECTION 64 (2)</p> <ul style="list-style-type: none"> » (i) to provide tissue banking facilities and services referred to in section 66(4); <p>SECTION 66 (4)</p> <ul style="list-style-type: none"> » The Institute also has the following functions— » (a) to receive tissue taken in accordance with the <i>Human Tissue Act 1982</i> (whether under Part X of that Act or otherwise) from living persons in Victoria and to process, store and supply the tissue for transplantation to living persons in Victoria or elsewhere or for use, in Victoria or elsewhere, for other therapeutic purposes or for medical or scientific purposes; » (b) to remove tissue, or receive tissue taken, in accordance with the <i>Human Tissue Act 1982</i> from deceased persons in Victoria (whether or not a coroner has jurisdiction to investigate the deaths) and to process, store and supply the tissue for transplantation to living persons in Victoria or elsewhere or for use, in Victoria or elsewhere, for other therapeutic purposes or for medical or scientific purposes; » (c) to remove tissue, or receive tissue taken, in accordance with a corresponding law of another State or a Territory and to process, store and supply the tissue for transplantation to living persons in Victoria or elsewhere or for use, in Victoria or elsewhere, for other therapeutic purposes or for medical or scientific purposes; » (d) to receive tissue taken in accordance with a corresponding law of a country other than Australia and to process, store and supply the tissue for transplantation to living persons in Victoria or elsewhere or for use, in Victoria or elsewhere, for other therapeutic purposes or for medical or scientific purposes.
		<p>Academic Programs</p> <p>The Institute undertakes its teaching and research obligations as the Department of Forensic Medicine for Monash University. Its primary function is to advance the training and development of forensic practitioners and to increase the evidence basis for the discipline through research.</p>	<p>SECTION 64 (2)</p> <ul style="list-style-type: none"> » (b) to promote, provide and assist in the post-graduate instruction and training of trainee specialist pathologists in the field of forensic pathology in Victoria; » (c) to promote, provide and assist in the post-graduate instruction and training of persons qualified in biological sciences in the field of toxicological and forensic science in Victoria; » (d) to provide training facilities for doctors, medical undergraduates and such other persons as may be considered appropriate by the Council to assist in the proper functioning of the Institute; » (e) to conduct research in the fields of forensic pathology, forensic science, clinical forensic medicine and associated fields as approved by the Council; » (ha) to contribute to reducing the number of preventable deaths and to promote public health and safety and the administration of justice;

C: Committees

The Council has four working committees to ensure compliance with legislative, accreditation and other regulatory requirements.

Executive and Finance Committee (EFC)

The VIFM Council has appointed an Executive and Finance Committee (EFC) to assist in fulfilling its governance responsibilities. The Council has delegated certain functions to the EFC, as set out below. The EFC is a standing committee of Council and its functions are to:

- » Contribute to the development of the Institute's strategic plan and monitor performance against the plan
- » Advise the Council about the Institute's progress towards delivery of the strategic plan
- » Review and evaluate the annual budget prior to submitting it to Council for approval
- » Monitor financial performance against the budget and conduct an annual review of financial performance
- » Monitor and evaluate the VIFM's operations for efficiency and efficacy
- » Review and monitor the progress of major capital expenditure and major contracts
- » Oversee and monitor the performance of key policies and strategies, as required
- » Recommend to Council the review of service areas, as required
- » Review executive and medical salaries, and
- » Consider any other matters referred to it by Council and/or management.

In performing its duties, the EFC will maintain effective working relationships with the Council and management.

Members: Professor Robert Conyers (Chair), Professor Noel Woodford, Mr Neil Robertson PSM, Mr Tim Fitzmaurice and Ms Mari-Ann Scott.
Executive Officer: Ms Carolynne van der Cingel

Audit and Risk Management Committee (ARMC)

The VIFM Council has appointed the Audit and Risk Management Committee (ARMC) to assist it in fulfilling its governance responsibilities. In particular, the ARMC is to assist the Council in overseeing matters of accountability and internal control affecting the operations of the Institute. The Council has delegated certain functions to the ARMC as set out below. The ARMC is a standing committee of Council and its functions are to:

- » Independently review and assess the effectiveness of the VIFM's systems and controls for financial management, performance and sustainability, including risk management
- » Oversee the internal audit function under Direction 3.2 of the Standing Directions of the Minister for Finance 2018
- » Review annual financial statements and make a recommendation to the VIFM Council as to whether to authorise the statements before they are released to

- » Parliament by the Attorney-General
- » Review information in the report of operations of financial management, performance and sustainability before it is released to Parliament by the Attorney-General
- » Review and monitor compliance with the *Financial Management Act 1994* and the Standing Directions 2018 and advise the VIFM Council on the level of compliance attained
- » Review and monitor remedial actions taken to address compliance deficiencies
- » Maintain effective communication with external auditors
- » Consider recommendations made by internal and external auditors relating to, or impacting on, financial management, performance and sustainability and actions to be taken by the VIFM to resolve any issues raised
- » Regularly review implementation of actions in response to internal or external audits, including remedial actions to mitigate future instances of non-compliance
- » Approve appropriate financial management delegations of authority
- » Review other strategic policies that are of relevance to the ARMC, including but not limited to, delegations, procurement, purchasing and outsourcing to contractors.

Members: Professor Robert Conyers (Chair), Mr Neil Robertson PSM and Mr Tim Fitzmaurice.

Executive Officer: Ms Carolynne van der Cingel

The VIFM Ethics Committee

The VIFM Ethics Committee is a committee of the VIFM Council. It is constituted and operates in accordance with the National Health & Medical Research Council National Statement on Ethical Conduct in Human Research. The Committee functions are to:

- » Review applications for research involving VIFM data, human tissue or live participants by VIFM staff members or external researchers
- » Approve the above research applications where they meet the requirements of the National Health and Medical Research Council National Statement on Ethical Conduct in Human Research, and
- » Consider and advise on any other ethical issues referred to the Committee by the Director of the VIFM or the VIFM Council.

Members: Mr Stephen Nossal (Chair), Deputy Chief Magistrate Felicity Broughton, Coroner Audrey Jamieson, Mr Trent Brickle, Ms Lynne Wenig, Professor Noel Woodford, Dr Marisa Herson, Dr Danny Sullivan, the Hon. Frank Vincent AO QC, Ms Michelle Skinner, Mr Stefan Poniatowski, Associate Professor Richard Bassed and Professor Belinda Gabbe.
Executive Officer: Ms Fiona Leahy

The Donor Tissue Bank Committee

The purpose of the Committee is to assist the Council in fulfilling its responsibilities in relation to the *VIFM Act 1985*, *Human Tissue Act 1982* and *Therapeutic Goods Act 1989* including the requirements of Good Manufacturing Practice, the Biological Framework and associated Therapeutic Goods Orders, and ethical guidelines of the National Health and Medical Research Council.

The functions of the Committee are to:

- » Develop a DTBV strategic plan for Council's approval and monitor progress against the plan
- » Approve key operational policies for ensuring regulatory compliance and appropriate evidence based application of donor and donation/product risk management in the context of ensuring safety and efficacy of tissue for transplant. Monitor DTBV's compliance against the policies
- » Periodically review the DTBV's process for monitoring compliance with laws and regulations governing its operations
- » Monitor the effectiveness of DTBV quality assurance management including but not limited to incidents, audit, TGA compliance, complaint, and adverse events handling
- » Provide a conduit for two-way communication with wider stakeholders as well as tissue users by acting as a clinical user group. Provide clinical and business horizon-scanning to the DTBV service, to inform strategic planning
- » Ensure matters put before the Committee involving issues of ethical practice are referred to the VIFM Ethics Committee
- » Monitor the operational and financial performance of the DTBV against the strategic plan and the budget, and refer matters to the Executive and Finance Committee and the Audit and Risk Management Committee of Council, where necessary
- » Review, provide advice and recommend input into, the annual budget to the Executive and Finance Committee, prior to it being submitted to Council for approval
- » Regularly review DTBV risks in accordance with the VIFM risk management framework
- » Consider any other matters referred to it by Council and/or management.

Members: Mr Tim Fitzmaurice (Chair), Mr Neil Bergman, Coroner Rosemary Carlin, Dr Michael Catton, Mr Luke Cornelius APM, Ms Heather Cleland, Ms Rhonda Holdsworth, Mr Stefan Poniatowski, Professor David Ranson and Mr Peter Skillington.

Executive Officer: Mr Stefan Poniatowski

Internal Management

Senior Executive Group

The Senior Executive Group meets and consults about key strategic matters. It comprises the Institute Director, Chief Operating Officer, Deputy Director Academic Programs and Deputy Director Forensic Services.

Members: Professor Noel Woodford (Chair), Ms Mari-Ann Scott, Professor David Ranson and Associate Professor Richard Bassed.

Executive Team

The Executive Team comprises of the Director, Chief Operating Officer, Deputy Directors, Forensic Service Heads, Academic Program Head, Chief Finance Officer, Chief Information Officer and Quality Manager. The focus of the VIFM Executive Team is planning, policy, strategy, quality, performance and improvement, finance and resource management, strategic and operational risk, leadership, culture, and strategic human resources.

Members: Professor Noel Woodford (Chair), Ms Mari-Ann Scott, Mr Peter Ford, Professor David Ranson, Associate Professor

Morris Odell, Associate Professor Dimitri Gerostamoulos, Associate Professor Richard Bassed, Mr Murray Hall, Mr Stefan Poniatowski, Dr Linda Iles and Ms Frances Adamas.

Executive Officer: Ms Margaret Craddock

Managers' Forum 2018

The Managers' Forum meets monthly and members provide regular reports on their team's activities, request assistance from other areas where appropriate, and share positive feedback and achievements for the month.

Members: Ms Frances Adamas (Chair July - November 2018), Noel Woodford (Chair December - June 2019), Dr Jodie Leditschke, Mr Steve Ansell, Mr Jeff Lomas, Mr Jarrod Boxall, Dr Liz Manning, Mr David Cauchi, Ms Helen McKelvie, Ms Lauren Murton, Ms Susan Dickie, Mr David Downing, Dr Linda Glowacki, Ms Rebecca Owen, Ms Kellie Hamilton, Mr Richard Prokop, Dr Dadna Hartman, Mr Ben Stewart, Ms Leanna La Combre, Ms Barbara Thorne, Ms Fiona Leahy, Ms Margaret Craddock, Ms Kerry Crump, Ms Elizabeth Jenkins, Ms Alison Monaghan, Mr Thomas Munro, Mr Dean Krenske and Mr Alan Wilson.

Executive Officer: Ms Charmain Anderson

Occupational Health and Safety (OHS) Committee

The Occupational Health and Safety (OHS) Committee meets a minimum of four times each year and is a forum for management and staff to work together to ensure health and safety issues are raised for action at the Institute.

The VIFM's OHS Committee is established in accordance with S.72 of the *Occupational Health and Safety Act 2004* and is a joint committee of employees and management.

Specifically the Committee's role is to:

- » Ensure the identification and investigation of workplace OHS hazards and matters as they occur and make recommendations to the VIFM Executive Team to address issues
- » Review incident statistics and examine trends for the workplace to identify problem areas and make recommendations for corrective action
- » Communicate to all staff about any new or amended OHS legislation, regulations and any other OHS compliance requirements
- » Review and monitor the annual program of OHS activities including health and safety prevention programs
- » Commission regular OHS audits, and make recommendations to the VIFM Executive Team about changes required, based on the findings of the audits
- » Oversee the review and development of safety procedures
- » Approve staff OHS training and education programs and monitor the uptake of training
- » Ensure that OHS issues are appropriately reported up to the Executive Team and the VIFM Council.

The OHS Committee is the peak Committee for all OHS related activities. It has the ability to seek any information it requires to perform its duties and create ad-hoc sub committees to perform OHS related functions and activities.

Members: Ms Mari-Ann Scott (Chair), Ms Emily Hall (OHS Adviser

D: Publications

Journal Articles

Beck, B., Smith, K., Mercier, E., Bernard, S., Jones, C., & Meadley, B., et al. (2019, May). Potentially preventable trauma deaths: a retrospective review. *Injury*, 50(5), 1009-16.

Beck, B., Smith, K., Mercier, E., Gabbe, B., Bassed, R., & Mitra, B., et al. (2019, June 4). Differences in the epidemiology of out-of-hospital and in-hospital trauma deaths. *PLoS one*, 14(6): e0217158; doi: 10.1371/journal.pone.0217158.

Bellenger, E.N., Ibrahim, J.E., Kennedy, B., & Bugeja, L. (2019, March). Prevention of physical restraint use among nursing home residents in Australia: the top three recommendations from experts and stakeholders. *International Journal of Older People Nursing*, 14(1): e12218; doi: 10.1111/opn.12218.

Bellenger, E.N., Ibrahim, J.E., Lovell, J.J., & Bugeja, L. (2018, August). The nature and extent of physical restraint-related deaths in nursing homes: a systematic review. *Journal of Aging and Health*, 30(7), 1042-61.

Bicknell, R., Kennedy, B., Pham, T., Bugeja, L., & Ibrahim, J.E. Thermal injury deaths of community-dwelling older people with dementia. Alzheimer Disease and Associated Disorders. Published online January 8, 2019; doi:10.1097/WAD.0000000000000290.

Blau, S., Sterenberg, J., Weeden, P., Urzedo, F., Wright, R., & Watson, C. (2019, February). Exploring non-invasive approaches to assist in the detection of clandestine human burials: developing a way forward. *Forensic Sciences Research*, 3(4), 304-26.

Borruso, L.D., Buckley, N.A., Kirby, K.A., Carter, G., Pilgrim, J.L., & Chitty, K.M. (2019, February). Acute alcohol co-ingestion and hospital-treated deliberate self-poisoning: is there an effect on subsequent self-harm? *Suicide & Life-threatening Behavior*, 49(1), 293-302.

Bowman, Z.E., Mosse, K.S.A., Sungaila, A.M., van Oorschot, R.A.H., & Hartman, D. (2018, November). Detection of offender DNA following skin-to-skin contact with a victim. *Forensic Science International Genetics*, 37, 252-9.

Brodie, L.R., Odell, M., Ranson, D., Young, C., Kitching, F., & Ibrahim, J.E. (2019, April). Sudden natural death behind the wheel: review of driver deaths and fitness to drive assessment history in Victoria, Australia 2012-2013. *Journal of Forensic and Legal Medicine*, 63, 31-3.

Bugeja, L., Woolford, M.H., Willoughby, M., Ranson, D., & Ibrahim, J.E. (2018, December). Frequency and nature of coroners' recommendations from injury-related deaths among nursing home residents: a retrospective national cross-sectional study. *Injury Prevention: Journal of the International Society for Child and Adolescent Injury Prevention*, 24(6), 418-23.

& Co-ordinator), Mr Richard Prokop, Ms Frances Adamas, Ms Helen Makrakis, Ms Prue Armstrong, Ms Emma Cowley, Mr Alexander Gillard (Deputy HSR), Mr Peter Ford (Acting Chair, November 2018), Mr Jason Egan (until November 2018), Ms Loretta Mitchell (until September 2018), Ms Leanna La Combre (until September 2018).

Privacy, Confidentiality and Data Protection Committee

The Privacy, Confidentiality and Data Protection Committee meets a minimum four times a year and has representatives from across the business. Committee representatives are responsible for raising any privacy, confidentiality or data related concerns and communicating key messages to their work areas. The role of the Privacy, Confidentiality and Data Protection Committee is:

- » To monitor VIFM compliance with privacy legislation including the relevant provisions of *VIFM Act 1985*, *Privacy and Data Protection Act 2014*, *the Health Records Act 2001*, *Human Tissue Act 1982*, the *Coroners Act 2008* and applicable standards for information security
- » To regularly review and update: the VIFM Privacy and Data Security Statement; Privacy and Confidentiality Policy and Procedures; the Information Security Policy and Procedures; and related documents
- » To develop initiatives to effectively implement the above policies, including organising staff training and awareness activities
- » To provide advice, support and training to service areas on matters relating to privacy, confidentiality and data protection
- » To identify and discuss privacy and information security issues relevant to VIFM and refer suggestions for resolution and improvement to the relevant manager or to the Managers' Forum if the issue is Institute-wide
- » To consider at each meeting a summary of CIRCAS (corrective actions) involving privacy and information security issues, including any complaints
- » To review and analyse any privacy breaches and record resolutions.

Members: Ms Margaret Craddock (Chair and Privacy Officer), Ms Tram Lam, Ms Voula Staikos, Mr Jarrod Boxall, Mr Jeff Vasquez, Mr Richard Prokop and Mr Jeff Lomas.

Quality Review Committee

The Quality Review Committee (QRC) oversees and monitors the VIFM's quality system and operational quality issues including complaints. It reviews the VIFM Management Review Reports, Internal Audit Program findings, Quality Assurance Program (QAP) performance and Continuous Improvement – Corrective Action (CIRCA) trends and issues relating to complaints, compliments, equipment, evidence handling, external service, improvement request, internal service, OHSE Issues, safety incidents and QAPs.

The QRC reviews complaints received or any other significant issue affecting the VIFM's service quality. The QRC reviews and monitors results, progress and status of external third party audits (NATA, ISO, TGA, NATA and Global Compliance Certifications).

Members: Professor David Ranson (Co-Chair), Ms Frances Adamas (Co-Chair), Professor Noel Woodford, Ms Leanna La Combre (up to October 2018) , Mr Jeff Lomas, Dr Jodie Leditchke, Associate Professor Dimitri Gerostamoulos and Mr Ben Stewart.
Executive officer: Ms Soumela Horomidis

Research Advisory Committee (RAC)

The Research Advisory Committee (RAC) reviews submissions for research projects from both internal and external researchers. The RAC determines whether the project constitutes Quality Assurance or research, ensures that each project has scientific merit, and refers all research projects to the appropriate Human Research Ethics Committee for ethical review.

Members: Associate Professor Richard Bassed (Chair), Professor Belinda Gabbe, Ms Kellie Hamilton, Dr Dadna Hartman, Dr Linda Iles, Ms Fiona Leahy, Dr Jo Ann Parkin and Associate Professor Soren Blau.
Executive Officer: Ms Carolynne van der Cingel

The Green Team

Ms Kellie Hamilton (Co-Chair), Ms Fiona Leahy (Co-Chair), Ms Fiona Lawrence, Mr Evan Leckenby, Dr Linda Iles, Ms Lyn Ireland, Mr Robert Coyle, Ms Janine Krochmal, Ms Nadia Polikarpowski, Mr Dean Krenske, Ms Janine Shiels and Ms Samantha Joubert.

The Social Club Committee

Mr Murray Hall (President), Mr Jarrod Boxall (Vice President), Ms Joanne Hanna (Treasurer), Ms Emily Hall (Secretary), Ms Rebecca Johnston-Ryan, Ms Michelle Spiden, Ms Leanne Daking, Ms Jennah Tiu, Mr Jeff Lomas, Ms Kim Conway, Ms Alison Monaghan, Ms Martina Schaefer, Ms Claudia Hodgins, Ms Chloe Claringbold and Ms Prue Armstrong.

Emergency Planning Committee (Facilities)

Ms Mari-Ann Scott, Ms Carolyn Gale, Mr Peter Ford, Mr Gerard Garson, Mr David Cauchi.
Executive Officer: Ms Margaret Craddock

Wardens

Mr David Cauchi (Chief Warden), Mr Ben Stewart (Deputy Chief), Mr David Orchard (Deputy Chief), Ms Michelle Spiden (Deputy Chief), Ms Charmain Anderson, Mr Alexander Gillard, Mr Adam Li, Mr Lakshan De Run, Ms Jill Russell, Ms Joanne Hanna, Ms Voula Staikos, Ms Melissa Peka, Mr Matthew Di Rago, Dr Mark Chu, Ms Fiona Lawrence, Ms Katherine Dartnell, Ms Alice Bussey, Ms Alison Monaghan, Ms Samantha Francis-Pester, Dr Jason Schreiber, Ms Kaitlyn Hart, Ms Melynda Hargreaves, Ms Gaie Russell, Ms Emma Cowley, Ms Prue Armstrong and Mr Keith Bretherton.

De Boer, H.H., Blau, S., Delabarde, T., & Hackman, L. The role of forensic anthropology in Disaster Victim Identification (DVI): recent developments and future prospects. *Journal of Forensic Sciences and Research*. Published online 2018, October 2; doi: org/10.1080/20961790.2018.1480460.

Doyle, E., Márquez-Grant, N., Field, L., Holmes, T., Arthurs, O.J., & van Rijn, R.R., et al. (2019, February). Guidelines for best practice: imaging for age estimation in the living. *Journal of Forensic Radiology and Imaging*, 16, 38-49.

Drummer, O.H., Di Rago, M., Gerostamoulos, D. (2019, May). Analysis of benzodiazepines for drug-facilitated assaults and abuse settings (urine). *Methods in Molecular Biology* (Clifton, NJ), 1872, 23-39.

Drummer, O.H., Gerostamoulos, D., & Woodford, N.W. (2019, May). Cannabis as a cause of death: a review. *Forensic Science International*, 298, 298-306.

Ferrah, N., Stephan, K., Lovell, J., Beiles, C.B., & Ibrahim, J.E. Rural centres do not have a higher prevalence of post-operative complications than urban centres: a retrospective analysis of a mortality audit. *ANZ Journal of Surgery*. Published online 2019, Feb 21; doi: 10.1111/ans.15083.

Ferrah, N., Stephan, K., Lovell, J., Ibrahim, J., & Beiles, B. (2018, August). Post-operative complications following emergency operations performed by trainee surgeons: a retrospective analysis of surgical deaths. *World Journal of Surgery*, 42(8), 2329-38.

Gilmartin-Thomas, J.F., Bell, J.S., Liew, D., Arnold, C.A., Buchbinder, R., & Chapman, C., et al. (2019, February). Chronic pain medication management of older populations: key points from a national conference and innovative opportunities for pharmacy practice. *Research in Social & Administrative Pharmacy : RSAP*, 15(2), 207-13.

Hall, F., Forbes, S., Rowbotham, S., & Blau, S. Using PMCT of individuals of known age to test the Suchey-Brooks method of aging in Victoria, Australia. *Journal of Forensic Sciences*. Published online 2019, May 31; doi: 10.1111/1556-4029.14086.

Hatfield, J., Poulos, R.G., Murphy, S.M., Flack, L.K., Rissel, C., & Grzebieta, R., et al. (2019, June). Safety aspects of riding with children: descriptive analysis of adult riders' self-report. *Accident; Analysis and Prevention*, 131, 33-44.

Hicks, A.J., Clay, F.J., Hopwood, M., James, A.C., Jayaram, M., & Batty, R., et al. (2018, December). Efficacy and harms of pharmacological interventions for neurobehavioral symptoms in post-traumatic amnesia after traumatic brain injury: a systematic review. *Journal of Neurotrauma*, 35(23), 2755-75.

Holmes, A.L., Bugeja, L., Young, C., & Ibrahim, J.E. Deaths due to thermal injury from cigarette smoking in a 13-year national cohort of nursing home residents. *International Journal of Older People Nursing*. Published online 2019, Mar 29; doi: 10.1111/opn.12233.

Ibrahim, J.E. (2019, June). Royal Commission into Aged Care Quality and Safety: the key clinical issues. *The Medical Journal of Australia*, 210(10), 439-41.

Ibrahim, J.E., Holmes, A., Young, C., & Bugeja, L. (2019, February). Managing risk for aging patients in long-term care: a narrative review of practices to support communication, documentation, and safe patient care practices. *Risk Management and Healthcare Policy*, 12, 31-9.

Ibrahim, J.E., Kipsaina, C., Martin, C., Ranson, D.L., & Bugeja, L. Variations in death notification of nursing home residents to Australian Coroners. *Injury Prevention : Journal of the International Society for Child and Adolescent Injury Prevention*. Published online 2018, July 9; doi: 10.1136/injuryprev-2017-042689.

Jain, B., Willoughby, M., Winbolt, M., Lo Giudice, D., & Ibrahim, J. (2018, December). Stakeholder perceptions on resident-to-resident aggression: implications for prevention. *Australian Health Review: a Publication of the Australian Hospital Association*, 42(6), 680-8.

Johnson, M., Bugeja, L., & Koppel, S. 1875 (2018, November). Do we already have the answers to prevent deaths on our roads? In-depth analysis of coroners' recommendations. *Injury Prevention*, 24(Suppl 2): A78.

Jokanovic, N., Ferrah, N., Lovell, J.J., Weller, C., Bugeja, L., & Bell, J.S., et al. (2019, April). A review of coronal investigations into medication-related deaths in residential aged care. *Research in Social & Administrative Pharmacy : RSAP*, 15(4), 410-6.

Koppel, S., Bugeja, L., Hua, P., Osborne, R., Stephens, A.N., & Young, K.L., et al. (2019, February). Do mindfulness interventions improve road safety? A systematic review. *Accident; Analysis and Prevention*, 123, 88-98.

Koppel, S., Stephens, A.N., Bedard, M., Charlton, J.L., Darzins, P., & Stefano MD, et al. (2019, February). Self-reported violations, errors and lapses for older drivers: measuring the change in frequency of aberrant driving behaviours across five time-points. *Accident; analysis and prevention*, 123, 132-9.

Lee, H.C., Ibrahim, J.E., Koppel, S., Johnson, M., & Bugeja L. Nursing home resident deaths due to road trauma and the potential roles for nursing home providers to promote public safety. *Australasian Journal on Ageing*. Published online 2019, March 29; doi: 10.1111/ajag.12650.

Lee HC, Johnson M, Bugeja L, Koppel S, Chong D, Ibrahim JE. Fatal road transport crashes among Australian residential aged care facility residents. *Australasian Journal on Ageing*. 2019 Mar; 38(1): 52-6.

Lovell, J., Pham, T., Noaman, S.Q., Davis, M.C., Johnson, M., & Ibrahim, J.E. (2019, April 29). Self-management of heart failure in dementia and cognitive impairment: a systematic review. *BMC Cardiovascular Disorders*, 19(1), 99.

Lovibond, S.W., Mariani, J.A., & Odell, M. Driving with cardiac devices in Australia. Does a review of recent evidence prompt a change in guidelines? *Internal Medicine Journal*. Published online 2019, February 6; doi: 10.1111/imj.14243.

Luber, R.P., Rentsch, C., Lontos, S., Pope, J.D., Aung, A.K., & Schneider, H.G., et al. Turmeric induced liver injury: a report of two cases. *Case Reports in Hepatology*. Published online 2019, April 28; doi: 10.1155/2019/6741213.

Maas A, Maier C, Iwersen-Bergmann S, J.L. P, Di Rago M, Madea B, et al. Propofol and propofol glucuronide concentrations in hair following medical propofol administration and in forensic death cases. *Forensic Toxicology*. 2018 Jul; 36(2): 270-9.

Mantiniaks, D., Gerostamoulos, D., Wright, P., & Drummer, O. (2018, September). The effectiveness of decontamination procedures used in forensic hair analysis. *Forensic Science, Medicine, and Pathology*, 14(3), 349-57.

Mitchell, J.L., & Blau, S. (2019). The 1954 Excavation of Tombs at Tauchira and Euesperides, Libya. *Buried History*, 54, 19-34.

Murphy, B., Kennedy, B., Martin, C., Bugeja, L., Willoughby, M., & Ibrahim, J.E. (2019, June). Health and care related risk factors for suicide among nursing home residents: a data linkage study. *Suicide & Life-threatening Behavior*, 49(3), 695-706.

Neal, A., Carne, R., Odell, M., Ballek, D., D'Souza, W.J., & Cook, M.J. (2018, September 18). Characteristics of motor vehicle crashes associated with seizure: car crash semiology. *Neurology*, 91(12), e1102-e11.

Pena-Solorzano, C.A., Albrecht, D.W., Paganin, D.M., Harris, P.C., Hall, C.J., & Bassed, R.B., et al. (2019, April). Development of a simple numerical model for trabecular bone structures. *Medical Physics*, 46(4): 1766; doi: 10.1002/mp.13435.

Pena-Solorzano, C.A., Dimmock, M.R., Albrecht, D.W., Paganin, D.M., Bassed, R.B., & Klein, M., et al. (2018, November). Effect of external fixation rod coupling in computed tomography. *Strategies in Trauma and Limb Reconstruction* (Online), 13(3), 137-49.

Pham, T., Young, C., Woodford, N., Ranson, D., Young, C.M.F., & Ibrahim, J.E. (2019, May 19). Difference in the characteristics of mortality reports during a heatwave period: retrospective analysis comparing deaths during a heatwave in January 2014 with the same period a year earlier. *BMJ Open*, 9(5): e026118; doi: 10.1136/bmjopen-2018-026118.

Pope, J.D., Choy, K.W., Drummer, O.H., & Schneider, H.G. (2019, May 1). Harmala alkaloids identify ayahuasca intoxication in a urine drug screen. *Journal of Analytical Toxicology*, 43(4), e23-e7.

Pope, J.D., Drummer, O.H., & Schneider, H.G. (2018, August). The cocaine cutting agent levamisole is frequently detected in cocaine users. *Pathology*, 50(5), 536-9.

Pope, J.D., Drummer, O.H., & Schneider, H.G. (2018, December). Pirfenidone causes false-positive urine benzodiazepine results: implications for patients with pulmonary fibrosis. *The Journal of Heart and Lung Transplantation : the Official Publication of the International Society for Heart Transplantation*, 37(12), 1475-7.

Raju, H., Parsons, S., Thompson, T.N., Morgan, N., Zentner, D., & Trainer, A.H., et al. (2019, March 7). Insights into sudden cardiac death: exploring the potential relevance of non-diagnostic autopsy findings. *European Heart Journal*, 40(10), 831-8.

Ranson, D. (2018, December). The investigations into what happened at the Gosport War Memorial Hospital - did the Coroner's process help? *Journal of Law and Medicine*, 26(2), 306-10.

Ranson, D., & Ibrahim, J. (2018, October). Geriatric forensic medicine - a specialty that can no longer wait to be realised. *Journal of Law and Medicine*, 26(1), 39-43.

Rogers, J.E., Odell, M.S., & Schreiber, J.R. (2018, October). Sexual assault examination of the unconscious patient: a legal, ethical and professional grey-area for the forensic physician. *Journal of Law and Medicine*, 26(1), 265-73.

Rowbotham, S.K., Blau, S., Hislop-Jambrich, J., & Francis, V. (2018, July). Skeletal trauma resulting from fatal low (</=3 m) free falls: an analysis of fracture patterns and morphologies. *Journal of Forensic Sciences*, 63(4), 1010-20.

Rowbotham, S.K., Blau, S., Hislop-Jambrich, J., & Francis, V. (2019, March). An anthropological examination of the types of skeletal fractures resulting from fatal high (>3 m) free falls. *Journal of Forensic Sciences*, 64(2), 375-84.

Rowbotham, S.K., Blau, S., Hislop-Jambrich, J., & Francis, V. (2019, January). An Assessment of the Skeletal Fracture Patterns Resulting from Fatal High (>3 m) Free Falls. *Journal of Forensic Sciences*, 64(1), 58-68.

Santos, T., Lovell, J., Shiell, K., Johnson, M., & Ibrahim, J.E. (2018, September). The impact of cognitive impairment in dementia on self-care domains in diabetes: a systematic search and narrative review. *Diabetes/Metabolism Research and Reviews*, 34(6): e3013; doi: 10.1002/dmrr.3013.

Sarkar, R., Ozanne-Smith, J., & Bassed, R. Systematic review of the patterns of orofacial injuries in physically abused children and adolescents. *Trauma, Violence & Abuse*. Published online 2019, Mar 10; doi: 10.1177/1524838019827617.

Sawyer, S., Coles, J., Williams, A., & Williams, B. (2019, May). The psychometric properties of an intimate partner violence education outcome measure. *Nurse Education Today*, 76, 148-53.

Shelmerdine, S.C., Gerrard, C.Y., Rao, P., Lynch, M., Kroll, J., & Martin, D., et al. (2019, May). Joint European Society of Paediatric Radiology (ESPR) and International Society for Forensic Radiology and Imaging (ISFRI) guidelines: paediatric postmortem computed tomography imaging protocol. *Pediatric Radiology*, 49(5), 694-701.

Smith, D., Bugeja, L., Cunningham, N., & Ibrahim, J.E. (2018, November 3). A systematic review of sexual assaults in nursing homes. *The Gerontologist*, 58(6): e369-e83; doi: 10.1093/geront/gnx022.

Smith, D., Cunningham, N., Willoughby, M., Young, C., Odell, M., & Ibrahim, J., et al. (2019, February). The epidemiology of sexual assault of older female nursing home residents, in Victoria Australia, between 2000 and 2015. *Legal Medicine* (Tokyo, Japan), 36, 89-95.

Soon, A., Graham, J., & Bassed, R. (2019, August). Teaching of forensic odontology in basic dental programmes in nine Australian dental schools: a survey. *European Journal of Dental Education : Official Journal of the Association for Dental Education in Europe*, 23(3), 244-250.

E: Presentations

Stam, N.C., Gerostamoulos, D., Gerstner-Stevens, J., Scott, N., Smith, K., & Drummer, O.H., et al. (2018, September). Determining the effective dose of street-level heroin: a new way to consider fluctuations in heroin purity, mass and potential contribution to overdose. *Forensic Science International*, 290, 219-26.

Stam, N.C., Gerostamoulos, D., Pilgrim, J.L., Smith, K., Moran, L., & Parsons, S., et al. (2019, March). An analysis of issues in the classification and reporting of heroin-related deaths. *Addiction (Abingdon, England)*, 114(3), 504-12.

Stam, N.C., Gerostamoulos, D., Smith, K., Pilgrim, J.L., & Drummer, O.H. (2019, May). Challenges with take-home naloxone in reducing heroin mortality: a review of fatal heroin overdose cases in Victoria, Australia. *Clinical toxicology* (Philadelphia, Pa), 57(5), 325-30.

Sutherland, T., Parsons, S., Cordner, S., & O'Donnell, C. (2019, June). Tension pneumopericardium following blunt chest trauma. *Journal of Medical Imaging and Radiation Oncology*, 63(3), 358-9.

Sutherland, T.R., Lynch, M.J., & O'Donnell, C. (2019, June). Post-mortem CT features of fulminant fatal fat embolisation associated with prosthetic femoral neck replacement. *Journal of Medical Imaging and Radiation Oncology*, 63(3), 353-4.

Woolford, M.H., Bugeja, L., Weller, C., Boag, J., Willoughby, M., & Ibrahim, J.E. Recommendations for the prevention of deaths among nursing home residents with unexplained absences. *International Journal of Older People Nursing*. Published online 2019, May 7; doi: 10.1111/opn.12237.

Woolford, M.H., Bugeja, L., Weller, C., Johnson, M., Chong, D., & Ibrahim, J.E. (2018, August). Unexplained absence resulting in deaths of nursing home residents in Australia: a 13-year retrospective study. *International Journal of Geriatric Psychiatry*, 33(8), 1082-9.

Zaman, H., Sampson, S., Beck, A., Sharma, T., Clay, F., & Spyridi, S, et al. (2018). Benzodiazepines for psychosis-induced aggression or agitation. *Schizophrenia Bulletin*, 44(5), 966-9.

Zark, L., Hammond, S.M., Williams, A., & Pilgrim, J.L. Family violence in Victoria, Australia: a retrospective case-control study of forensic medical casework. *International Journal of Legal Medicine*. Published online 2019, Jan 25; doi: 10.1007/s00414-019-02000-9.

Books and Book Chapters

Blau, S. In press. The anthropology of aging. In K. Collins & R. Byard (Eds.), *Geriatric Forensic Medicine and Pathology*. Cambridge University Press.

Blau, S. In press. Forensic human identification: an Australian perspective. In R.C. Parra., S.C. Zapico & D.H. Ubelaker (Eds.), *Humanitarian Forensic Science: Interacting with the Dead and the Living*. Wiley and Sons.

Blau, S. In press. Our resilient bodies: the role of forensic science and medicine in restoring the disappeared to history. In J. Heath & J. Zahedi (Eds.), *Book of the Disappeared: The Transnational Quest for Justice*.

Blau, S. In press. Working for the living and the dead: challenges associated with personal identification from skeletal remains in Timor-Leste. In L. Kent, L & R.G. Feijo (Eds.), *The Dead as Heroes, Ancestors and Martyrs in Independent Timor-Leste*. Amsterdam University Press.

Blau, S., & Ranson, D. In press. Body in the barrel: complex body disposal. In H. Garvin-Elling & N. Langley (Eds.), *Case Studies in Forensic Anthropology*. CRC Press.

Blau, S., Ranson, D., & O'Donnell, C. (2018) *An Atlas of Skeletal Trauma in Medico-Legal Contexts*. London: Elsevier.

Blau, S. (2018) Theoretically interesting: different perspectives of the application of theory to forensic anthropology practice and research. In D. Boyd & C Boyd (Eds.), *Forensic Anthropology: Theoretical Framework and Scientific Basis*. Hoboken, N.J: Wiley.

Drummer, O. H. (2019). Mass Spectrometry | Forensic Applications. In P. Worsfold., C. Poole., A, Townshend & M. Miró (Eds.), *Encyclopaedia of Analytical Science*, 3rd ed., vol. 6, (pp 351–357). Amsterdam: Elsevier.

Rowbotham, S.K., & Blau, S. In press. The application of medical imaging to the anthropological estimation of sex. In A. Klaes (Ed.), *Sex Estimation of the Human Skeleton: History, Methods, and Emerging Techniques*. Elsevier.

Schreiber, J et al. (2019). Guide for Clinicians Working with Interpreters in Healthcare Settings January 2019, *Migrant & Refugee Women's Health Partnership*.

Wallman, J., & Archer, M. In press. The application of insects to the estimation of the time since death. In J. Hayman & M. Oxenham (Eds.), *Human Body Decomposition*. 2nd ed. Academic Press.

Bassed, R. (2018, December). *The VIFM and Monash Department of Forensic Medicine – an overview*. Department of Health and Human Services, Melbourne.

Bassed, R. (2018, July). *Medico-Legal Death Investigations at the VIFM*. Dixon Law Chambers Bar Readers Course, Melbourne.

Bassed, R. (2018, October). Dental Anatomy: Clinical/Forensic/Research. Melbourne University, Melbourne.

Bassed, R. (2019, June). *Identification Structure at VIFM and Forensic Odontology with Reference to the Black Saturday Bushfire Disaster*. ICRC Short course VIFM.

Bassed, R. (2019, February). *Forensic Odontology – DVI and Black Saturday – possibilities for facial recognition of the deceased using machine learning*. NEC offices, Docklands.

Bassed, R. (2019, February). *Machine Learning: Applications for Forensic Medicine and odontology*. Pathology Update, Melbourne Convention Centre.

Bassed, R. (2019, January). *The VIFM and Department of Forensic Medicine – Education and career opportunities*. Monash University Post Grad Expo, Clayton.

Bassed, R. (2019, Match). *Academic Programs and DFM activities: Practical Applications for Forensic Medicine*. VIFM Lecture Theatre, Melbourne.

Blau, S. (2019, June). *Identifying systems and communication gaps: attempts to improve the investigation of long-term missing persons and unidentified human remains*. Forensic Data Management, Improving Forensic Human Identification through Implementation of Simple Systems. International Committee of the Red Cross (ICRC) Conference. Bangkok, Thailand.

Blau, S. (2019, June). *Collecting ante-mortem data; forensic significance of evidence; locating mass graves*. Workshop presentations provided to the Office on Missing Persons, Colombo, Sri Lanka, South Asian Centre for Legal Studies.

Blau, S. (2019, May). *More than just bones: Insights into the practice of forensic anthropology*. Invited speaker, New Zealand Society of Forensic Odontology. Wellington, New Zealand.

Cunningham, N. (2019, February 22). Safe working hours. Pathology Update, Melbourne.

Cunningham, N. (2019, March 7). *Learning from coroners' cases*. ACEM Patient Safety Workshop, Melbourne.

Cunningham, N., Moller. M., Parkin, J.A., & Morrissey, B. (2019, March 25). *Forensics in critical care*. Workshop, SMACC, Sydney.

Dickie, S. (2019, March 20). *Tissue Donation at DTBV*. Lions Eye Donation Service. Melbourne.

Dickie, S. (2019, May 16). *Tissue Donation at DTBV*. DonateLife Victoria, Melbourne.

Drummer, O. (2018, October). *Post-mortem Toxicology (alcohol and post-mortem interpretation)*. RCPA Foundation of The Royal College of Pathologists of Australasia Workshop. Sydney.

Drummer, O. (2018, November 13-16). Invited lecture on Asia Pacific Coroners conference on Multiple Drug Overdosing in Coronial Deaths. Canberra.

Drummer, O. (2019, May 22-25). Invited keynote presentation to Symposium on Forensic Theory and Practice on Postmortem drug changes and artefacts: factors affecting toxicological interpretation. Shanghai, China.

Drummer, O. (2019, June 16-19). Cannabis as a cause of death: keynote at Forensic and Clinical Toxicology Association of Australasia (FACTA). Adelaide.

Grzebieta, R. (2018, November 23). *Incident Investigation, Reconstruction and Injury Causation Analysis*. Presentation, Monash School of Public Health and Preventive Medicine Summer Vacation Program Site Visit, Melbourne.

Grzebieta, R. (2019, May 13-14). *Forensic Incident/Accident Investigation, Analysis & Reconstruction*. Sydney Marcus Evans two day course. Sydney, NSW.

Grzebieta, R. (2019, June 26). *Quad Bike Safety Round Table, Engineering Controls: Quad Bike Research Work in Australia*. Presentation via ZOOM, ISASH 2019 - International Society for Agricultural Safety & Health Conference. Des Moines, USA.

Iles, L. (2019, August 25). *EDS IV: getting the genetic genie back into the bottle*. RCPA Forensic Interim meeting, Darwin.

Iles, L. (2019, June 9). *Sudden death in achondroplasia; and unexpected skeletal muscle pathology: the value of following minimum sampling protocols*. 4th Annual Meeting in Forensic and Paediatric Pathology, Atlanta, USA.

Iles, L. (2019, May 13). *VIFM and forensic pathology practice*. Victorian Legal Aid, Melbourne.

Iles, L. (2019, February 22). *Neurosurgical Interventions*. RCPA Pathology Update, Melbourne.

Iles, L. (2018, October 16). *The Utility of Post Mortem CT Angiography in Forensic Practice*. NAME Annual meeting, West Palm Beach, USA.

Iles, L. (2018, September 26). *CT in post mortem neuropathology practice*. ICN 2018, Tokyo, Japan.

Moller, M. (2019, February 20). *Prevention of sexual exploitation and abuse in the aid sector*. Australasian Aid Conference, Canberra.

Moller, M. (2019, February 22). *Preventing sexual misconduct in the international aid sector*. RCPA Path Update, Melbourne.

O'Hehir, A. (2018, October). *Forensics Management in ED*. Post Graduate Nursing, Monash University, Melbourne.

O'Hehir, A. (2018, November). *Drug Facilitated Sexual Assault*. Party Drugs Conference, Melbourne.

O'Hehir, A. (2019, February). *Care of the Forensic Patient*. Post Graduate Paramedics. Federation University, Ballarat.

O'Hehir, A. (2019, February). *Forensics & Family Violence*. Post Graduate Maternal Child Health Nurses. RMIT, Bundoora.

O'Hehir, A. (2019, April). *When Domestic Violence is Lurking*. Midwifery Challenges Conference, Melbourne.

O'Hehir, A. (2019, May). *Forensics & Consent*. Masters of Advanced Nursing Program, Monash University.

O'Hehir, A. (2019, June). *Forensics*. Disaster Nursing Conference, Melbourne.

Poniatowski, S. (2019, April 26). *Donor Tissue Bank of Victoria*. The Alfred Hospital - Organ and Tissue Donation Study Day, Melbourne.

Rowbotham, S.K. (2018). *An anthropological analysis of the skull fractures resulting from fatal falls*. Podium, 6th FACE Symposium. Cape Town, South Africa.

Rowbotham, S.K. (2018). *The use of post-mortem CT to assess skeletal trauma in fatal falls*. Invited Podium, The 28th Annual Scientific Meeting of the Australian and New Zealand Bone and Mineral Society. Queenstown, New Zealand.

Rowbotham, S.K. (2018). *Forensic anthropology Down Under*. Institute of Archaeology, University College, London, United Kingdom.

Rowbotham, S.K. (2018). *Forensic anthropology in the Australian medico-legal system*. Department of Forensic Medicine, University of Pretoria. Pretoria, South Africa.

Rowbotham, S.K. (2019). *Forensic anthropology*. Crime Scene Officers, Victoria Police.

Rowbotham, S.K. (2019). *Forensic anthropology*. Detective Training School, Victoria Police.

Rowbotham, S.K. (2019). *Human identification*. Medicine, Monash University.

Rowbotham, S.K. (2019). *Forensic anthropology*. Elements of Forensic Odontology, Monash University.

Rowbotham, S.K. (2018). *The analysis of human remains in forensic science*. Introduction to Forensic Science, Swinburne University.

Sarkar, R. (2018, November 20-21). *Orofacial injuries in physical child abuse*. International Domestic Violence and Health Conference 2018, Melbourne.

Schreiber, J. (2019, June 24). Presentation of journal article, Isa et al: *Experimental investigation of cranial fracture initiation in blunt human head impacts*, Forensic Science International 300 (2019): pages 51–62. Journal Club, Melbourne.

Sammut, S. (2018, July 12). *Uploading and storing of digital images via VIFM's iCMS software*. AANZPA NIFS EESAG meeting, Tasmania.

Wells, D. (2019, June 17). *Insight into Trauma*. Judicial College of Victoria, Melbourne.

Joint Presentations

Brehauer, K., Rowbotham, S.K., & Durdle, A. (2018). *Recording completeness of fragmentary skeletal remains*. Poster. Australian and New Zealand Forensic Science Society 24th International Symposium. Perth, Western Australia.

Blau, S., & Leditschke, J. (2018, November). *Management of the dead at the scene following disasters*. Workshop on the management of dead bodies following disasters for the Philippines National Police, Manila, Philippines.

Blau, S., Rowbotham, S., & Wright, R. (2018, September). *Investigating the relationship between linear skull fractures and fatal falls: an analysis of blunt force trauma using post mortem computed tomography*. Podium, Australian and New Zealand Forensic Society (ANZFSS) 24th International Symposium on the Forensic Sciences. Perth, Western Australia.

Blau, S., & Rowbotham, S.K. (2019). *Forensic anthropology down under: reflections on the development and practice of forensic anthropology in Australia*. Invited Podium, 71st Annual Scientific Meeting of the American Academy of Forensic Sciences. Baltimore, Maryland. USA.

Byrne, K., & Morgan, N. (2018 September 9-13). Presented by K Byrne. *The Contribution of Forensic Photography to the Family Health Information Program*. ANZFSS 2018 International Symposium, Perth.

Cunningham, C., Moller, M., & Parkin, J. (2019, March 25). *Forensics in Critical Care*. Smacc (social media and critical care) Conference, Sydney.

Grzebieta, R., Gaffney, T., & Rechnitzer, G. (2019, May 13-14). *Forensic Incident, Accident Investigation and Reconstruction*. Two-day course, Marcus Evans Professional Training. Novotel, Sydney Central.

Hamilton, K., & Bartolo, C. (2019, February 13). *Tissue Donation and the Donor Tissue Bank of Victoria*. Australian Orthopaedic Nurses, Victorian Branch meeting.

Ibrahim, J., & Cunningham, N. (2018, November 13). *Lessons from the Coroners Court a - 10 year Overview*. 23rd Australian & New Zealand Prevocational Medical Education Forum (ANZPMEF), Melbourne.

Krishnan, S.R., Bugeja, L., & Ibrahim, J. (2019, April 9-10). *Characteristics, comorbid conditions and legal outcomes among older violent offenders with dementia*. Justice Health Conference 2019. International Convention Centre, Sydney.

Morey, S., Gerostamoulos, D., Dodd, M., Crump, K., & Glowacki, L. (2019, June 17). *The Importance of toxicology in death investigations*. FACTA Conference, Adelaide.

Rowbotham, S.K., Blau, S., & Hislop-Jambrich, J. (2018). *The skeletal fracture patterns resulting from fata high (>3m) free falls*. Podium, Australian and New Zealand Forensic Science Society 24th International Symposium. Perth, Western Australia.

F: Staff by Department

as at 30th June 2019

Senior Executive and Support

NOEL WOODFORD - MBBS LLM DMJ(Path) FRCPA FRCPath

Director

MARI-ANN SCOTT - BEcon(Hons) MPhil MAICD

Chief Operating Officer

DAVID RANSON - BMedSc BM BS LLB FRCPath FRCPA FACLM FFFLM FFCFM DMJ(Path)

Deputy Director, Forensic Services (also Master of Forensic Medicine Unit Coordinator)

RICHARD BASSED - BDS DipForOdont PhD FFOMP(RCPA)

Deputy Director, Academic Programs, Adjunct Clinical Professor, Senior Forensic Odontologist

FIONA LAWRENCE

Executive Administration Officer

Forensic Services

The Forensic Services Division is led by Deputy Director David Ranson.

Management Team

DIMITRI GEROSTAMOULOS - BSc(Hons) PhD FFSc(RCPA)

Head, Forensic Sciences (also Master of Forensic Medicine Unit Coordinator)

LINDA ILES - BMSc MBBS(Hons) FRCPA DMJ(Path)

Head, Forensic Pathology

MORRIS ODELL - BE MBBS FRACGP DMJ(Clin) FFFLM FFCFM(RCPA) Dip Med Tox

Head, Clinical Forensic Medicine

DAVID CAUCHI - BSc

Manager, Histology

LINDA GLOWACKI - BAppSc(Hons) PhD MRACI CChem

Manager, Toxicology

DADNA HARTMAN - BSc(Hons) PhD GCertPubSecMgmt FFSc(RCPA)

Manager, Molecular Biology

JODIE LEDITSCHKE - PhD FFSc(RCPA)

Manager, Forensic Technical Services and CAE

JEFF LOMAS - BAJ GradDipSocSc(Gestalt Therapy)

Business Operations Manager, Forensic Services

BARBARA THORNE - BA GradDipCrim

Senior Policy Advisor, Forensic Services

Operations

MELANIE ARCHER - BSc(Hons) PhD MBBS FRCPA

Consultant Forensic Pathologist

YELIENA BABER - MBBS MRC SEd FRCPath

Consultant Forensic Pathologist

MELISSA BAKER - MBBS(Hons) FRCPA

Consultant Forensic Pathologist

PAUL BEDFORD - MBBS FRCPA DipForensPath

Consultant Forensic Pathologist

HEINRICH BOUWER - MBChB FRCPA

Consultant Forensic Pathologist

MICHAEL BURKE - MBBS BSc FRCPA DipForensPath

MALCOLM DODD - MBBS FRCPA DMJ(Path) AssocDipMLT FFFLM(RCP-UK) FACBS MACLM GradCertHealth Prof Ed

VICTORIA FRANCIS - MBBS MSc BA(Hons) FRCPA

JOANNA GLENGARRY - MBChB(Dist) FRCPA DipForensPath

MATTHEW LYNCH - MBBS LLB(Hons) FRCPA DipForens Path DMJ(Path)

SARAH PARSONS - BMedSc(Hons) MBBS(Hons) FRCPA

GREG YOUNG - MBChB BHB FRCPA

CHRISTOPHER O'DONNELL - MBBS MMed GDipForMed FRANZCR

KAREN BYRNE - BAppSc(Photo)(Hons)

STEPHEN SAMMUT

NATALIE MORGAN - RN

MELANIE HALLORAN - RN BN

BIANCA SZYMANSKI - RN BN

JEREMY GRAHAM - LDS BDS Sc DipForOdont MPhil GradCertHighEd FFOMP(RCPA) FICD

LYNDALL SMYTHE - BDS DipForOdont

SOREN BLAU - BA(Hons) MSc PhD FFSc(RCPA)

SAMANTHA ROWBOTHAM - MArchSc(Res) PhD

JEFF VASQUEZ - RN BN Sc GradCertNur(EmergC) GradCertHS MN

ELISE DOHERTY - RN BN GradCertNg(CritCare)

DENNIS ESPINOSA - BSc(Nursing) RN CCNC DipLead&Mgt

REBECCA ADOLPH - RN BN GradCertNg(CritCare)

TERESA LIMOND - RN BN CCRN

ESTHER MCMILLAN-DRENDEL - RN

ALLY O'DELL - RN BN

KRISTEN ROBINSON - RN

YUEN FUNG - RN BN GradCertNg(CritCare)

SHAREE SCOTT - RN BN GradCertNg(CritCare)

ALICE WICKETT - RN BN GradDipNg(CritCare)

FOTEINI ROZAKEAS - MSc(Allergy) BScAPP(Nurs) BNat DipCouns DipHlthSc(Nurs)

DEBBIE BROADHURST

GEMMA CARTER - BSc(Hons) PhD

MELROY PEREIRA - BSW(SocWk) MSc

JILL RUSSELL

MEGAN OSBORNE - BSc(ForSc) CertMortPrac CertLead&Mgt

Consultant Forensic Pathologist

Consultant Forensic Pathologist

Consultant Forensic Pathologist

Consultant Forensic Pathologist

Consultant Forensic Pathologist

Consultant Forensic Pathologist

Consultant Forensic Pathologist

Consultant Forensic Radiologist

Specialist Forensic Photographer

Specialist Forensic Photographer

Family Health and Genetic Nurse Specialist

Family Health Nurse

Family Health Nurse

Consultant Forensic Odontologist (also Master of Forensic Medicine Unit Coordinator)

Consultant Forensic Odontologist (also Master of Forensic Medicine Unit Coordinator)

Senior Forensic Anthropologist (also Master of Forensic Medicine Unit Coordinator)

Forensic Anthropologist - Casework and Research

Assistant Manager, Coronial Admissions and Enquires

Medical Liaison Nurse

Medical Liaison Nurse

Medical Liaison Nurse

Medical Liaison Nurse

Medical Liaison Nurse

Medical Liaison Nurse

Medical Liaison Nurse

Medical Liaison Nurse

Medical Liaison Nurse

Medical Liaison Nurse

Medical Liaison Nurse

Medical Liaison Nurse

Medical Liaison Nurse

Medical Liaison Nurse

Medical Liaison Nurse

Medical Liaison Nurse

Medical Liaison Nurse

Research Nurse

Medico-Legal Executive Assistant

Medico-Legal Executive Assistant

Medico-Legal Executive Assistant

Medico-Legal Executive Assistant

Assistant Manager, Forensic Technical Services

HELEN MESSINIS

CATHERINE VINCENT - BAppSc(MIT)

SUZANNE BAUER

KEITH BRETHERTON

EVAN LECKENBY - BAppSc(MedSc)

JENNAH ORCHARD - BBiolSc CertIII(Path)

OLIVIA WHELAN - BForensicSci BCCJ

PRUE ARMSTRONG - BSc MSc(Hons)

CHARLOTTE BACSA - BSc BEmergHealth(Pmed)

PETER BURY - Dip MedLabSc DipPhoto

KARA CATTELL

CHLOE CLARINGBOLD - BForensicSc

ELISA COCCIARDI - BBiomedSc(LabMed)

WADE CORDEROY - BSc(Hons) GradDipEd(Sec) GDipForSci

JOANNA COTSONIS - BA/BMus

EMMA COWLEY - BSc

JASON EGAN - CertFunServ(Embalm)

KIRBY LAW - BForensicSci

DAVID LAWSON - BAppSc(Bio/Biotech)

TIMOTHY MALPASS

LORETTA PATTLE - BBiomedSc(LabMed)

DANIELLE STEVENS - CertMortPrac

ALISON STEVENSON - BForensicBiotech

MARY MICALLEF

CAROLINE BOLT - MBChB FACEM

NICOLA CUNNINGHAM - BMed MForensMed FACEM FFCFM(RCPA)

SANJEEV GAYA - MBBS DMJ(Clin) MFFLM MForensMed FFCFM(RCPA)

RACHEL MARR - MBBS(Hons) FRACGP

MAAIKE MOLLER - MBChB BSc(Hons) MForenMed MSc MRCOG DTM&H DMCC FFCFM(RCPA) AFRACMA

JO ANN PARKIN - BEd BAppSc(Hons) MBBS MForensMed FFCFM(RCPA)

JASON SCHREIBER - German Medical State Exam(AMC Certified) MForenMed MFFLM DipFLM FFCFM(RCPA)

ANGELA SUNGAILA - MBBS MForensMed JD GDLP FFCFM(RCPA)

ANGELA WILLIAMS - MBBS MForensMed GradDipLaw FFFLM(UK) GAICD MBA FFCFM(RCPA) MPH/MHM

JANINE ROWSE - MBBS PGDipPH FRACGP

Senior Quality Improvement Officer

Forensic Radiographer

Senior Forensic Technical Officer

Senior Forensic Technical Officer

Senior Forensic Technical Officer

Senior Forensic Technical Officer

Senior Forensic Technical Officer

Forensic Technical Officer

Forensic Technical Officer

Forensic Technical Officer

Forensic Technical Officer

Forensic Technical Officer

Forensic Technical Officer

Forensic Technical Officer

Forensic Technical Officer

Forensic Technical Officer

Forensic Technical Officer

Cleaner (Mortuary)

Consultant Forensic Physician, CFM

Consultant Forensic Physician, CFM

Consultant Forensic Physician, CFM (also Master of Forensic Medicine Unit Coordinator)

Consultant Forensic Physician, CFM

Consultant Forensic Physician, CFM

Consultant Forensic Physician, CFM (also Master of Forensic Medicine Unit Coordinator)

Consultant Forensic Physician, CFM

Consultant Forensic Physician, CFM

Consultant Forensic Physician, CFM

Consultant Forensic Physician, CFM

Senior Forensic Medical Registrar, CFM

THOMAS ENGLISH - *MBBS LLB BCom*

SUPRIYA RAMA KRISHNAN - *MBBS*

SEAN RUNACRES - *MBBS BBS BSc ACCAM DipAmbParaStudies*

THOMAS WOOD - *MBCbB*

ADELE O'HEHIR - *RN BEd PGCert(Forensics) PGCert(Critical Care) PGCert(Emerg)*

ALISON MONAGHAN - *BCCJ DipJus*

NADIA AMBRUOSI

DIANNE ANSELL

GABRIELLE CONNERS

ELIZABETH DALY

SARABJEET DEV - *BSc (PCM)*

CAITLIN HALEY - *BCrim*

NOELLE LARGE

KAREN POINTU - *BA*

CLAIRE RIDGWAY

GAIE RUSSELL

JOANNE HANNA - *BAppSc*

ROBERT COYLE - *DipLabTech*

MICHAEL PAIS - *BAppSc*

NGOC TRUONG TRAN - *BBiomedSc(LabMed)*

APRIL STOCK - *BSc(Hons)*

LINDA BENTON - *BSc*

ZOE BOWMAN - *BAppSc(LabMed)*

ASHIL DAWAWALA - *BSc GradDip(BioTech) GradDip(MedLabSc)*

ANDREW COVENTRY - *BScAdv(Hons)*

MICHELLE SPIDEN - *MSc BSc/BA*

KAITLYN HART - *BA/BSc(Hons)*

KERRYN CRUMP - *DipAppSc BAppSc MSc*

ELIZABETH JENKINS - *BSc(Hons) MSc MIBMS*

OLAF DRUMMER - *Dr.h.c.(Antwerp) FFSC FRCPA FACBS CChem PhD(Med) BAppSc(Chem)*

JENNIFER SCHUMANN - *BSc(Hons) PhD*

MARK CHU - *BSc(Hons) PhD*

NATALIA GEORGE - *BAppSc MBA*

MELYNDA HARGREAVES - *BAppSc*

Forensic Medical Registrar, CFM

Forensic Medical Registrar, CFM

Forensic Medical Registrar, CFM

Forensic Medical Registrar, CFM

Forensic Nurse Network Coordinator

Assistant Manager, Forensic Services Support

Client Services Officer

Administrative Coordinator

Client Services Officer

Administrative Assistant

Senior Forensic Stenography and Records Officer

Client Services Officer

Forensic Stenography and Records Officer

Client Services Officer

Client Services Officer

Senior Receptionist

Senior Scientist, Histology

Scientist, Histology

Scientist, Histology

Technical Officer, Histopathology / Toxicology

Senior Scientist, Molecular Biology

Scientist, Molecular Biology

Scientist, Molecular Biology

Scientist, Molecular Biology

Scientist, Molecular Biology

Scientist, Molecular Biology

Research Assistant, Molecular Biology

Assistant Manager, Toxicology

Assistant Manager, Toxicology

Forensic Toxicology Consultant Specialist

Senior Research Fellow, Toxicology

Senior Scientist, Toxicology

Senior Scientist, Toxicology

Senior Scientist, Toxicology

ALEXANDER KOTSOS - *BSc MSc*

VICTORIA MCCOMBE - *BSc(Hons)*

MARIA PRICONE - *BSc(Hons)*

VOULA STAIKOS - *BAppSc*

KATHERINE WONG - *BSc(Hons)*

LACHLAN ARENTZ - *BSc(Hons)*

JARED CASTLE - *BA/BSc*

MATTHEW DI RAGO - *BAppSc*

RANJEETA DHUMMAD - *BForensicBiotech DipMedLabTech*

JESSICA FERNANDEZ - *BSc(Hons)*

ELIZABETH GOULD-WILLIAMS - *BSc*

SAMANTHA JOUBERT - *BSc BForensics*

IRENE KANTZIDIS - *BAppSc*

MONTANNA LEVEQUE - *BPharmSc(Hons)*

DYLAN MANTINIEKS - *BBiomedSc(PharmSc)(Hons)*

LOREDANA MONFORTE - *BBiomedSc*

SARAH MOREY - *MForSt ForSc BMPharBio(Hons) BBiomedChem*

LAURA MUNFORTE - *BSc(Hons) GradDipLabMed*

SARAH NASMARK - *BSc(Hons)*

MELISSA PEKA - *BSc*

LILLIAN ROBERTS - *BSc(Hons)*

STEVEN STEFANOVSKI - *BSc(Hons)*

JOSEPHINE TRUONG - *BSc(Hons)*

THAM VU - *BSc(Hons)*

STEPHANIE WALLACE - *BForensicSc*

GRACE WANG - *BSc*

SOPHIE WIDDOP

ROWENA ZAMMIT - *BSc*

PRIYA BOSE - *BSc MSc*

CHARALAMBIA DEMETRIOU - *BA/BSc*

HANNAH DOUBLE - *BSc*

CATHLEEN JAN - *BSc*

SIMONA JUZMESKA - *BForensicSc/BCrim*

JAMIE MACKENZIE - *BSc*

Senior Scientist, Toxicology

Senior Scientist, Toxicology

Senior Scientist, Toxicology

Senior Scientist, Toxicology

Senior Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Scientist, Toxicology

Technical Officer, Toxicology

Technical Officer, Toxicology

Technical Officer, Toxicology

Technical Officer, Toxicology

Technical Officer, Toxicology

Technical Officer, Toxicology

Technical Officer, Toxicology

JACOB O'DONOGHUE - *BSc*

Technical Officer, Toxicology

LILY TUONG - *BPharmSc(Hons)*

Technical Officer, Toxicology

Academic Programs

The Academic Programs Division is led by Deputy Director Richard Bassed. Professor Noel Woodford is the Chair of Forensic Medicine.

STEPHEN CORDNER - *AM MA MBBS BMedSc Dip Crim DMJ(Path) FRCPATH FRCPA*

Head, International Programs (also Consultant Forensic Pathologist)

ELIZABETH MANNING - *BA(Hons) PhD(SocSc)*

Manager, National and International Programs

DAVID WELLS - *OAM MA MBBS DMJ GradCertHigherEd DipRACOG FRACGP FFCFM(RCPA)*

Senior Education Coordinator / Clinical Forensic Medicine Consultant

JENNIFER RYAN - *BA MCrim*

Manager, Department of Forensic Medicine

TIMOTHY MONTGOMERY - *BCreativeArts*

Postgraduate Administration Officer

SARAH TRAVERS - *BA(Hons) CertTrain&Dev*

Administration Officer

JO-ANNE MAZZEO - *BA LLB*

Co-Convenor - Medical Law Tutorial Program

KATHRYN EASTWOOD - *PhD BSc BN DipAmbParaStudies BParamedicStudies GradDipEmerHlth(MP) MEmergHealth(Pmed) GradCertHigherEd*

Research Fellow

GEORGIA AITKEN - *BBiomedSc*

Research Assistant

EMMA WARD

Research Assistant

ALICE HOLMES

Research Assistant

DUK HUY (TONY) PHAM - *BBioMedSc MBBS(cand.)*

Research Assistant

ALASTAIR ROSS - *MAppSc BAppSc GradDipBA*

Forensic Medicine Unit Coordinator Graduate and Undergraduate

Donor Tissue Bank of Victoria

STEFAN PONIATOWSKI - *BSc(Hons) MIBMS*

Head, Donor Tissue Bank of Victoria

CHARMAIN ANDERSON - *BA*

Administration Officer

CAROLE SPENCE

Administration Officer

SUSAN DICKIE - *BN*

Nurse Manager

BEN STEWART - *BSc*

Production Manager

KELLIE HAMILTON - *BSc(Hons)*

Senior Scientist

KIMBERLY CONWAY - *BHlthSc(Paramedic)*

Scientist

KATY SADLER - *MSc*

Scientist

SARAH COOPER - *BSc*

Technician

LARA HEDDLES - *BSc*

Technician

BRADLEY NEYMAN

Technician

DUYEN MINH BUI - *BSc*

Assistant

ELENA WEDGEWOOD - *BSc*

Assistant

TYRA REES - *BSc(Hons)*

Senior Microbiologist

MICHAEL GREEN - *BSc*

Microbiologist

HELEN ZISIS - *BAppSc(MedLab) GCertHumNutr*

Microbiologist

CHANTEL BARTOLO - *BN PGCertN(ICU)*

Tissue Donation Nurse Specialist

SAMANTHA FRANCIS-PESTER - *RN GCertCR*

Tissue Donation Nurse Specialist

GEORGINA LADEMANN - *BNSc BAppSc(HumMvmt)*

Tissue Donation Nurse Specialist

JANINE SHIELDS - *MN(CritC) BSc(Nursing)*

Tissue Donation Nurse Specialist

Corporate Services and Development

The Corporate Services and Development Division is led by Chief Operating Officer Mari-Ann Scott.

Management Team

FRANCES ADAMAS - *BSc(Hons) MBiotechBus*

Manager, Quality and Improvement

MARGARET CRADDOCK

Coronial Services Relationship and Compliance Manager

PETER FORD - *FCCA*

Chief Finance Officer

MURRAY HALL - *BAppSc BEng GradDipBA*

Chief Information Officer

FIONA LEAHY - *LLB(Hons) BA*

Manager, Legal and Governance

RICHARD PROKOP - *BBA*

Manager, Human Resources and Organisational Development

Corporate Staff

STEPHEN ANSELL - *FCCA*

Management Accountant

JIM COSENTINO

Facilities Manager

EMILY DELVES - *CertAcc*

Finance and Supplies Officer

DEAN KRENSKE - *BBus*

Facilities Coordinator

XIANG (ADAM) LI

Purchasing and Supplies Officer

LAUREN MURTON - *BA/BCom DipModLang CPA*

Financial Accountant

MARGARET STOLKE

Finance Officer

ALAN WILSON - *BBus(Acc) CPA*

CAROLYNNE VAN DER CINGEL - *BA*

HELEN MCKELVIE - *BA LLB MMgIL(OD)*

REBECCA FLEET - *BA(Hons) GDipER&HRM*

MARINA GEORGE - *BBA(HRM)*

LISA OMER

EMILY HALL - *BSc MFCSc MBA(Exec) CertTAA CertWHS*

RASIKA AMARASIRI - *PhD MSc BSc(Hons)*

JARROD BOXALL - *DipInfoTech*

SUBHANGI CHAKRAVARTY - *BIT CertTAA*

EMILIANNE CONTATORE

AKASH CHEEMA - *BTech MTelecNetEng*

WEI SIN (PHILIP) CHENG - *BSc(CompSc)*

LAKSHAN DE RUN - *DipCS BIS*

PETER EDBROOKE - *BAppSc(CompSc)*

SANDUN EKANAYAKE - *MIT BSc(CompSc)*

CHARLIE FORD - *CertIT(Net)*

ALEXANDER GILLARD - *BA MM*

STEPHEN GOODWIN - *GradDipMan CertProjMgt*

DAVID GUNDERSEN - *BSc(CompSc)/BCA*

VIKAS HOLKAR - *BE(CompSc) MSE*

GEETHA LAKSHMY - *MCA BSc(CompSc)*

THOMAS MUNRO - *MInfTechProjMgt*

BIAO (RAY) SHI - *BE GDipSci*

DAVID ORCHARD - *BSc(Biomedical)*

RON ROSE - *BAppSc*

SOUMELA HOROMIDIS - *BSc*

ROBYN JUGUETA - *BSc AssDipAppSc(Lab Tech)*

TRAM LAM - *BSc(AppSc)*

HELEN MAKRAKIS - *BAppSc(MedLab) DipHealth DipOH&S*

NIKI TAXIDIS - *BAppSc(MLS)*

Finance Manager

Policy Officer, Board and Committee Secretariat

Senior Legal Counsel and Internal Consultant

Senior Human Resources Consultant

Human Resources/Payroll Consultant

Human Resources/Payroll Consultant

OHS Advisor and Coordinator (also Senior Forensic Technical Officer)

Data Analyst

Operations Manager, ICT

Senior Business Analyst

ICT Service Delivery Coordinator

Service Desk Officer

Service Desk Officer

IT Security Analyst and Oracle Systems Administrator

Solution Architect

Senior Java Developer

Service Desk Officer

Digital Media and Communications Project Officer

Programme Manager

Software Development Manager

Senior Java Developer

ICT Test Lead

Information Manager

Senior Java Developer

Network Administrator and Service Desk Team Leader

Windows and Desktop Administrator

Quality and System Improvement Officer

Quality and System Improvement Officer

Quality and System Improvement Officer

Quality Support Officer

Lead Quality and System Improvement Officer

Clinical Forensic Practitioners providing CFM Services across Victoria

The VIFM employs practitioners to provide clinical forensic services across metropolitan and regional Victoria, including Forensic Physicians, and Forensic Nurse Examiners, who respond to both victims and offenders of physical and sexual assault, conduct forensic medical examinations and provide medico legal reports for Police, and Forensic Nurses who provide an after-hours Biological Sample Collection service, which includes blood/and or urine collection from suspected intoxicated drivers and other biological samples as required for medico-legal purposes.



VIFM Annual Report Team

» Sponsor

Mari-Ann Scott

» Coordinators

Fiona Leahy

Carolynne van der Cingel

» Contributors

VIFM Staff

» Photography

John Lloyd Fillingham

Karen Byrne

Peter Bury

Stephen Sammut

Claudio Oyarce, Plug2Studio

» Design

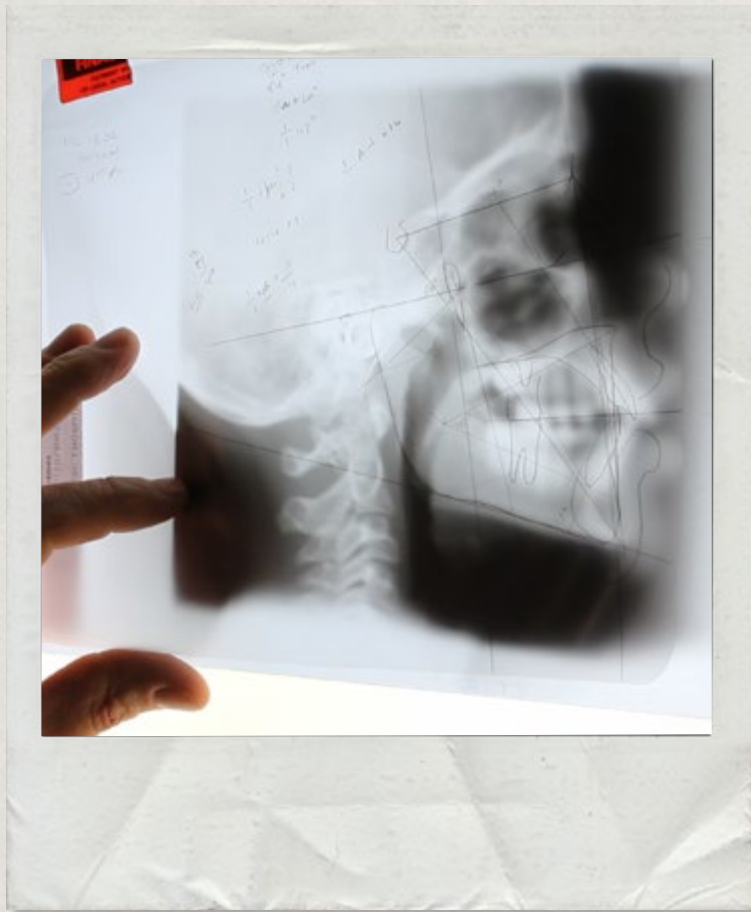
Plug2Studio

www.plug2studio.com



**VICTORIAN INSTITUTE
OF FORENSIC MEDICINE**





COVER FEATURE

**Collaborating to identify
long-term missing persons**

See page 24

Cover Design

Plug2 Studio

65 Kavanagh Street, Southbank
VIC Australia 3006

Tel. +61 3 9684 4444 | Fax. +61 3 9682 7353

WWW.VIFM.ORG