




THE UNIVERSITY  
of ADELAIDE



# International Conference on Evidence Law and Forensic Science

5th Proceedings, The City of Adelaide, South Australia, Australia  
Monday, 20 July 2015 – Thursday, 23 July 2015

# Hosts and Sponsors

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China University  
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中国政法大学



International Association  
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# Conference Organising Committee

## Executive Committee

Mr David Caruso (Chief Organiser)  
Emeritus Fellow Andrew Ligertwood

Professor Zhang Baosheng  
Assistant Professor Zhuhao Wang

Professor Ronald J. Allen  
Professor John Williams

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Professor Paul Babie  
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Professor Christophe Champod  
Professor Chris Pearman

Professor Michele Taruffo  
Professor Gary Edmond

Professor Paul Roberts  
Dr Carolyne Bird

# Conference Statement

On behalf of the Hosts and Sponsors, I am delighted you are joining us for, this, the 5<sup>th</sup> International Conference on Evidence Law and Forensic Science (ICELFS 2015).

The ICELFS Program has its origins in the efforts of Professor Zhang Baosheng to introduce rules of evidence in Chinese courts. Professor Zhang studied under Professor Ronald J. Allen, the John Henry Wigmore Chair of Law at Northwestern University. In 2002, Professor Zhang returned to Beijing and his home University, the Chinese University of Political Science and Law (CUPL). By 2006, Professor Zhang had established the Institute of Evidence Law and Forensic Science within CUPL. The Institute, in turn, welcomed and invited Professor Allen to teach evidence law and to advise on the development of uniform evidence laws for Chinese courts. Professor Allen and Professor Zhang then worked together to welcome other international scholars of evidence law and forensic science to share their knowledge through teaching at the Institute.

In conjunction with this work, a biennial conference on evidence law and forensic science was conceived, to foster, develop and promote the work of the Institute. The first ICELFS was held at CUPL in Beijing in 2007. It was generously sponsored by CUPL, with the support of the Key Laboratory of Evidence Science of the Ministry of Education and co-sponsored by Northwestern University.

The first ICELFS was attended by a number of international delegates. They joined their Chinese colleagues to discuss and debate the content of the *Draft Uniform Provisions of Evidence of the People's Court (Proposals for Judicial Interpretation)* which had been developed. Since 2007, these laws have been trialed in selected courts of China for empirical assessment.

The success of the first ICELFS led to its continuation and expansion. It was biennially convened with conferences in 2009, 2011 and 2013. ICELFS attracted the support of the Collaborative Innovation Center of Judicial Civilization (CICJC), created through the Chinese Ministries of Education and Finance and of which Professor Zhang is currently Co-Chair. The CICJC now provides support to CUPL to bring to China, on a regular basis, internationally known, foreign scholars to take part in its law and forensic science programs.

At the 2011 ICELFS, the International Association of Evidence Science (IAES) was established. IAES formalised the relationships and work being undertaken to foster international collaboration between evidence scholars and forensic scientists and also took

responsibility for the biennial ICELFS. The officers and members of IAES include scholars and practitioners of law and science from Asia, the Americas, Europe, Africa and Australasia.

At the Council Meeting of IAES at the 2013 ICELFS, I submitted to the Council that the ICELFS Programs were of such merit and value to the international community of evidence law and forensic science, that ICELFS should further its ambitions by convening beyond the borders of China. The suggestion was considered by the Council with interest and support.

In 2014, Professor Paul Babie, the Associate Dean of Research for the Adelaide Law School and Faculty of Professions, met with Professor Zhang to further discuss bringing the ICELFS Program to Adelaide in partnership. The convention of ICELFS 2015 in Adelaide garnered the interest and support of the Deputy Dean of the Adelaide Law School, Associate Professor Christopher Symes, and the Dean of the Law School, Professor John Williams. Professor Williams ensured the generous support of the Law School for ICELFS 2015.

In addition to the University of Adelaide Law School, ICELFS 2015 enjoys the support of the Law Foundation of South Australia; Ms Karen Thomas, Managing Partner of Fisher Jeffries Barristers and Solicitors; the Right Honourable the Lord Mayor of Adelaide, Mr Martin Haese; the "2011 Plan" China Collaborative Innovation Center of Judicial Civilization ("2011计划" 司法文明协同创新中心); the "111 Plan" China Base for Evidence Science Innovation and Talent Recruitment ("111计划" 证据科学创新引智基地); CUPL (中国政法大学) and IAES.

ICELFS 2015 is the inaugural convention of ICELFS outside Beijing. The Proceedings over 20-23 July 2015 comprise more than 150 Speakers and Chairs from more than 10 countries. The ICELFS 2015 Delegation exceeds 250.

The Conference Program which follows these remarks, together with the Pre-Conference Workshops convened on 20-21 July 2015, is testament to the work that has been dedicated to the Proceedings of ICELFS 2015 and the personal and professional relationships it has enriched.

The Conference is honoured by the attendance and support of the Chief Justice of Australia, the Honourable Robert S. French AC, and the Chief Justice of Tanzania, the Honourable Mohamed C. Othman. Their Honours' interest in these Proceedings demonstrates the multinational importance of the issues addressed by ICELFS 2015.



Professor Zhang Baosheng began and grew ICELFS to enjoy magnificent success. I would like to extend sincere and deep personal thanks to Professor Zhang for entrusting the University of Adelaide, its Law School and Litigation Law Unit, to host the 5th ICELFS.

I would also like to extend my thanks and acknowledge the significant work of Assistant Professor Zhu hao Wang of CUPL. Professor Wang has worked meticulously on every detail of these Proceedings on behalf of CUPL.

Each member of the Organising Committee has given their time to bring together these Proceedings. I particularly acknowledge Professor Chris Pearman, the Director of Forensic Science SA, who has been instrumental in ensuring the strength of the forensic program. Professor Gary Edmond, an Australian Research Council Future Fellow, took an immediate interest in this Conference and I am grateful to him for assembling two key specialist panels within the Program. I thank and acknowledge the Chief Justice of South Australia, the Honourable Christopher J. Kourakis, for the invaluable support his Honour gave every aspect of these Proceedings.

On behalf of the Organising Committee, I humbly thank the Chairs, Co-Chairs and above all, the Speakers, that constitute ICELFS 2015. The opportunity to sit within this assembly of distinguished colleagues, to learn of their work and to reflect on their words, is a rare privilege.

The Conference Secretariat and Litigation Law Unit Secretariat, Ms Charlotte Thomas, and Litigation Law Unit Associate, Mr Jordan Phoustanis, worked assiduously to ensure the success of these Proceedings and to meet the needs of delegates. Charlotte is in her final year of undergraduate law at the Adelaide Law School. Jordan graduated in 2015 with First Class Honours in Law and was awarded the University Medal for his outstanding academic achievements. Both will make significant contributions to the administration of justice.

I am also much obliged to Chief Judge Muecke and Judge Millsteed of the District Court of South Australia for seconding to the Conference the service of three Associates, Ms Cindy Chang, Ms Wei Xin Lee and Ms Tania Stevens, each of whom has been a wonderful assistant to these Proceedings.

Ms Rhiannon Black is the Event Coordinator of Adelaide Law School. Her contribution to these Proceedings defies an appropriate superlative. We who share in, learn from and enjoy this Conference are indebted to Rhiannon.

Finally, may I recognise my teacher, mentor, colleague and friend: Emeritus Fellow, Mr Andrew Ligertwood. Andrew is a Vice President of IAES. Andrew's treatise on the laws of evidence continues to inform the teaching of evidence law in South Australia and Australia. He continues to instill rigour in legal minds through his teachings at CUPL. The convention of ICELFS 2015 is in large measure the product of the esteem with which Andrew is held amongst legal and forensic thinkers and the eminence of his work.

The theme of ICELFS 2015 is *Proof in Modern Litigation: Developments and Reforms in Evidence Law and Forensic Science*. The Proceedings critique contemporary issues in evidence law and forensic science from the perspectives of law, forensic science, political science and cultural study. The principal focus is on the intersection of evidence laws and forensic science; in recognition that judicial decisions are dependent upon the accurate determination of facts. The search for just processes and reliable sciences is the quest for rectitude in decision-making: a concern for all courts in all countries.

We gather to advance and develop systems of proof for the administration of justice through a comparative, interdisciplinary and international exchange. My best wishes in this rewarding and vital endeavour.

**David R. A. Caruso**



# Pre-Conference Workshops

Monday, 20 July 2015

Time	Event
9.30-10.30	Attendance at Trial Sessions of the Supreme Court of South Australia and the District Court of South Australia
<b>Address:</b> 241-259 Victoria Square, Adelaide SA 5000	
10.30-11.00	Break
11.00-13.00	Australian Bar Association and Ferrier Hodgson Trial Examination of Expert Witnesses: Metadata Scenario
<b>Host:</b> Courts Administration Authority, 241-259 Victoria Square, Adelaide SA 5000	
<b>Court Comprises:</b>	
<ul style="list-style-type: none"><li>&gt; Mr Ian Robertson SC</li><li>&gt; Mr Jean-Pierre du Plessis (Ferrier Hodgson)</li><li>&gt; The Honourable Justice John Sulan, Supreme Court of South Australia</li><li>&gt; The Chief Justice of Tanzania, the Honourable Justice Mohamed C. Othman</li></ul>	
13.00-14.30	Lunch at the Offices of Fisher Jeffries Barristers and Solicitors
<b>Address:</b> Boardrooms, Level 1, 19 Gouger Street, Adelaide SA 5000	
15.00-16.15	Attendance and Presentations at the Australian Centre for Ancient DNA (University of Adelaide)
<b>Host:</b> Associate Professor Jeremy Austin	
<b>Address:</b> The Braggs Building, North Terrace Campus. The University of Adelaide, South Australia 5005, Australia	
16.15	Close



## Tuesday, 21 July 2015

Time	Event
10.00-13.00	Attendance and Presentations at the Laboratories of Forensic Science SA
<b>Host:</b> Director of Forensics SA, Professor Chris Pearman	
<b>Address:</b> 21 Divett Place, Adelaide SA 5000	
13.00-14.30	Lunch with Staff of Forensics SA
14.30-15.45	Presentations by the Office of the State Director of Public Prosecutions
<b>Host:</b> Forensic Science SA, 21 Divett Place, Adelaide SA 5000	
<b>Presenters:</b> > Mr Brenton Illingworth, ODPP > Mr Dean Oliver, ODPP > Ms Margie Von Doussa, ODPP	
16.00	Close



# Conference Program

Wednesday, 22 July 2015

Time	Event
8.15-9.00	Registration
9.00-9.45	Welcome Ceremony (Napier 102)
	<p><b>Mr David Caruso (Chair)</b> Chief Organiser, ICELFS 2015; Director, Litigation Law Unit, Faculty of Professions, The University of Adelaide; Lecturer, Adelaide Law School, The University of Adelaide; Special Counsel, Fisher Jeffries Barristers and Solicitors; President-Elect, Law Society of South Australia; Director, Law Council of Australia</p> <hr/> <p><b>Professor Warren Bebbington</b> Vice Chancellor and President, The University of Adelaide</p> <p><b>Professor Baosheng Zhang</b> Director, Key Laboratory of Evidence Science, CUPL, Ministry of Education, China; Co-Director, Collaborative Innovation Center of Judicial Civilization, Ministry of Education and Ministry of Finance, China</p> <p><b>Professor Ronald J. Allen</b> President, International Association of Evidence Science; John Henry Wigmore Chair of Law, Northwestern University</p> <p><b>Professor John Williams</b> Dean of Law, The University of Adelaide Law School</p>
9.45-11.15	Opening Plenary - Part 1 (Napier 102) <i>The Nature of Evidence and Forensic Proof in Modern Litigation</i>
	<p><b>Mr David Caruso (Chair)</b> Chief Organiser, ICELFS 2015; Director, Litigation Law Unit, Faculty of Professions, The University of Adelaide</p> <p><b>Emeritus Fellow Andrew Ligertwood (Co-Chair)</b> Vice-President, International Association of Evidence Science; Emeritus Fellow, The University of Adelaide</p> <hr/> <p><b>The Honourable Chief Justice Christopher J. Kourakis</b> Chief Justice of South Australia <i>Proof in Modern Litigation</i></p> <p><b>Professor Ronald J. Allen</b> President, International Association of Evidence Science; John Henry Wigmore Chair of Law, Northwestern University <i>The Domain of Evidence Law</i></p> <p><b>Professor David Balding</b> Faculty of Science, University of Melbourne <i>Quantitative Evaluation of Evidence: Is It Practical for Routine Casework?</i></p> <p><b>The Honourable President Christopher Maxwell</b> President of the Court of Appeal of Victoria <i>Why and How Should Courts Determine the Reliability of Expert Forensic Evidence?</i></p>
11.15-11.30	Morning Break



Time	Event	
11.30-13.00	<b>Opening Plenary - Part 2 (Napier 102)</b> <i>The Nature of Evidence and Forensic Proof in Modern Litigation</i>	
<b>Mr David Caruso (Chair)</b> Chief Organiser, ICELFS 2015; Director, Litigation Law Unit, Faculty of Professions, The University of Adelaide		
<b>Professor Chris Pearman (Co-Chair)</b> Director, Forensic Science SA		
<b>Professor Paul Roberts</b> Professor of Criminal Jurisprudence, University of Nottingham <i>How is a Unified Law of Evidence Coherent?</i>		
<b>Professor Baosheng Zhang</b> Director, Key Laboratory of Evidence Science, CUPL, Ministry of Education, China; Co-Director, Collaborative Innovation Center of Judicial Civilization, Ministry of Education and Ministry of Finance, China <i>The Reform Theory for Proof in China 'Mirror of Evidence': the Plausibility of Judicial Proof</i>		
<b>Professor Gary Edmond</b> Australian Research Council Future Fellow, The University of New South Wales <i>Forensic Science Evidence and the Conditions for Rational (Jury) Evaluation</i>		
<b>The Honourable Chief Justice Mohamed C. Othman</b> Chief Justice of Tanzania <i>Reform of Codes of Evidence in Developing World: A Case for Increased Application of Forensic Science: Practice in Eastern Africa</i>		
13.00-14.15	Lunch	
14.15-15.45	Concurrent Streams A	
<b>STREAM 1A (Napier 102)</b> <b>DNA Evidence: Technology, Presentation and Revolution</b>	<b>STREAM 2A (Ligertwood Lecture Theatre 2)</b> <b>Validation and Reliability of Modern Forensics</b>	<b>STREAM 3A (Napier G04)</b> <b>Forensic Advances in Proof of Pen and Hand</b>
<b>Associate Professor Jeremy Austin (Chair)</b> Australian Research Centre Future Fellow; Deputy-Director, Australian Centre for Ancient DNA  <b>Ms Liesl Chapman SC (Co-Chair)</b> Head of Chambers, Len King Chambers	<b>Dr Linzi Wilson-Wilde OAM (Chair)</b> General Manager, National Institute of Forensic Science  <b>Mr Rongliang Ma (Co-Chair)</b> Senior Forensic Scientist, Ministry of Public Security	<b>Professor Paul Roberts (Chair)</b> Professor of Criminal Jurisprudence, University of Nottingham  <b>Professor Zongzhi Long (Co-Chair)</b> Sichuan University School of Law
<b>Dr Duncan Taylor</b> Principal Scientist (Forensic Statistics) Forensic Science SA <i>Using Bayesian Networks to put DNA Findings in a Greater Case Context</i>  <b>Dr Runa Daniel</b> Victoria Police Forensic Services Department <i>Massively Parallel Sequencing: The next revolution in forensic DNA analysis?</i>  <b>Professor Dong Zhao</b> China University of Political Science and Law <i>Human RNA Quantification to Enhance mRNA Profiling in Forensic Biology</i>  <b>Professor Adrian Linacre</b> School of Biological Sciences, Flinders University <i>Soil as a Source of DNA Evidence</i>  <b>Associate Professor Hongxia Hao</b> China University of Political Science and Law <i>Detection of Four Common Organic Explosives Using Capillary Electrophoresis</i>  <b>Professor Edward J. Imwinkelried</b> School of Law, University of California <i>Microbial Forensics: The Biggest Thing Since DNA?</i>	<b>Professor Roger Byard AO PSM</b> George Richard Marks Chair of Pathology, The University of Adelaide <i>Expert Evidence in Court: The Sally Clark Case</i>  <b>Dr Carolyne Bird</b> Senior Forensic Scientist, Forensic Science SA <i>Validation and Reliability of Forensic Document Examination: A Turn of the Page</i>  <b>Senior Sergeant David Kuchenmeister</b> South Australia Police <i>Validation of CDR data using traditional collision reconstruction (and reverse)</i>  <b>Dr Kaye Ballantyne</b> Senior Research & Development Officer, Victoria Police; Adjunct Associate Professor, La Trobe University <i>Forensic decision making in the right context; domain irrelevant information and cognitive contamination in expert systems</i>  <b>Dr Rachel Dioso-Villa</b> Griffith University <i>The Fire and Arson Investigator's Toolkit: A Review of the Expertise and its Admission as Expert Evidence</i>	<b>Ms Yuanli Han</b> China University of Political Science and Law <i>Study on the Software Influence of Printing Character Features by Laser Printer</i>  <b>Associate Professor Yuanfeng Wang</b> China University of Political Science and Law <i>Fluorescent Small Particle Reagents based on Dye-doped Hydrophobic Silica Nanoparticles for Latent Fingerprint Detection</i>  <b>Assistant Professor Bing Li</b> China University of Political Science and Law <i>A Pilot Research on Typical Ink Defects of Ballpoint Pen Using Optical Method</i>  <b>Assistant Professor Lei Yan and Assistant Professor Yanlin Yu</b> Southwest University of Political Science and Law <i>Application of Novel Fe304 Nanopowders for Development of Latent Fingerprints on Various Surfaces</i>  <b>Ms Jing Wang</b> China University of Political Science and Law <i>A Comparison of the Identifying Features in Imitated Handwriting and the Elderly Handwriting</i>  <b>Associate Professor Wei Guo</b> Southwest University of Political Science and Law <i>Early Attentive Processing of Handwriting Recognition</i>
15.45-16.00	Afternoon Break	

Time	Event	
16.00-17.30	Concurrent Streams B	
<b>STREAM 1B (Napier 102)</b> <b>Training and Communicating Visual Expertise: Specialist Session</b>	<b>STREAM 2B (Ligertwood Lecture Theatre 2)</b> <b>Systems and Standards of Proof in Modern Litigation</b>	<b>STREAM 3B (Napier G04)</b> <b>The Maintenance of Rights in Modern Criminal Justice</b>
<p><b>Professor Edward J. Imwinkelried (Chair)</b> School of Law, University of California</p> <p><b>Professor Dong Zhao (Co-Chair)</b> China University of Political Science and Law</p> <hr/> <p><b>Associate Professor Richard Kemp</b> University of New South Wales</p> <p><b>Dr Matthew Thompson</b> University of Queensland</p> <p><b>Ms Rachel Searston</b> University of Queensland</p> <p><b>Ms Gianni Ribeiro</b> University of Queensland</p> <p><b>Dr Jason Tangen</b> University of Queensland</p> <p><b>Professor Gary Edmond</b> Australian Research Council Future Fellow The University of New South Wales</p> <p><i>A session introducing recent research relevant to forensic disciplines dependent on visual practices and the interpretation of images</i></p>	<p><b>Professor Ronald J. Allen (Chair)</b> President, International Association of Evidence Science; John Henry Wigmore Chair of Law, Northwestern University</p> <p><b>Professor Zhiyuan Guo (Co-Chair)</b> Deputy Director, Center for Criminal Law and Justice, China University of Political Science and Law</p> <hr/> <p><b>Professor Zongzhi Long</b> Sichuan University School of Law <i>"Beyond Reasonable Doubt" in the Chinese Legal Context</i></p> <p><b>Emeritus Fellow Andrew Ligertwood</b> Vice-President, International Association of Evidence Science; Emeritus Fellow, The University of Adelaide <i>Expression of Forensic Evidence and the Criminal Standard of Proof</i></p> <p><b>Assistant Professor Xi Zheng</b> Beijing Foreign Studies University <i>The System of Evidence Rules and Its Establishment in China</i></p> <p><b>Mr Zihong Shan</b> China University of Political Science and Law <i>A Study on the Burden of Proof in Sentencing Process</i></p>	<p><b>Mr Rocco Perrotta (Chair)</b> President, Law Society of South Australia</p> <p><b>Associate Professor Hongqi Wu (Co-Chair)</b> China University of Political Science and Law</p> <hr/> <p><b>Associate Professor Pieter du Toit</b> Faculty of Law, North-West University (Potchefstroom) <i>The Admissibility of Evidence Obtained by Intimate Body Searches: a South African Perspective</i></p> <p><b>Ms Lu Zhang</b> Procedural Law Research Institute <i>The Improvement of China's Standard of Proof in Criminal Cases: Focus on the New Provision as "Beyond Reasonable Doubt"</i></p> <p><b>Mr Xiaodong Dai</b> China University of Political Science and Law <i>The Value of the Right to Privacy in the Context of Criminal Investigation: the Necessary Consideration for Legislative Reform of Exclusionary Rules in China</i></p> <p><b>Assistant Professor Fei Zheng</b> Beijing Jiaotong University <i>Social Control Through Evidence Law</i></p>
17.30	Close	
19.00 for 19.30	5th ICELFS 2015 - CONFERENCE RECEPTION AND DINNER	
<p><b>Adelaide Town Hall</b> 128 King William Street, Adelaide SA 5000</p> <p><b>Honoured Speaker</b> The Chief Justice of Australia, The Honourable Robert S. French AC</p>		

## The Chief Justice of Australia, The Honourable Robert S. French AC

Robert French was appointed Chief Justice of the High Court of Australia on 1 September 2008. At the time of his appointment he was a Judge of the Federal Court of Australia, having been appointed to that office in November 1986.

He is a graduate of the University of Western Australia in science and law. He was admitted in 1972 and practised as a barrister and solicitor in Western Australia until 1983 when he went to the Independent Bar. He was an associate member of the Trade Practices Commission (now the Australian Competition and Consumer Commission) from 1983 to 1986 and Chancellor of Edith Cowen University from 1991 to 1996. From 1994 to 1998 he was President of the National Native Title Tribunal. At the time of his appointment he was an additional member of the Supreme Court of the Australian Capital Territory and a member of the Supreme Court of Fiji. He was also a Deputy President of the Australian Competition Tribunal and a part time member of the Australian Law Reform Commission.

From 2001 to January 2005 he was President of the Australian Association of Constitutional Law. In 2010, he was made a Companion in the Order of Australia and made a Fellow of the Academy of Social Sciences in Australia.

Time	Event		
8.15-9.00	Registration		
9.00-10.15	Concurrent Streams C		
<b>STREAM 1C (Napier 102)</b> <b>Forensic Identification Evidence: Methods and Proof</b>	<b>STREAM 2C (Ligertwood Lecture Theatre 2)</b> <b>Testimonial Evidence in Criminal Proof: Common and Civil Law Comparisons</b>	<b>STREAM 3C (Napier G04)</b> <b>New and Emerging Medical Forensics</b>	
<p><b>Emeritus Fellow Andrew Ligertwood (Chair)</b> Vice-President, International Association of Evidence Science; Emeritus Fellow, The University of Adelaide</p> <p><b>Ms Kellie Toole (Co-Chair)</b> The University of Adelaide Law School</p> <p><b>Associate Professor Jeremy Austin</b> Australian Research Centre Future Fellow Deputy-Director, Australian Centre for Ancient DNA <i>The Identification of Missing Persons using DNA: the Technology and Challenges</i></p> <p><b>Dr Charanjit Singh</b> University of West London <i>Quis custodiet ipsos custodios? Should Justice Beware: a Review of Voice Identification Evidence in light of Advances in Biometric Voice Identification Technology</i></p> <p><b>Mr Rongliang Ma</b> Senior Forensic Scientist, Ministry of Public Security <i>The Current Status and Future Directions of Automated Fingerprint Identification System (AFIS) in China</i></p>	<p><b>The Honourable Justice John Sulan (Chair)</b> Justice of the Supreme Court of South Australia</p> <p><b>Assistant Professor Zuhao Wang (Co-Chair)</b> China University of Political Science and Law</p> <p><b>Associate Dean Zhong Zhang</b> Institute of Evidence Law and Forensic Science <i>Where are the Witnesses? The System of Witness Appearance in Court and its Breakdown in Criminal Procedure in China</i></p> <p><b>Mr Michael O'Connell APM</b> Commissioner for Victims' Rights, South Australia <i>Victims as Witnesses in Australia's Criminal Justice System</i></p> <p><b>Associate Professor Shanshan Zhao</b> China University of Political Science and Law <i>The Appearance of Witnesses in Chinese Criminal Proceedings</i></p> <p><b>Dr Jacqueline Wheatcroft</b> BPS Chartered Psychologist, University of Liverpool <i>Witness Assistance and Familiarisation in England and Wales</i></p>	<p><b>Mr Anthony Rossi (Chair)</b> Vice-President, Law Society of South Australia</p> <p><b>Associate Professor Yuanfeng Wang (Co-Chair)</b> China University of Political Science and Law</p> <p><b>Professor Roger Byard AO PSM</b> George Richard Marks Chair of Pathology, The University of Adelaide <i>The Forensic Implications of Herbal Medicines</i></p> <p><b>Professor Xu Wang</b> China University of Political Science and Law <i>Clinical Forensic Medicine in China: History, Current Situation and Development</i></p> <p><b>Dr Stephen Wills</b> Specialist Forensic Pathologist, Forensic Science SA <i>Cross-Sectional Imaging in Medico-Legal Autopsy Practice</i></p>	
10.15-10.30	Morning Break		
10.30-11.45	Concurrent Streams D		
<b>STREAM 1D (Napier 102)</b> <b>Miscarriages of Justice: Lessons of Proof and Practice</b>	<b>STREAM 2D (Ligertwood Lecture Theatre 2)</b> <b>Reasoning and Efficiency in Modern Litigation</b>	<b>STREAM 3D (Napier G04)</b> <b>Electronic Data Preservation, Recovery and the Internet in Modern Litigation</b>	
<p><b>Ms Liesl Chapman SC (Chair)</b> Head of Chambers, Len King Chambers</p> <p><b>Dr Alex Biedermann (Co-Chair)</b> Faculty of Law, Criminal Justice and Public Administration School of Criminal Justice Institute of Forensic Science le Batochime University of Lausanne</p> <p><b>Associate Professor Hongqi Wu</b> China University of Political Science and Law <i>Miscarriage of Justice and Responsive Reform of Evidence Law in China</i></p> <p><b>Adjunct Professor Barbara Etter APM</b> Barrister and Solicitor B Etter Consulting; Formerly an Assistant Commissioner of Police (WA) <i>Miscarriages of Justice: What have we Learned (or Not Learned!) 30 Years on from Chamberlain</i></p> <p><b>Dr Delia Qinghong Lin</b> Asian Studies Department, The University of Adelaide <i>Notions of Justice: a Comparative Cultural Analysis</i></p>	<p><b>Professor Baosheng Zhang (Chair)</b> Director, Key Laboratory of Evidence Science, CUPL, Ministry of Education, China; Co-Director, Collaborative Innovation Center of Judicial Civilization, Ministry of Education and Ministry of Finance, China</p> <p><b>Mr David Caruso (Co-Chair)</b> Chief Organiser, ICELFS 2015; Director, Litigation Law Unit, Faculty of Professions, The University of Adelaide</p> <p><b>Professor Ronald J. Allen</b> President, International Association of Evidence Science; John Henry Wigmore Chair of Law, Northwestern University <i>Probability as a Tool of Plausible Reasoning</i></p> <p><b>Mr Martin Hinton QC SG</b> Solicitor-General for the State of South Australia <i>Hearsay, the Expert and Cross-Examination</i></p> <p><b>Mr Zhefeng Xu</b> Guangzhou Public Security Bureau <i>The Application of the Logical Rules in the Evaluation of Indirect Evidence Chain in Hit-and-Run Traffic Accident Cases</i></p> <p><b>Associate Professor Gefei Ji</b> China University of Political Science and Law <i>Western Mechanisms and the Chinese Solution on the Effect of "Issue" in Evidence Law</i></p> <p><b>Dr Anna Olijnyk</b> The University of Adelaide Law School <i>How do Judges Reconcile the Aims of Justice and Efficiency in Mega-Litigation?</i></p>	<p><b>Mr Jean-Pierre du Plessis (Chair)</b> Partner, Ferrier Hodgson</p> <p><b>Professor Dong Zhao (Co-Chair)</b> China University of Political Science and Law</p> <p><b>Ms Felicity Gerry QC</b> London Bar; NTBA; Charles Darwin University <i>Access to Extraterritorial Evidence: The Microsoft Cloud Case and Beyond</i></p> <p><b>Mr Xiaodong Xu</b> China University of Political Science and Law <i>Cybercrime in China: from PC Internet to Mobile Internet</i></p> <p><b>Mr Nigel Wilson</b> Barrister, Bar Chambers <i>Matter, Metadata, Miniaturisation and the Misty Cloud: Challenges for Preservation and for Discovery Protocols in the Digital Age</i></p> <p><b>Assistant Professor Zuhao Wang</b> China University of Political Science and Law <i>A New Evidentiary Frontier: Considerations in Admissibility of Electronic Evidence from a Comparative Law Perspective</i></p> <p><b>Ms Xiaoming Chen</b> East China University of Political Science and Law <i>On Rules of Reviewing Electronic Data Evidences</i></p>	



Time	Event	
11.45-12.00	Midday Break	
12.00-13.15	Concurrent Streams E	
<b>STREAM 1E (Napier 102)</b> <b>International Issues of Law and Forensics: Specialist Session</b> <b>Evidential Issues and Proof in International Arbitration</b>	<b>STREAM 2E (Ligertwood Lecture Theatre 2)</b> <b>Unlawfully Obtained Evidence in the East: the effect of Western Ideology</b>	<b>STREAM 3E (Napier G04)</b> <b>Expert Influence and Lay Assessment in Modern Litigation: The Treatment of Experts and the Future of Juries</b>
<p><b>Mr Albert Monichino QC (Chair)</b> President, Chartered Institute of Arbitrators (Australia)</p> <p><b>Mr David Morfesi (Co-Chair)</b> Executive Director, Institute for International Trade, The University of Adelaide</p> <hr/> <p><b>Dr Fan Yang</b> Deputy Director, China International Economic and Trade Arbitration Commission <i>Evidence and Proof in CIETAC Arbitration</i></p> <p><b>Mr Andrew Robertson</b> Partner, Piper Alderman <i>An International Approach to Evidence – Can There Be One?</i></p> <p><b>Ms Edwina Kwan</b> Senior Associate, Herbert Smith Freehills <i>Privilege in International Arbitration: an Asia-Pacific Perspective</i></p>	<p><b>Mr Martin Hinton QC SG (Chair)</b> Solicitor-General for the State of South Australia</p> <p><b>Associate Dean Zhong Zhang (Co-Chair)</b> Institute of Evidence Law and Forensic Science</p> <hr/> <p><b>Professor Zhiyuan Guo</b> Deputy Director, Center for Criminal Law and Justice China University of Political Science and Law <i>Exclusion of Illegally Obtained Confessions in China: an Empirical Perspective</i></p> <p><b>Assistant Professor Chuanming Fan</b> East China Normal University Department of Law <i>The Internal Conflicts and Compromise of the Chinese Confession Rule System: a Comparative Analysis with the Western Typical Model</i></p> <p><b>Professor Weimin Zuo</b> Sichuan University Law School <i>Application of the Exclusionary Rule to Illegal Evidence in China: a “Hot” or “Cold” Practice?</i></p> <p><b>Assistant Professor Run Ni</b> China University of Political Science and Law <i>The Exclusionary Rule for Illegally Obtained Evidence in Japan</i></p>	<p><b>The Honourable Justice Richard White (Chair)</b> Justice of the Federal Court of Australia</p> <p><b>Assistant Professor Zhuhao Wang (Co-Chair)</b> China University of Political Science and Law</p> <hr/> <p><b>Associate Professor Julia Davis</b> University of South Australia <i>Is there a Future for the Jury in a Modern Criminal Justice System?</i></p> <p><b>Mr Peng Chai</b> China University of Political Science and Law <i>The Influence of Appraiser Court Attendance and Expert Auxiliary System on Judicial Proof</i></p> <p><b>Associate Professor Zhenhui Wang</b> China University of Political Science and Law <i>On Evidential Problems of The Expert Assessor’s Appearance Before Court In Criminal Lawsuits</i></p> <p><b>Associate Professor Li Yuan</b> China University of Political Science and Law <i>Factors Influencing Expert Opinion Cross-Examination on DNA Evidence in Criminal Cases</i></p>
13.15-14.30	Lunch Break	
14.30-16.00	Concurrent Streams F	
<b>STREAM 1F (Napier 102)</b> <b>Forensic Evidence Frameworks: a Global Review of Forensic Standards and Legal Frameworks</b>	<b>STREAM 2F (Ligertwood Lecture Theatre 2)</b> <b>Comprehending Forensics within the Courtroom: Judge and Jury Challenges</b>	<b>STREAM 3F (Napier G04)</b> <b>International Issues of Law and Forensics: Specialist Session</b> <b>Proof and Evidence Preservation in International Conflict and Security</b>
<p><b>The Honourable Justice John Sulan (Chair)</b> Justice of the Supreme Court of South Australia</p> <p><b>Professor Chris Pearman (Co-Chair)</b> Director, Forensic Science SA</p> <hr/> <p><b>Dr Linzi Wilson-Wilde OAM</b> General Manager, National Institute of Forensic Science <i>Australian and Global Developments in Forensic Standards</i></p> <p><b>Dr Alex Biedermann</b> Faculty of Law, Criminal Justice and Public Administration School of Criminal Justice Institute of Forensic Science le Batochime University of Lausanne <i>Development of European Standards for Evaluative Reporting in Forensic Science: the Gap Between Intentions and Perceptions</i></p> <p><b>Md. Abu Hena Mostafa Kamal</b> Dhaka International University <i>Forensic Evidence Practice in Bangladesh</i></p> <p><b>Professor Thomas Yunlong Man</b> Peking University <i>Chinese Forensic Examination: An Institutional and Functional Analysis</i></p> <p><b>Mr David Dick</b> Facial Comparison Specialist, Australian Department of Immigration and Border Protection <i>An Evolving Natural Experiment in the Determination of Human Error in Operational Environments</i></p>	<p><b>Professor John Williams (Chair)</b> Dean of Law, The University of Adelaide Law School</p> <p><b>Ms Margaret Castles (Co-Chair)</b> Director, Clinical Legal Education, The University of Adelaide Law School</p> <hr/> <p><b>Professor Rob Morrison</b> Chair, SciWorld <i>The Evidence of Foot and Mouth: The Dingo Goes on Trial</i></p> <p><b>Dr Kristy Martire</b> The University of New South Wales <i>Are Jurors Hard of Hearing or is Meaning Just Hard to Hear?</i></p> <p><b>Ms Loene Howes</b> Institute of Law Enforcement Studies, University of Tasmania <i>Can Science ever be Understood in the Courtroom?</i></p> <p><b>Associate Professor Luping Zhang and Ms Meng Li</b> China University of Political Science and Law <i>An Investigation Into Translation Criterion And Strategies – Based on the English Translation of “物证”</i></p> <p><b>Professor Roger Byard AO PSM</b> George Richard Marks Chair of Pathology The University of Adelaide <i>How to Respond to Questions in Court</i></p>	<p><b>The Honourable Kevin Duggan AM RFD QC (Chair)</b> Retired Justice of the Supreme Court of South Australia</p> <p><b>Professor Clement Macintyre (Co-Chair)</b> School of Politics and International Studies, The University of Adelaide</p> <hr/> <p><b>Associate Professor Captain Dr Dale Stephens CSM RANR</b> The University of Adelaide Law School <i>Evidence Collection and Fact-Finding in Armed Conflict and Peace-Keeping</i></p> <p><b>Ms Miiko Kumar</b> Barrister, New South Wales Bar Association The University of Sydney <i>Evidence and Open Justice: Public Interest Immunity and Closed Process in Australia and the UK</i></p> <p><b>Dr David Gilbert</b> Chair Vietnamese Language Panel of Examiners, National Accreditation Authority for Translators and Interpreters (NAATI) <i>Electronic Surveillance and Systemic Deficiencies in Language Capability: Implications for Australia’s National Security</i></p> <p><b>The Honourable Michael David QC</b> Retired Justice of the Supreme Court of South Australia <i>Evidence and Procedure in War Crimes Prosecutions</i></p>

Time	Event
14.30-15.30	<p>5th International Congress of the Council of the International Association of Evidence Science</p> <p>Round Table Meeting of the Council The Henry Basten Room, Mitchell Building, The University of Adelaide</p>
16.00-16.15	Afternoon Break
16.15-17.15	Concurrent Streams G
<p><b>STREAM 1G (Napier 102)</b> <b>Law and Forensics of Character and Misconduct Evidence</b></p> <hr/> <p><b>His Honour David M Smith QC (Chair)</b> Retired Judge of the District Court of South Australia</p> <p><b>Mr David Caruso (Co-Chair)</b> Chief Organiser, ICELFS 2015; Director, Litigation Law Unit, Faculty of Professions, The University of Adelaide</p> <hr/> <p><b>Ms Felicity Gerry QC</b> London Bar; NTBA; Charles Darwin University</p> <p><b>and Associate Professor Gregor Urbas</b> University of Canberra</p> <p><i>Patterns of Sexual Behaviour: The Law of Evidence: Back to the Future in Australia and England</i></p> <p><b>His Honour Judge Steven Millstead</b> Judge of the District Court of South Australia</p> <p><i>The Admission of Character Evidence in South Australia and Lessons for Emerging Evidence Systems</i></p> <p><b>Professor Edward J. Imwinkelried</b> School of Law, University of California</p> <p><i>Uncharged Misconduct Evidence in the United States</i></p>	
<p><b>STREAM 2G (Ligertwood Lecture Theatre 2)</b> <b>Criminal Psychology and Mental Functioning: the Legal and Forensic Response</b></p> <hr/> <p><b>Professor Paul Roberts (Chair)</b> Professor of Criminal Jurisprudence, University of Nottingham</p> <p><b>Professor Thomas Yunlong Man (Co-Chair)</b> Peking University</p> <hr/> <p><b>Mr Qiang Liu</b> China University of Political Science and Law</p> <p><i>The Motive System of the Criminal Evidence Law of China: A Tentative Study</i></p> <p><b>Professor Aiyan Zhang</b> Shandong University of Political Science and Law</p> <p><i>Psychiatric Evaluation and Criminal Responsibility</i></p> <p><b>Professor Jinian Hu</b> China University of Political Science and Law</p> <p><i>On Rules of Proof in Forensic Psychiatric Evaluation</i></p>	
17.15-17.30	Evening Break
17.30-18.45	Concurrent Streams H
<p><b>STREAM 1H (Napier 102)</b> <b>How to Cross-Examine Forensic Scientists: A Guide for Lawyers Specialist Session</b></p> <hr/> <p><b>The Honourable John J. Doyle AC QC (Chair)</b> Retired Chief Justice of South Australia</p> <p><b>Mr Michael Abbott AO QC (Co-Chair)</b> Gilles Street Chambers</p> <hr/> <p><b>Professor Gary Edmond</b> Australian Research Council Future Fellow, The University of New South Wales</p> <p><b>Associate Professor Richard Kemp</b> University of New South Wales</p> <p><b>Dr Kristy Martire</b> The University of New South Wales</p> <p><b>Emeritus Fellow Andrew Ligertwood</b> Vice-President, International Association of Evidence Science; Emeritus Fellow, The University of Adelaide</p> <p><b>Dr Kaye Ballantyne</b> Senior Research &amp; Development Officer, Victoria Police; Adjunct Associate Professor, La Trobe University</p> <p><b>Ms Mehera San Roque</b> University of New South Wales</p> <p><i>This session will discuss 'How to cross-examine forensic scientists: A guide for lawyers' (2014) 39 Australian Bar Review 174</i></p>	
19.00	<p><b>5th ICELFS 2015 - CONFERENCE CLOSE</b></p> <p><b>The Stamford Plaza</b> Adelaide, 150 North Terrace, SA 5000</p> <p><b>Closing Remarks</b> Professor Baosheng Zhang Mr David Caruso</p>



# Speaker Biographies and Abstracts

PLENARY

## The Nature of Evidence and Forensic Proof in Modern Litigation

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### PART 1

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#### The Honourable Chief Justice Christopher J. Kourakis

Admitted to practice 1982. Articled at Johnston Withers McCusker. Worked at the Legal Services Commission for several years then at a suburban practice before going to the Bar in 1989. Legal Services Commissioner 1993-1997. Took silk in 1997. President of the Law Society 2001. Appointed as Solicitor-General for the State of South Australia on 3 February 2003. Appointed to the bench of the Supreme Court of South Australia 21 August 2008. Appointed as Chief Justice of the Supreme Court of South Australia on 25 June 2012. Conferred Degree of Doctor of Laws *honoris causa* by Flinders University April 2015.

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#### *Proof in Modern Litigation*

There are a number of significant trends in the nature of the evidence received in modern trials which challenge traditional approaches to proof. First there is the frequent reliance on expert evidence and its often determinative effect on critical issues. The second trend, which is associated with the first, is the greater capacity of forensic science to statistically quantify the probability of events or circumstances. The third I mention is the wider acceptance of written statements of agreed facts as substitutes to oral testimonies. At the same time in common law countries, the jury trial, with the inscrutability of the jury verdict, has been extensively replaced by Judge alone trials and the associated requirement of adequate reasons which explicitly disclose the evaluation of trial evidence.

These trends have created certain tensions when they come up against largely immutable epistemic concepts of proof which are largely incapable of precise quantification. As Professor Wigmore said “no one has yet invented or discovered a mode of measurement for the intensity of human belief”.

The traditional common law view that the legal concept of reasonable doubt needs no definition may actually obscure the reality that it is a malleable normative standard. That standard is an ethical one reflecting the degree of satisfaction which judicial authorities should feel before imposing punishments to protect the community or making civil orders adjusting the monetary or property resources of private citizens.

The determination of questions of fact based on bare statements of probabilities or possibilities abstracted from a broader factual context is problematic. Bare statistical analysis is unlikely to produce the persuasive satisfaction required by traditional tests. An example in the civil contest is the decision of Murphy J in *TNT v Brooks* 23 ALR 345, a motor vehicle accident case in which both drivers died and there was no direct testimony of the collision itself with no witnesses. *Fitzgerald v The Queen* 88 ALJR 779 and *R v Lindsay* are more recent examples in criminal cases concerning DNA evidence. The statistical quantification of DNA profile matches has raised the question whether DNA evidence alone can convict an accused?

A further challenge presented by the increasing prevalence of expert evidence is the sometimes Herculean task of explaining that evidence and the significance of probability evidence in particular. The explanation of DNA probability evidence and the survival of the prosecutor's fallacy is an example.



## Professor Ronald J. Allen

Professor Allen is the John Henry Wigmore Professor of Law at Northwestern University, in Chicago, IL. He did his undergraduate work in mathematics at Marshall University and studied law at the University of Michigan. He is an internationally recognized expert in the fields of evidence, criminal procedure, and constitutional law. He has published seven books and over 100 articles in major law reviews. He has been quoted in national news outlets hundreds of times, and appears regularly on national broadcast media on matters ranging from constitutional law to criminal justice. The New York Times referred to him as one of nation's leading experts on constitutional law and criminal procedure. He has worked with various groups in China to help formulate proposals for legal reform, and he was recently retained by the Tanzanian Government to assist in the reform of their evidence law.

Professor Allen began his career at the State University of New York, and has held professorships at the University of Iowa and Duke University prior to coming to Northwestern. He has lectured on his research at universities across the world, among them Columbia University, Cornell University, University of Chicago, University of Virginia, University of Pennsylvania, University of Michigan, Duke University, Oxford University, University of London, Leiden University, the Royal Netherlands Academy of Arts and Sciences, University of Edinburgh, University of British Columbia, the University of Paris (Sorbonne), Parma University, Turin University, Pavia University, University of Adelaide, Australia, and Victoria University of Wellington, New Zealand, and UNAM, Mexico City. In 1991, he was the University Distinguished Visiting Scholar, at the University of Adelaide, South Australia. One of his books has been translated into Chinese by the Ministry of Education of the People's Republic of China, and he has been invited to China for a series of lectures each year from 2004 to 2010. He was recently appointed the inaugural Fellow of the Procedural Law Research Center of the China University of Political Science and Law (CUPL), Beijing, and Chair of the Board of Advisors of the Institute of Evidence Law and Forensic Science, CUPL. In April of 2007, the Ministry of Education of the People's Republic of China announced that he had been designated as a Yangtze River Scholar, only the fourth American and first law professor (Chinese or foreign) to be so honored. In September 2014, he was awarded the China Friendship Award, the highest award the People's Republic of China gives to honor non-Chinese nationals for "outstanding contribution[s] to China's economic and social progress." He has also been invited to lecture by the governments of Mexico, Spain, and Trinidad/Tobago. For the last ten years, his research has focused on the nature of juridical proof.

He is a member of the American Law Institute, has chaired the Evidence Section of the Association of American Law Schools, and was Vice-chair of the Rules of Procedure and Evidence Committee of the American Bar Association's Criminal Justice Section. He has served as a Commissioner of the Illinois Supreme Court, assigned to the Attorney Registration and Disciplinary Commission. He is presently on the Boards of the Constitutional Rights Foundation-Chicago, and the Yeager Society of Scholars of Marshall University. He has served on various boards and committees of civic and cultural institutions in Chicago, and presently is a member of the Board of the Joffrey Ballet.

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## *The Domain of Modern Evidence Law*

The law of evidence is conventionally believed to address primarily the epistemological problem of trials—how a trial process is to go about achieving rational (true) outcomes. As a result, virtually all legal scholarship concerning the field of evidence focuses on epistemological issues. However, the law of evidence regulates much more than the law's epistemology. It reaches into at least four other major areas, which I call the Organizational Problem, the Governance Problem, the Social Problem, and the Enforcement Problem. Each of these "problems" is briefly discussed. This foundational complexity explains in part the complexity of the law of evidence. How should the reformer of the law of evidence proceed in the face of this complexity? Drawing upon the experience of the reform of evidence movements worldwide, eight principles are offered to guide the structuring of the law of evidence.

## Professor David Balding

After an undergrad degree at Newcastle (NSW) and PhD at Oxford (UK), both in mathematics, I worked on developing and applying maths/stats methods in population, evolutionary, medical and forensic genetics while based in departments of Mathematics, Statistics, Epidemiology & Public Health, and Genetics, at universities in and around London. In forensic genetics I have developed methods for evaluating the strength of DNA evidence allowing for population genetic issues and also for low-template and/or degraded samples. I was also a scientific advisor to the board of the UK Forensic Science Service and a member of the UK Forensic Regulator's DNA Advisory Group. I have written a monograph "Weight-of-evidence for forensic DNA profiles", 1st ed 2005, 2nd ed 2015 joint with C Steele. Since November 2014 I have been Professor of Statistical Genetics, joint between the Schools of BioSciences and of Maths & Stats at U Melbourne.

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## *Quantitative evaluation of evidence: is it practical for routine casework?*

Some among us have long been advocating a more quantitative approach to evidence evaluation, based to a greater or lesser extent on the Bayesian paradigm of statistical inference. We have faced some strong headwinds, including those coming from a generally hostile judiciary, some examples of poor understanding of the relevant principles and consequent poor implementation, and research showing that numerical measures of evidential weight are often poorly understood by the general public. Among other obstacles, modes of legal reasoning based on logical principles in which facts are established and consequences follow appear to conflict with probabilistic reasoning in which facts are not established but the uncertainties associated with propositions are measured. In current UK legal practice we have a strange hybrid in which probabilistic reasoning is routine for DNA evidence, which the England and Wales Court of Appeal has tolerated while it has strived to prohibit rational, quantitative assessment of other evidence types. I will review some recent EWCA judgments in the context of my own experience as an expert witness presenting DNA profile evidence in UK courts.

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## The Honourable President Christopher Maxwell

Justice Maxwell commenced practice at the Bar in 1984. He was appointed Queen's Counsel in 1998. He practised mainly in constitutional and administrative law. In 1994, he was counsel assisting the Judicial Inquiry into the Australian Secret Intelligence Service. In 2003-4, he undertook a review for the Victorian Government of the Occupational Health and Safety Act 1985. The recommendations of that review were implemented in the Occupational Health and Safety Act 2004. Justice Maxwell was appointed President of the Court of Appeal in July 2005.

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## *Why and How Should Courts Determine the Reliability of Expert Forensic Evidence?*

The obvious risk in a criminal trial when expert evidence is led from a forensic scientist is that a jury will give the evidence more weight than it deserves. To prevent unfair prejudice of that kind, it is essential that the reliability of expert evidence be established to the court's satisfaction before it is presented to a jury. Recently, in *Tuite v The Queen* [2015] VSCA 148, the Victorian Court of Appeal concluded that the touchstone of reliability for this purpose was proof of appropriate validation, both of the underlying science (where necessary) and of the particular methodology being employed. Noting academic criticism that 'too much weak, speculative and unreliable opinion is allowed into criminal proceedings', the Court recommended institutional and procedural reforms to assist judges in assessing the reliability of forensic evidence.

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## PART 2

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### Professor Paul Roberts

Paul Roberts is Professor of Criminal Jurisprudence in the University of Nottingham School of Law; an Adjunct Professor in the University of New South Wales Faculty of Law; and a regular visiting lecturer in CUPL's Institute of Evidence Law and Forensic Science. Roberts works on criminal evidence and procedure, with an accent on methodological, philosophical, comparative and interdisciplinary perspectives and approaches. His current research includes a major collaborative project, sponsored by the Royal Statistical Society, to produce Practitioner Guides on the use of probabilistic inferential reasoning for lawyers and forensic scientists. His other major publications include: Roberts and Zuckerman, *Criminal Evidence* (OUP, 2/e 2010); Roberts (ed), *Theoretical Foundations of Criminal Trial Procedure* (Ashgate, 2014); Roberts (ed), *Expert Evidence and Scientific Proof in Criminal Trials* (Ashgate, 2014); Roberts and Hunter (eds), *Criminal Evidence and Human Rights* (Hart, 2012); Roberts and Redmayne (eds), *Innovations in Evidence and Proof* (Hart, 2007); and Roberts and Wilmore, *The Role of Forensic Science Evidence in Criminal Proceedings*, RCCJ Research Study No.11 (HMSO, 1993). Roberts has served as a consultant to the English and Scottish Law Commissions, the Crown Prosecution Service, and the Forensic Science Regulator, and is a member of the International Association of Evidence Science.

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### *How is a Unified Law of Evidence Coherent?*

The Law of Evidence can be thought about in at least two, fundamentally quite different, ways. Common lawyers since Stephen, Thayer, Wigmore and then Cross conceptualised Evidence law as a unified, "trans-substantive" body of rules regulating the admissibility, production and (to some extent) evaluation of evidence applicable, with some contextual modifications, to all kinds of legal proceedings, civil as well as criminal. This is the model of Evidence law that was reproduced and further institutionalised in modern legislative

codifications, including the US Federal Rules of Evidence and the Australian uniform Evidence Acts. Civilian jurists, however, took a different view. They conceived evidence law as part of the more general topic of "procedure", whilst sharply differentiating between criminal procedure and civil procedure – as reflected in the (separate) Napoleonic codes of Criminal Procedure and Civil Procedure and their modern re-enactments, which remain in force today in civilian jurisdictions, including most of Continental Europe, Francophone Africa and South America.

Both ways of looking at laws of evidence and procedure are coherent on their own, distinctive, terms. The traditional common law approach is rooted in epistemic coherence, whereas the civilian/Continental model prioritises normative coherence over epistemological considerations. These different intellectual starting points, and their implicit value choices, have important practical implications for legislation, litigation and legal education.

This paper explores the significance for law reformers, judges, litigators and legal educators of these two contrasting basic models of the Law of Evidence, and explains why it makes more sense now for England and Wales to turn its back on its common law heritage and 'go Continental' in its basic conceptualisations of procedural law.

### Professor Baosheng Zhang

Baosheng Zhang is Professor of Law and former Vice President at China University of Political Science and Law (CUPL), Beijing. Dr. of Key Laboratory of Evidence Science (CUPL) Ministry of Education of China. He got Ph.D. in Law at Renmin University of China. He is a nationally recognized expert in the fields of evidence law, procedural law, and philosophy of law. He has published six books and approximately twenty articles in major journal of law. He has been quoted in major journal of law and national newspapers many times on matters ranging from litigation to evidence law to criminal justice.

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### *The Reform Theory for Proof in China ‘Mirror of Evidence’: The Plausibility of Judicial Proof*

In the process of judicial proof, the court has to make findings of fact concerning events that happened in the past. But the triers of fact have no direct knowledge of the past events. Therefore, the triers can only find the truth by means of the “mirror of evidence” which inevitably differs from the original facts of the case. It is the truth reconstructed in the trier’s mind, and only a product of thought. The “mirror of evidence” doctrine explains that what the fact finder could find is only a plausible account of the truth. As the evidence-based information cannot be entirely achieved, the facts reconstructed under the “mirror of evidence” doctrine seem like “flowers in a mirror”. The judicial proof process is mostly deemed as a probabilistic reasoning process. But its profound foundation is the plausibility approach. The plausibility approach properly explains judicial proof better than the probability explanation. Compared with the western countries’ undergoing evolvement of the judicial proof theory from probability to plausibility, Chinese scholars are fighting against the statutory determination of evidence doctrine. The research on probability and plausibility will provide significant enlightenment in China in terms of rejecting the traditional theory of pursuing absolute certainty in judicial proof. We hope that by progressively renewing the understanding of judicial proof, the plausibility of judicial proof can be recognized and applied gradually in the judicial practice in China.

### **Professor Gary Edmond**

Gary Edmond is a law professor in the School of Law at the University of New South Wales, where he directs the Program in Expertise, Evidence and Law, and a research professor (fractional) in the School of Law at Northumbria University, UK. Originally trained in the history and philosophy of science, he studied law at the University of Sydney and took a PhD in law from the University of Cambridge. An active commentator on expert evidence in Australia, England, the US and Canada, he is Vice-President of the Australian Academy of Forensic Sciences, a member of Standards Australia’s forensic science committee, a member of the editorial board of the Australian Journal of Forensic Sciences, and served as an international adviser to the Goudge Inquiry into Pediatric Forensic Pathology in Ontario (2007-2008). With Andrew Ligertwood he is co-author of *Australian Evidence: A principled approach to the common law and the uniform acts* (5th ed. LexisNexis, 2010).

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### *Forensic Science Evidence and the Conditions for Rational (Jury) Evaluation*

Historically, concerns with jury competence have been assuaged by the celebration of trial safeguards, expressions of confidence in jury abilities, and most recently through initiatives intended to improve the presentation of expert evidence. Whereas trial and appellate judges continue to express confidence in the effectiveness of the adversarial trial and the competence of juries, based almost exclusively on their (individual or institutional) experience, jury researchers have been more attentive to empirical studies of jury performance, particularly how jurors understand complex evidence, probabilities, directions and warnings and standards of proof. These empirical studies sometimes identify problems with traditional trial practices though often suggest that problems can be improved (or overcome) through more careful presentation. In response, this essay contends that legal assumptions and some of the proposals flowing from empirical research are misguided. It will be argued that inattention to the validity and reliability of many forensic science techniques, along with the failure to provide indicative error rates and attend to limitations, proficiency and contextual bias, means that in many cases expert opinion evidence adduced in criminal proceedings is not susceptible to rational evaluation.

### **The Honourable Chief Justice Mohamed C. Othman**

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### *Reform of Codes of Evidence in Developing World: A Case for Increased Application of Forensic Science: Practice in Eastern Africa*

The Honourable, the Chief Justice of Tanzania, Justice Mohamed Chande Othman will address reforms concerned with the codification of evidence law in Eastern Africa and the increasing reliance on and application of forensic science as a means to proof in modern East African practice.



## DNA Evidence: Technology, Presentation and Revolution

### Dr Duncan Taylor

Duncan Taylor is the Principal Scientists for Forensic Statistics at Forensic Science SA. He has a PhD in molecular biology, and a diploma in Biostatistics and has worked in the forensic field for over a decade. During his working life, Duncan has produced numerous DNA reports and presented evidence in magistrates, district and supreme courts in a number of Australian states. Duncan is a member of the Australasian Statistics Scientific Working Group and the international Scientific Working Group for DNA Analysis Methods for Y-STRs and has published a number of works in both areas. Duncan is one of the developers of STRmix, a DNA interpretation software being used in forensic labs in Australia and New Zealand. Duncan is an Associate Professor in Biology at Flinders University and supervises Honours and PhD students.

### *Using Bayesian Networks to put DNA Findings in a Greater Case Context*

DNA evidence is commonplace in criminal trials. It is typical for reference DNA profiles from persons of interest (POIs) to be compared to evidence profiles in an attempt to elucidate who may have contributed DNA to items of importance. In Australia, the results of this comparison will be reported as a likelihood ratio (LR), which compares the likelihood of obtaining the evidence if the POI is, or is not, a contributor of DNA. Whilst this information is important, the presence of a POIs DNA is often not in dispute. In these instances it is the source of DNA (e.g. trace DNA, a specific biological fluid or laboratory error) or the activity by which it was deposited onto an item (e.g. from an assault, through social contact or from secondary transfer through an intermediary) that is of the greater interest in the case. To answer questions of source or activity, more than just DNA profiling results is required. Often an expert witness faced with such questions can only provide generalising statements or no information at all. Information regarding transfer and persistence of biological material, laboratory error rates, performance of presumptive tests for biological fluids and DNA profiling results can all be combined using a tool known as a Bayesian Network to assist the courts with enquiries that are higher up the hierarchy of propositions. This presentation, explains the hierarchy of propositions, the use of Bayesian Networks to assist in answering questions regarding source and activity, and shows the context in which DNA findings fit within a case.

### Dr Runa Daniel

Dr. Runa Daniel completed her Ph.D. from the University of Technology Sydney in the development of DNA-based ancestry informative intelligence tools. Since 2008, she had been employed as a research scientist in the Forensic Services Department at Victoria Police where her primary research focus is the development of Forensic DNA Intelligence capabilities. Since 2012, Dr Daniel's research group has also been assessing Massively Parallel Sequencing applications in Forensic DNA analysis. Dr. Daniel is the co-chair of the Australia/NZ Massively Parallel Sequencing Working Group and is a member of the International Society of Forensic Genetics, the Australia and New Zealand Forensic Science Society and the Australian Academy of Forensic Science.

### *Massively Parallel Sequencing: The next revolution in forensic DNA analysis?*

Massively parallel sequencing (MPS), also known as next generation sequencing, has the potential to revolutionize forensic DNA analysis. Sequencing enables the analysis of every base in a DNA fragment thereby increasing the informativeness of DNA analysis. In addition, MPS utilises nucleotide barcodes (unique identifier sequences) to label DNA fragments within an individual sample enabling multiple samples and DNA markers to be analysed simultaneously ultimately resulting in higher throughput in a forensic casework workflow.

Currently, the global forensic genetics community is assessing the application of MPS to both forensic identity and intelligence. Initial forensic MPS applications were focused on DNA-based intelligence which is used to predict the biogeographical ancestry (BGA) and externally visible characteristics (EVCs) of the donor of an evidential sample. As MPS enables the analysis of hundreds of DNA markers simultaneously, this increases the ability to provide highly detailed intelligence to forensic investigators. More recently, DNA tests for forensic identity have been developed which analyse existing forensic STR loci.

A number of considerations must be addressed in order to appropriately assess MPS technology for uptake into forensic DNA analysis including technical considerations (such as accuracy, analysis and interpretation methodology etc), infrastructure, database and legislative requirements as well as cost benefits. An Australia/NZ MPS Working Group has been formed which will enable a coordinated approach to the assessment and validation of MPS technologies for forensic applications.

### Professor Dong Zhao

Dong Zhao is a professor of forensic science at the Institute of Evidence Law and Forensic Science, China University of Political Science and Law ("the Evidence Institute, CUPL"), a member of the "2011 Plan" of the PRC national government – Collaborative Innovation Center of Judicial Civilization ("CICJC") and a member of the "111 Plan" of the PRC national government – Base for Evidence Science Innovation and Talent Recruitment ("BESITR"). He received his master's degree from the China Medical University, and doctor's degree from the Osaka City University in Japan. He joined CUPL in September 2013, after three years of postdoctoral training in cell biology in the Albany Medical College, and two years of working experience as a research associate in molecular biology and forensic science in the University of Central Florida, United States.

While teaching at CUPL, Professor Zhao serves as an associate editor-in-chief and editorial director of the *Journal of Forensic Science and Medicine* – an international journal covering a variety of subjects of forensic science and forensic/legal medicine. Professor Zhao's teaching and research areas focus on forensic biology and forensic pathology.

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## ***Human RNA Quantification to Enhance mRNA Profiling in Forensic Biology***

RNA analysis offers many potential applications in forensic science and molecular identification of body fluids by analysis of cell-specific RNA markers represents a new technique in forensic cases. However, due to the nature of forensic materials that often admixed with nonhuman cellular components, human specific RNA quantification is required for the forensic RNA assays. Quantification assay for human RNA has been developed in the present study with respect to body fluid samples in forensic biology. The quantitative assay is based on real time RT-qPCR of mitochondrial COX1 RNA (Cytochrome c oxidase subunit I), and capable of RNA quantification with high reproducibility and a wide dynamic range. The human RNA quantification improves the quality of mRNA profiling in identification of body fluids of Saliva and semen, because the quantification assay can exclude the influence of non-human components and reduce the adverse affection from degradation.

## **Professor Adrian Linacre**

I graduated with a 2.1 honours degree in Zoology from the University of Edinburgh in 1984 and then completed a PhD (D.Phil.) in Molecular Genetics from Sussex University in 1988. I was employed as a Post-doctoral Research Fellow at the University of Sussex from 1988 to 1994 before taking up a lectureship in Forensic Science, University of Strathclyde from 1994. In 2010 I became the inaugural South Australia Justice Chair in Forensic Science & Emerging DNA Technology at Flinders University.

I have published over 100 publications in international peer reviewed journals and am co-author of the text book '*An Introduction to Forensic Genetics*', Willey Press (2nd edition published in December 2010) as well as the editor and contributor to '*Forensic Science in Wildlife Investigations*', which was published in CRC Press 2008. I am Associate Editor of the journal '*Forensic Science International: Genetics*', and on the editorial board of '*Investigative Genetics*', '*Forensic Science Medicine & Pathology*', and the '*Australian Journal of Forensic Sciences*'. Currently I am the President of the Australia & New Zealand Forensic Science Society, SA Branch.

I have authored over 500 Court Reports or Witness Statements and was a Registered Forensic Practitioner in the area of Human Contact Traces (DNA, body Fluids and Blood Pattern Analysis) from 2004. I was a member of Review into Low Template DNA Typing commissioned by the UK Home Office in 2007, which reported in 2008 (authors Prof. Brian Caddy, Graham Taylor & Adrian Linacre). More recently I was Chair of International Society for Forensic Genetics (ISFG) into the use of non-human DNA in the criminal justice system.

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## ***Soil as a Source of DNA Evidence***

Soil is encountered frequently on items submitted to a forensic science laboratory. The soil may adhere to clothing, tools and vehicles and has the potential to link these items to a particular location. Locations include a particular site of interest or an alibi site. Despite the potential of soil it is rarely examined for its biological composition; this is most likely due to the lack of reproducibility of any result and the lack of any reference database. This paper will provide evidence of using whole genome testing using three different approaches (whole genome amplification, shot gun analysis and arbitrary primed amplification) to test for reproducibility both in location and throughout the year. Three different locations were chosen with separation of about 3 kilo-meters and multiple samples taken from the same sites and at different times of the year. The results indicate that arbitrary primed amplification resulted in fewer

false positives and greatest reproducibility being able to link different samples from the same location regardless of the time of year the sample was collected. A comparison is made with the alternative approach of targeting specific genetic loci rather than the entire genome in terms of reproducible results, ease of use, and reporting of results. The endpoint is that there is now the possibility of using DNA typing from soils in forensic cases if the need arises.

## **Associate Professor Hongxia Hao**

Hongxia Hao is an Assistant Professor of China University of Political Science and Law (CUPL) and a member of the "2011 Plan" of the PRC National Government. She received her BSc in chemistry from Inner Mongolia Normal University and her MSc and PhD in medicine and toxicology analysis from the Chinese People's Public Security University. In 2012, she was a visiting scholar at the University of Toronto (Canada) in the biosensors research group.

Presently, she is executive director of the Forensic Science Instrument Research Center developing technology for on-the-spot, rapid detection of drugs and explosives. To date, she has authored 8 patents and 40 publications in various research areas such as: surface plasmon resonance (SPR) sensors, molecular imprinted polymer (MIP) sensors, immunoassays and biosensors.

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## ***Detection of Four Common Organic Explosives Using Capillary Electrophoresis***

With respect to the work being presented. Detection methods for commonly used organic explosives have been investigated and optimized. In accordance with the investigated techniques, a detection method based on capillary electrophoresis (CE) has been proposed. After preliminary trials were conducted, a mixture composed of 50 mmol/L sodium dodecyl sulfate (SDS) and 50 mmol/l ammonium acetate was adopted as the buffer system for the CE analysis. The use of ultraviolet (UV) detection processes for four kinds of organic explosives, namely, RDX, HMX, PIC and DDNP, were conducted using the buffer system. Moreover, the proposed CE-based detection method was investigated in terms of the reproducibility of migration time, linear relationship between mass density, peak area and the detection limit. The experimental results indicate that the proposed CE-based method exhibits favourable reliability and stability. Additionally, using a photodiode array detector (PDA), the wave spectrograms of these four organic explosives were obtained, by which the qualitative results by UV detection were further verified.

## **Professor Edward J. Imwinkelried**

Edward Imwinkelried is the Edward L. Barrett, Jr. Professor of Law Emeritus at the University of California, Davis. He is the former chair of the Evidence Section of the American Association of Law Schools. He has served as: a member of the National Institute of Science and Technology expert group on fingerprint examination, a member of the legal issues working group of the National Commission on the Future of DNA Evidence, and the legal consultant to the Surgeon General's Commission on Urinalysis Testing in the Armed Forces. He has written over 100 law review articles. He is a coauthor of McCORMICK, EVIDENCE (7th ed. 2013) and SCIENTIFIC EVIDENCE (5th ed. 2012) and is the author of THE NEW WIGMORE: EVIDENTIARY PRIVILEGES (2d ed. 2010), UNCHARGED MISCONDUCT EVIDENCE (rev. 2014), THE METHODS OF ATTACKING SCIENTIFIC EVIDENCE (5th ed. 2014), and EVIDENTIARY FOUNDATIONS (9th ed. 2015).

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## *Microbial Forensics: The Biggest Thing Since DNA?*

Our bodies and world are covered by a cloud of bacteria, fungi, viruses, and other microorganisms. Each person has a microbial community or microbiome. Our bodies are home to between two and six pounds of microbial life—cells that do not share our DNA but live and replicate on and inside our bodies. Scientists have developed phylogenetic analysis to identify individual microbes. The most powerful technique for analysing microbes is a DNA sequencing method, and the current marker of choice is the small subunit rRNA (ss-rRNA) gene, representing approximately 1,500 bases of the genome. By constructing evolutionary trees of ss-rRNA genes, scientists can compare samples and determine their relatedness.

Phylogenetic analysis has already surfaced in court. The leading case is the Spanish prosecution of Dr. Juan Maeso, an anaesthesiologist practicing in Valencia. There was a large outbreak of Hepatitis C among his patients. A team of Spanish and Polish geneticists used computational phylogenetics to convince the court that the accused was the source of the infection. Similarly, in the United States, geneticists used computational phylogenetic methods to persuade a court that Dr. Richard Schmidt had injected his mistress with HIV and HCV from two of his patients. The trial judge admitted the prosecution testimony over a *Daubert objection*, and the Louisiana appellate courts affirmed the accused's conviction.

Researchers have already identified a number of potential uses for microbial analysis:

- > **Improving the estimations of post-mortem interval.** In a study headed by Dr. Jessica Metcalf, the researchers found that the analysis of the microbial communities on the skin of the head of dead mice yielded more reliable PMI estimates than any of the traditional short-term techniques.
- > **Personal identification.** A research team led by Noah Fierer discovered that identifiable bacterial communities are readily transferred from the skin to computer keyboards. Using a pool of 270 possible matches, researchers correctly associated each microbial community on the keyboard to the person who had touched the keyboard.
- > **The determination of the type of body fluid.** Each kind of body fluid harbors a different flora of bacteria. By analyzing the genus and species of the bacteria present in a sample, investigators can identify the type of fluid. For example, in an experiment reported by Gaimpaoli, researchers successfully distinguished between saliva and vaginal fluid.
- > **Soil mapping.** Soil is embedded with living organisms, including bacteria, nematodes, fungi, and protozoa. Genetic information can be extracted from these organisms and mapped geographically. The maps can be used to determine the source of a soil sample.

We may soon hear claims that the advent of microbial forensics is the second coming of DNA analysis. However, it is important to remember that there were missteps in the early history of DNA typing. In particular, absent proof of independence the product rule was used improperly to generate random probabilities; and in some cases random match probabilities were misconstrued as source probabilities. Microbial analysis techniques have tremendous forensic potential, but the lesson from the DNA wars is that these techniques must be subjected to rigorous scrutiny before they are used extensively in court.



## Validation and Reliability in Modern Forensics

### Professor Roger Byard AO PSM

Professor Roger Byard holds the George Richard Marks Chair of Pathology at the University of Adelaide and is a Senior Specialist Forensic Pathologist at Forensic Science SA in Adelaide, Australia. He qualified in medicine in Australia in 1978 and became a licentiate of the Medical Council of Canada in 1982. He has published, or has in press, over 600 papers in peer-reviewed journals, and coedited *Sudden Infant Death Syndrome* (Arnold, 2001), the four volume *Encyclopedia of Forensic and Legal Medicine* 2nd ed. (Elsevier/Academic Press, 2015) and the two volume *Forensic Pathology of Infancy and Childhood* (Springer, 2014), wrote *Sudden Death in the Young* (3rd ed) (Cambridge University Press, 2010) and coauthored the *Atlas of Forensic Pathology* (Springer 2012). He is the Editor-in-Chief/Managing Editor of *Forensic Science Medicine and Pathology*. He was awarded the Humanitarian Overseas Service Medal (HOSM) and the Australian Federal Police (AFP) Operations Medal for disaster victim identification work in Bali after the bombings in 2002 and in Thailand after the tsunami in 2004.

### *Expert Evidence in Court: The Sally Clark Case*

In the United Kingdom in November 1999 a 35-year-old lawyer, Sally Clark, was convicted of murdering her two young sons. The conviction was by a majority of 10 to 2 in the Chester Crown Court and an appeal against the conviction was dismissed in October 2000. The conviction was, however, subsequently quashed by a second Court of Appeal in January 2003. This resulted in a number of questions being raised about the case, including the interpretation of the alleged pathological findings. Review of both autopsies demonstrated that standard procedures had not been followed with some potentially important diagnoses and conclusions being altered over time. The case demonstrates the difficulties that may arise if cases are not investigated thoroughly by pathologists with specific training in a particular area at the time. The problems that may result in subsequently trying to clarify the findings at a later stage are discussed, in addition to the idiosyncratic approach to the initial diagnoses.

### Dr Carolyne Bird

Carolyne Bird is a forensic document examiner at Forensic Science SA, where she has been employed since 2002. She has a Bachelor of Science (honours) from the Flinders University of South Australia, and a Doctor of Philosophy from La Trobe University, Melbourne, for which she undertook research into the skill of forensic handwriting experts in identifying disguised and simulated handwritten text.

Carolyne is a member of the Australian and New Zealand Forensic Science Society, the Australasian Society of Forensic Document Examiners Inc and the International Graphonomics Society, an associate member of the European Document Experts Working Group and the European Network of Forensic Handwriting Experts, and a corresponding member of the American Society of Questioned Document Examiners. She has attended conferences held by these societies, where she has presented scientific papers and posters, and a workshop on the topic of disguised and simulated handwriting behaviours. Carolyne has co-authored five papers published in peer-reviewed scientific journals on the topic of forensic document examination.

### *Validation and Reliability of Forensic Document Examination: A Turn of the Page*

Over the past 15 years, and following academic criticisms, there has been a move to address the issue of characterising and validating the skill of forensic document examiners (FDEs). Past studies have compared FDEs' authorship opinions on questioned handwriting and signatures with those of lay people, and found that FDEs do possess expertise in this area. However, research has identified that disguised and simulated writings (unnatural writings) are problematic areas for FDEs. Little empirical data currently exists which addresses these problem areas.

Another area that exhibits a lack of published data is the skill of FDEs for document examinations other than handwriting and signature comparisons. These include ink comparisons, detection and decipherment of alterations to or indentations in documents, and identifying print processes. While some of these examinations are based on well documented techniques that are in use in many areas of science, others have had very little validation.

Research findings will be presented on various aspects of FDEs' skill in detecting unnatural handwriting processes, including their level of expertise compared to a group of laypeople. An overview of current research projects dealing with other aspects of forensic document examination will also be given.

### Senior Sergeant David Kuchenmeister

Senior Sergeant David Kuchenmeister has been a member of the South Australian Police for over 25 years, and worked in the Major Crash Investigation Section for over 12 years and is now the Senior Technical Examiner and Officer in Charge of the Reconstruction and Technical Examination Unit.

He has been posted to metropolitan patrols, large country police stations as well as being the Officer in Charge of the Hallett and Oodnadatta police stations. As well as being an investigator with the Major Crash Investigation Unit, he has been an investigator attached to the Paedophile Task Force and the Internal Investigation Branch.

Senior Sergeant Kuchenmeister has studied in the United Kingdom, Canada, the United States and New Zealand in relation to collision reconstruction and more recently in the advancement of technology relating to imaging data contained in vehicle air bag control modules.

### *Validation of CDR data using traditional collision reconstruction (and reverse)*

Collision Reconstruction is the application of the Laws of Physics, Mathematics and Geometry, combined with Common Sense, to determine the pre-impact and impact speeds of vehicles in collisions, or their alignment and specific location at the point of impact.

However, traditional reconstruction techniques require assumptions to be made, in particular as to the coefficient of friction of the roadway and the post impact equivalent speed loss of vehicles involved.

Almost all modern vehicles are equipped with air bags and other safety features, the deployments of which are controlled by electronic modules. The primary function of the modules is to sense a developing

collision and decide what devices, if any, need to be deployed. The modules that control the deployments of the air bags contain electronic data which can assist the collision reconstructionist to calculate pre-impact speeds and alignment of vehicles involved in collisions.

Information obtained from the modules has repeatedly been found to be accurate however, the judicial process requires corroborative evidence. This is done by using either physical evidence from the collision scene or via a mathematical solution. By validating the forensic data contained in the modules, the question of reliability and robustness of that data can be shown.

## Dr Kaye Ballantyne and Bryan Found

Kaye Ballantyne is a Senior Research and Development Officer, Office of the Chief Forensic Scientist VPFSD and an Adjunct Associate Professor, School of Psychology & Public Health, La Trobe University. Kaye has published extensively in books and peer-reviewed journals in the fields of forensic science and molecular genetics, and provided seminars and workshops both nationally and overseas. Kaye's research interests include cognitive forensics, statistics, evidence interpretation, Bayesian logic and the logical framework, and applications of Y chromosome DNA profiling to genetics and forensics.

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### *Forensic decision making in the right context; domain irrelevant information and cognitive contamination in expert systems*

Many forensic pattern examination sciences use human perceptual and cognitive processes to form opinions evidence products. Human cognitive processes are known to be susceptible to unconscious cognitive contamination from varying types of potentially biasing information. Several high-profile miscarriages of justice, combined with human factors research findings, have demonstrated the potential effects of expectation, confirmation and context biases, and how they may induce shifts in the strength or direction of opinions in forensic casework. The forensic community has been slow to engage with the large body of knowledge on cognitive bias that exists in the psychological sciences, with many practitioners remaining exposed to domain-irrelevant and biasing information. However, increasing awareness and knowledge around cognitive factors and contextual bias is resulting in improved practices and procedures in some areas, through engagement with strategies that shield practitioners from psychological contamination or declaration of potential effects where strategies have not, or cannot, be implemented.

## Dr Rachel Dioso-Villa

Dr. Dioso-Villa is a Lecturer in the School of Criminology and Criminal Justice at Griffith University. She received her PhD in Criminology, Law and Society from the University of California, Irvine and her MA in Criminology from the University of Toronto. Her areas of research include the sociology of forensic science and its application in the criminal justice system and the study of wrongful convictions in Australia. In particular, she is interested in the admissibility of the forensic sciences, the validation of forensic science techniques, and the causes and correlates of wrongful conviction. Dr Dioso-Villa has received grants and fellowships from the Social Science and Humanities Research Council of Canada, the American Society of Criminology and the Canadian Foundation of University Women. Her work has appeared in the *Stanford Law Review*, *Canadian Journal of Criminology*, *UNSW Law Journal*, *Law Probability and Risk* and the *Wall Street Journal*.

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### *The Fire and Arson Investigator's Toolkit: A Review of the Expertise and its Admission as Expert Evidence*

Fire and arson investigation has its origins in experience-based and mentor-apprenticeship models. When admitted into court as expert witnesses, fire and arson investigators testify as to the cause and origin of fires and the validity and reliability of their methods and claims are rarely scrutinised in cross-examination and by the court. This presentation will review some of the controversies surrounding this form of forensic evidence including a discussion of the interpretation of arson indicators, the role of extra-legal factors in fire investigations, potential overclaims made by investigators, and the dangers of confirmation bias in practice.

## Forensic Advances in Proof of Pen and Hand

### Ms Yuanli Han

Yuanli Han is a forensic document examiner at Fada Institute of Forensic Medicine & Science which belongs to the Institute of Evidence Law and Forensic Science, China University of Political Science and Law ("the Evidence Institute, CUPL"). She received M.E. from Beijing Institute of Graphic Communication. She joined CUPL in October 2010.

Her research area is Questioned Document Examination, including handwriting, seal, printing document, stained document, the sequence of seal and handwriting etc.

#### *Study on the Software Influence of Printing Character Features by Laser Printer*

Printing document examination is one of the most important branches of testing a document, and occupies a very important position in the field of forensic science. In recent years, the continuing developments in the quality of impression, combined with the ever reducing cost of toner printers, has allowed this technology to spread and thus be used in increasing numbers of homes for any type of document, including for a criminal aim.

Influencing factors of printing features and its value are studied to text files, concluding operating system, office software. The report of Net Application October 2014 showed that Windows7 and Windows XP's market share were: 53.05% and 17.18% respectively. The report of Forrester October 2013 showed that, Microsoft Office's market share occupies more than 85%, the top three being Microsoft Word 2003, 2007, 2010. In the study, Windows XP, Windows 7, and Microsoft Word 2003, 2007, 2010, WPS 2013, PDF format are chosen, which are all the most common. WPS office is developed by Chinese King-soft Co., Ltd., and has a high usage in China. The text file is designed, edited and printed by laser printer. The printing features of characters are selected and fixed by Anyty 3R digital microscope, Printer Expert and X-printer devices. Coincidence comparison and outline feature extraction are used to evaluate the differences.

It is showed that Windows XP and Windows7 have no effect on printing features of text files, but different Offices have a certain degree influence on printing features and PDF format has great influence on text files.

### Associate Professor Yuanfeng Wang

Yuanfeng Wang has a BSc in forensic science and MSc in analytical chemistry from the China Criminal Police University. She got a PhD in procedure law from the Chinese People's Public Security University on the application of IIB-VIA quantum dots and TiO<sub>2</sub> nanoparticles for latent fingerprint development. She carried out a post-doc research in collaboration with Professor Christophe Champod at the University of Lausanne (UNIL, Switzerland) on the application of fluorescent small particle reagents based on dye-doped hydrophobic silica nanoparticles for latent fingerprint detection.

She is actually an associate Professor at the Key Laboratory of Evidence Science from the China University of Political Science and Law (CUPL). She is in charge of the microtraces and chemical criminalistics department including the analysis of forensic samples

like paint, plastics and fibres. Meanwhile, she participates in the forensic toxicological analysis as well. Her research activities cover a broad spectrum of disciplines aimed at elucidating analytical and interpretative problems involving trace evidence and toxicological evidence.

#### *Fluorescent Small Particle Reagents based on Dye-doped Hydrophobic Silica Nanoparticles for Latent Fingerprint Detection*

The methodology herein uses the significant advantage of the high sensitivity of functionalized nanoparticles (NPs) towards the trace sebaceous component of finger-marks deposited on non-porous surfaces. Described in this work are the NP preparation procedure and its application to latent finger-mark detection. Dye-doped silica NPs were prepared by a reaction between solution 1 (a mixture of 11.16 mL tetraethoxysilane and 88.84 mL ethanol) and solution 2 (a mixture of 70.68 mL distilled water, 7.76 mL ammonia, 5 mL Ru(bpy)<sub>3</sub><sup>2+</sup> solution and 66.56 mL ethanol). Hydrophobic functionalisation was achieved by the use of octadecyltrimethoxysilane (OTMOS). A small particle reagent (SPR) based on Ru(bpy)<sub>3</sub><sup>2+</sup>-doped hydrophobic silica NPs was utilized as the developing agent for latent finger-marks. Orthogonal experimental design was employed to optimize the newly developed SPR. The concentration of OTMOS applied during the synthesis of silica NPs, the amount of SPR detergent, the amount of silica NPs and the dilution ratio were considered as the potential influencing factors. Finally, comparisons were made between the optimized SPR in our laboratory and another two SPR methods recently reported in the literature. The average size of silica NPs synthesized with this procedure was approximately 214.2 nm. A 40-min treatment with ultrasonication could break down the aggregation of silica NPs completely. The results of the application of the optimized SPR demonstrate that it could be applied to a broad range of substrates. Compared to the two SPR methods recently reported in the literature, the optimized SPR method developed in our laboratory has a higher coloration efficiency and relatively better development results for some kinds of samples. This demonstrates the potential use of the double-functionalized NPs for latent finger-mark detection.

### Assistant Professor Bing Li

Bing Li is Assistant Professor of Forensic Science at Institute of Evidence Law and Forensic Science, China University of Political Science and Law ("the Forensic Institute, CUPL"), a member of the "2011 Plan" of the PRC national government – Collaborative Innovation Center of Judicial Civilization ("CICJC"). She received MD from *China University of Political Science and Law*. She had ever served in *Department of Forensic Science of Beijing Higher People's Court* during Jun.2004- May.2006. Subsequently she joined CUPL in May 2006.

Professor Li's teaching and research areas include questioned document, handwriting and evidence law. She is a recipient of a grant from the "2011 Plan" – CICJC and a grant from the PRC Ministry of Education for his teaching and research.



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### ***A Pilot Research on Typical Ink Defects of Ballpoint Pen Using Optical Method***

The ballpoint pen is widely used as a writing instrument and has been for a long period. Since the structure and mechanical function of the writing tip exert an influence on the morphology of the writing strokes, it produces various kinds of morphological features. It is vitally important for document examining experts to grasp the procedure of writing movement and the morphological features of ink strokes produced by the ballpoint pen. While the dispute is never halting, we consider whether we can identify authorship or identify writing instruments by making use of morphological features such as the ink defects. In this paper, an experimental analysis on typical ink defects, the writing tip of ballpoint pens and writing movement is presented. Important morphological ink defects of ballpoint pen strokes should be deciphered separately and we make effort to find some principles between the writing instruments and the specific ink defects through this experimental study on the ink defects produced by the ballpoint pen. The morphology analysis of these ink defects is elaborated and illustrated with experimental findings.

### **Assistant Professor Lei Yan and Assistant Professor Yanlin Yu**

Lei Yan is Assistant Professor of forensic science at School of Criminal Investigation, Southwest University of Political Science and Law(SWUPL), a member of the Chongqing Municipal Forensic Engineering Research Center of Institutions of Higher Education and a member of the Program for Innovation Team Building at Institutions of Higher Education in Chongqing.

Dr Yan received Ph.D. Degree in Analytical Chemistry from Sichuan University, and B.S. Degree in Medical Chemistry from Chongqing University. She did research works in HongKong Baptist University in 2009-2010 as a visiting researcher. She joined SWUPL in January 2012. As a science researcher, Dr Yan carries several projects supported financially by the governments (such as the National Natural Science Foundation of China, Chongqing Municipal Education Commission etc.). Her research interests focus on studies and applications of novel nanomaterials and chemical biosensor in forensic analysis and detection. Several of her research papers have been published in SCI journals.

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### ***Application of Novel Fe<sub>3</sub>O<sub>4</sub> Nanopowders for Development of Latent Fingerprints on Various Surfaces***

Magnetic Fe<sub>3</sub>O<sub>4</sub> nanoparticles prepared by microwave irradiation have been formulated for developing latent finger-marks on various surfaces(include porous and nonporous surfaces, smooth and rough surfaces). As-synthesized Fe<sub>3</sub>O<sub>4</sub> nanoparticles were characterized using TEM and XRD. Magnetic Fe<sub>3</sub>O<sub>4</sub> nanoparticle powders produced sharp and clear development of latent finger-marks without good contrast. Especially for the rough surface, the small, fine nano-sized magnetic powder demonstrated great advantages.

### **Ms Jing Wang and Jianwei Liu**

Jing Wang is a professional appraiser of questioned document examination and fingerprint identification at the Key Laboratory of Evidence Science from China University of Political Science and Law (CUPL), a member of the "2011 Plan" of the PRC national government – Collaborative Innovation Center of Judicial Civilization ("CICJC") and an editor of *Journal of Forensic Science and Medicine (JFSM)*.

She has a BSc in questioned document examination from the China Criminal Police University. She has been working in forensic science field for more than fourteen years, and has handled about 2000 cases. She has a lot of experience in identification and Court testimony.

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### ***A Comparison of the Identifying Features in Imitated Handwriting and the Elderly Handwriting***

Imitated handwriting and elderly-person handwriting are two manifestation patterns of changed handwriting, several similarities of handwriting features could be found in both of them, such as gentle movement, curved jitter and so on. It is very easy to confuse the two patterns in practice, leading to wrong decisions, which brings difficulty to our document examination. The key to solve these problems is correctly recognizing the similarities and differences between imitated handwriting and the elderly-person handwriting.

This paper is made up of four parts. The first part introduces the general features of elderly handwriting; the second part talks about the general characteristics of imitated handwriting; the third part analyses the features between imitated handwriting and the elderly-person handwriting; and the fourth part concludes the key points of identification the elderly-person handwriting and imitated handwriting.

Since the number of cases concerning the identification of elderly handwriting and imitated handwriting are increasing year by year, this paper has certain practical significance for the documents examiners in practice, and provides the theoretical support to the questioned document examination.

### **Associate Professor Wei Guo and Zhihui Jia**

Wei Guo is Associate Professor of Law in Forensic Sciences Center and Criminal Investigation College of Southwest University of Political Science and Law, Director of Institute of Policing and Law Enforcement of College of Safety Management and Social Order Maintenance.

Recent years, more than ten papers of Associate Professor Wei Guo were published in the academic authority of psychology journals such as "Psychological Science", "Psychological Development and Education" and other authoritative academic journals such as "Leading Journal of Ideological & Theoretical Education". Professor Wei Guo also published four academic works, presiding and participating in eight projects of national and provincial level, won four research awards.

Associate Professor Wei GUO ever worked on psychological clinic as psychotherapist and were in charge of psychological clinic of the First Affiliated Hospital of Gannan Medical University, doing researches of clinical psychology.

Now, Professor Wei Guo is also the committee member of the following association: International Association of Chinese Medical Specialists & Psychologists (IACMSP),

Chinese Psychological Society(CPS),Asian Association of Social Psychology(AASP), Chinese Association of Social Psychology (CASP), Chongqing Psychological Association (CQPA), Chongqing Social Psychological Society CQSPS).Besides, she is Senior advisor of Jiangxi Bureau of Prisons on the mental health of policemen and prisoners.

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## *Early Attentive Processing of Handwriting Recognition*

This research examined the mechanisms of individual attentive processing on different types of handwriting. The results indicated that the P2 amplitudes evoked by own imitated others' handwriting were significantly more positive than the P2 amplitudes evoked by own handwriting and others' handwriting. The P2 component was known as reflecting the rapid perception to the characteristics of particular stimulus (Bigman & Pratt, 2004), reflecting the automatic

capture of attention, marking the rapid automatic detection of emotional prominent stimuli (Thomas, Johnstone, & Gonsalvez, 2007). The results of this research expressed that individuals would automatically put more attentive resources to own imitated handwriting and unconsciously detect and recognise such a kind of stimulation faster in the early stages of attentive processing, compared with early attentive processing of one's own handwriting and others' handwriting.

STREAM 1B (Napier 102)

## Training and Communicating Visual Expertise – Specialist Session

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### *Training*

Current training models in the visual pattern and comparison disciplines of forensic science lean heavily on mentorship and guidance from senior expert examiners. These experts have the task of imparting their knowledge to novices, often in the form of feedback on visual comparison decisions, or instruction on the language typically used by an expert to describe domain specific concepts. Here, we present experimental data showing that guidance from an expert, in the form of detailed feedback on visual comparison decisions, provides no initial learning benefit over feedback from a peer learner. We explore the performance and accuracy results of learners across two measures of transfer. Further experimental work on training visual expertise will help to establish evidence-based learning strategies for examiners and instructors to draw on.

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### *Communicating*

Experimental data on the performance and accuracy of pattern and comparison experts is growing. We now have a clearer picture of the factors that affect the performance of forensic examiners, medical doctors, and face specialists. Less clear, is how to communicate this visual expertise to non-experts. These experts are often asked to explain the basis of their decisions in courtrooms, hospitals, and security arenas, but we don't know what's most effective for understanding. These experts must also impart their expertise to novices, but we don't know what's most effective for training. Here we propose a diagnostic framework for the interpretation and expression of comparison evidence in the courtroom.

Experts have very little insight into the information they rely on when making judgements and decisions. Experts also tend to suffer the curse of knowledge (Camerer, Loewenstein, & Weber, 1989), where it is difficult to see the world from the perspective of a novice who has not shared the same experiences. These empirical findings are problematic for expert testimony and justifying your work more generally.

### **Associate Professor Richard Kemp**

Associate Professor Richard Kemp is based at the School of Psychology, University of New South Wales, where he is director of the Master of Psychology (Forensic) program. Richard's background is in experimental and applied cognitive psychology. He was awarded his PhD from University College London in 1995 for his research into of human face perception. In recent years Richard's research has focused on the application of psychological knowledge to issues relating to the legal system and Policing. His current research interests include Forensic science evidence, the use of photo-ID documents to establish identity, biometrics, eyewitness memory and eyewitness identification, expert evidence.

### **Dr Matthew Thompson**

Matthew researches the nature of visual expertise in forensics and medicine, towards improving safety-critical decision making. He is a Postdoctoral Fellow at The University of Queensland. Matthew was a Fulbright Scholar at the University of California, Los Angeles, and an Endeavour Fellow at Harvard Medical School. He collaborates with major Australian police agencies and has a research background in medicine, defence, and air traffic control.

### **Ms Rachel Searston**

Rachel investigates how to turn novice identifiers into experts in visual domains such as forensics and face matching. She is a cognitive psychology PhD candidate in Jason Tangen's Expertise and Evidence lab at the University of Queensland. Rachel works closely with trainee and expert fingerprint examiners at Queensland Police Service, New South Wales Police Force, Australian Federal Police and Victoria Police on research projects aimed at improving training and recruitment.

## Ms Gianni Ribeiro

Gianni researches how juries understand and evaluate forensic science expert testimony. She is a cognitive and social psychology PhD candidate in Jason Tangen's Expertise and Evidence lab at the University of Queensland. Gianni received her Bachelor of Psychological Science (Hons) from the University of Queensland in 2014 after completing an honours thesis in jury decision-making and procedural justice in the Applied Social Psychology Lab.

## Dr Jason Tangen

Jason is a teaching and research academic who explores the nature of expertise and the development of competence in professional practice. He has lead several large research programs in collaboration with police agencies, passports, and the reserve bank. In 2013, Jason developed UQ's first Massive Open Online Course called "The Science of Everyday Thinking," which attracted more than 120,000 enrolments

## Professor Gary Edmond

Gary Edmond is a law professor in the School of Law at the University of New South Wales, where he directs the Program in Expertise, Evidence and Law, and a research professor (fractional) in the School of Law at Northumbria University, UK. Originally trained in the history and philosophy of science, he studied law at the University of Sydney and took a PhD in law from the University of Cambridge. An active commentator on expert evidence in Australia, England, the US and Canada, he is Vice-President of the Australian Academy of Forensic Sciences, a member of Standards Australia's forensic science committee, a member of the editorial board of the Australian Journal of Forensic Sciences, and served as an international adviser to the Goudge Inquiry into Pediatric Forensic Pathology in Ontario (2007-2008). With Andrew Ligertwood he is co-author of *Australian Evidence: A principled approach to the common law and the uniform acts* (5th ed. LexisNexis, 2010).



## Systems and Standards of Proof in Modern Litigation

### Professor Zongzhi Long

Professor Long Zongzhi, male, Doctor of laws, born in Sep. 1954, Chengdu, Sichuan Province. Professor Long served as Chief prosecutor, the President of Southwest University of Politics and Law (SWUPL). Now he is a professor, tutor of doctors in Sichuan University. Professor Long is the standing director of China Law Society, a member of the Discipline Judging Team of National Planning office of Philosophy and Social Science, a special expert consultant of Supreme People's Procuratorate.

Professor Long's teaching and research areas include evidence law, criminal procedural law

#### *"Beyond Reasonable Doubt" in the Chinese Legal Context*

The standard of proof in the Chinese criminal procedure bears five characteristics: first, it centres around corroboration; second, its starting point is objectivity; third, its theoretical foundation is cognoscibilism, i.e. the epistemological optimism; fourth, the objective of proof is used as the method of proof, which makes the standard less practical; and the last is that it is used as a universal rule, and lacks flexibility in different situations. We should draw on the experience of other countries. As to the application of the standard, "beyond reasonable doubt" not only applies to the credibility of evidence, but also applies to the sufficiency of evidence. It is used in the evaluation of both the overall evidence and individual pieces of evidence. As methods of proof, the differences between "proof beyond reasonable doubt" and "proof with credible and sufficient evidence" mainly lie in that the former is a kind of positive construction while the latter is a kind of passive deconstruction; the former has a semantic orientation to subjective evaluation while the latter has a semantic orientation to objective corroboration. There are both differences and consistencies in the degree of proof between the two standards. "Credible and sufficient evidence" is the sufficient condition for "beyond reasonable doubt" while the latter is the necessary condition for the former. To apply the standard of "beyond reasonable doubt" in the Chinese criminal procedure, we need to be more "passive" in the examination of doubts so as to reinforce the error prevention mechanism. We should treat it as both a standard of proof and a method of proof. The standard of "beyond reasonable doubt" can be applied to different types of cases as well as different stages of an individual case, but there can be some flexibility in practical application in different situations. We should adhere to the rules of thumb in the application of it and combine it with the Chinese experience of "removal of doubts". To make it easy for application, we can make proper interpretation of it. We should interpret and carry out the standard of proof through judicial precedents, and guarantee its effectiveness through proper evidence law and by making public the formation of proof.

### Emeritus Fellow Andrew Ligertwood

Andrew Ligertwood is currently an Emeritus Fellow in Law at The University of Adelaide having spent a number of decades at that University of Adelaide teaching, researching and writing in the field of Evidence. His principal publication is his treatise *Australian Evidence*, 5th Ed, LexisNexis, 2010 with co-author Professor Gary Edmond. He has been involved with the ICELFS since its inception in 2007, is a Vice President of IAES, and currently teaches at CUPL in the Institute of Evidence Law and Forensic Science program.

#### *Expression of Forensic Evidence and the Criminal Standard of Proof*

The object of this presentation is to emphasise the legal context within which forensic evidence is presented; to explain how the common law sees the role of forensic scientists in the court process and the demands that this puts upon forensic scientists when it comes to expressing their evidence.

It is argued that criminal proof demands proof of the prosecution case, having regard to all the evidence properly before the court, beyond reasonable doubt. This requires the jury carefully to consider all the received evidence, find it consistent with the prosecution case and to exclude any reasonable possibility of that evidence being explicable by an hypothesis consistent with the accused's innocence.

The likelihood of finding evidence if the prosecution case is correct is not decisive of criminal proof. It is the exclusion of any reasonably possible innocent account having regard to all the evidence properly before the court that is decisive. To ensure that the jury performs this task it is suggested that, rather than forensic evidence being presented for the prosecution simply as a likelihood ratio, that it be presented in a way that emphasizes (and, where appropriate, quantifies, for example as a frequency) the possibility of innocent explanations for its existence. The jury can then go about its task of excluding these possibly innocent explanations having regard to all the received evidence before finding the accused guilty 'beyond reasonable doubt.'

The argument is pragmatic: given that the common law demands a particular approach to criminal proof, as long as this approach is retained forensic scientists are required to present their evidence in a form that can be accommodated within it.

### Assistant Professor Xi Zheng

Xi Zheng is Assistant Professor of Law at Law School of Beijing Foreign Studies University (BFSU) which is a member university of the "2011 Plan" of the PRC national government. He also works as a Postdoctoral Researcher in Institute of Law of Chinese Academy of Social Sciences.

Prof. Zheng received his Bachelor, Master and Ph.D degree from China University of Political Science and Law. After joining BFSU Law School in 2013, he teaches Criminal Procedure Law, Evidence Law and other courses.

Prof. Zheng has published two books, *The Power of the Police in China: Police Behavior and Human Rights Protection in Criminal Investigation Process* (English, published in Germany) and *The Interrogation Process in Criminal Investigation* (Chinese, published in China).

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### *The System of Evidence Rules and Its Establishment in China*

Different evidence rules can be included into a system after being permuted. According to their basic roles and implementation of goals, the rules can be divided into relevancy, auxiliary, and extrinsic policy rules. Furthermore, the auxiliary rules can be divided into preferential, analytic, prophylactic, simplificative, and quantitative rules. There are some evidence rules in China. However, they have not formed a completed system. We can learn from the common law countries to achieve the completion of the system of evidence rules, and to coordinate the exercise of the individual rules.

### **Mr Zihong Shan**

Shan Zihong is studying at China University of Political Science and Law (CUPL) as a doctoral candidate in the field of Criminal Procedure Law and Criminal Evidence Law. His supervisor is Professor Chen Guangzhong of CUPL. Shan Zihong has published many papers in Chinese journals and has also undertaken internships in law firms and prosecution offices in China.

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### *A Study on the Burden of Proof in Sentencing Process*

With respect to the probative objects in the criminal procedure law of the PRC, the substantial facts consist of facts of conviction and facts of sentencing. To be more specific, in independent sentencing procedure, facts of sentencing are divided into “compound facts of sentencing” and “independent facts of sentencing”. The former refers to the facts that are both useful in proving the case, reaching the decision of conviction and sentencing imposed on the accused, while the latter refers to the facts that have an impact on sentencing only rather than conviction. In accordance with the principle of presumption of innocence, as it should be, the prosecution bears the burden of proof to prove the “compound facts of sentencing”. Although some scholars argued that the principle of *probatio incumbit ei qui dicit* should be applied in sentencing process, the prosecution also bears the burden of proof for the “independent facts of sentencing” for the following reasons.

First of all, the principle of presumption of innocence protects the rights of the accused during the whole criminal proceeding until the decision of conviction is reached. In criminal procedure law of the PRC, the judge cannot reach a decision until proper sentence is made. Therefore, presumption of innocence will also be valid even in sentencing procedure and the prosecution still bears the burden of proof during this proceeding.

Secondly, Chinese procurators also shoulder the “objective duty”, which requires procurators obtain evidence comprehensively, objectively and impartially. This principle refers not only to the evidence of conviction, but also to the evidence proving the accused innocent or that a mitigated punishment should be included. Therefore, the prosecution bears the burden of proof in sentencing procedure as a fulfillment of their “objective duty”.

Finally, according to the principle of balancing profits, it is more reasonable to assign the burden of proof to prosecution rather than defendant.

Prosecution should bear the burden of proof in sentencing process, and the performance is presenting sentencing proposal. There are two elements to supply the sentencing proposal. One is the probative duty of the judge to investigate positively when dispute happens. The other one is that the defendant and his counsel should bear burden of production and supply a sentencing proposal, which is regarded as phenomena of transfer of burden of proof.

## The Maintenance of Rights in Modern Criminal Justice

### Associate Professor Pieter du Toit

Pieter du Toit (Blur, LLB, LLM, LLD) is an associate professor at the Faculty of Law of the North-West University in Potchefstroom, South Africa. Before joining the university he was a prosecutor in the Regional and High Courts. He teaches the Law Criminal Procedure at undergraduate level and his research also focuses on this field.

#### *The Admissibility of Evidence Obtained by Intimate Body Searches: a South African perspective*

The *South African Criminal Procedure Act* provides for proof of the bodily features of persons and also regulates the issue of searches of persons. However, the Act contains no provisions as far as intimate body searches are concerned, although provision is made for the obtaining of “intimate samples”. As a result there are differing judicial pronouncements on the powers of the authorities in this respect. One High Court judgment has, for example, held that a court may order a surgical procedure to obtain evidence linking a suspect to a crime, whilst another has held (it is submitted correctly) that such an order is impermissible. More recently, a High Court was asked to decide whether the police was negligent in not detecting a concealed weapon used by an arrestee to murder a fellow detainee. In terms of the South African Constitution evidence obtained in a manner that violates any right in the Bill of Rights must be excluded if the admission of that evidence would render the trial unfair or otherwise be detrimental to the administration of justice. The question arises as to whether evidence obtained as a result of intimate body searches will be admissible in South African law. The issue is complicated by the absence of a law of general application that clearly defines the powers of the police in this regard – a constitutional prerequisite. Recommendations will be made to improve the South African legal position. In this regard valuable lessons can be learned from the *Police and Criminal Evidence Act* (England and Wales) as well as South Africa’s own *Correctional Services Act*. Notwithstanding the absence of legislation it will be argued that situations may arise where evidence obtained as a result of an intimate body search will be admissible in a court.

### Ms Lu Zhang

Lu Zhang is a research assistant in Procedural Law Research Institute— one of key research institute of Ministry of Education of PRC, and also a member of the “2011 plan” of the PRC national government—Collaborative Innovation Center of Judicial Civilization. She received doctor’s degree of law from CUPL in July, 2014, and joined Procedural Law Research Institute promptly.

While studying at CUPL, Lu Zhang focused on the litigation and evidence system in China and chose the standard of proof as the subject of her doctoral dissertation. At the same time, she also acted as the academic secretary of Professor Jianlin Bian, and joined in several important projects, such as the pilot project of exclusion of illegal-obtained evidence, and the project of sentencing suggestion. Now, as a research assistant, she is studying the enforcement of criminal procedural law in China, especially the proof standard of “beyond a reasonable doubt”. And she also joins in the project of pre-trial conference, the project of electronic evidence and presides the project of the improvement of the standard of proof.

#### *The Improvement of China’s Standard of Proof in Criminal Cases: Focus on the New Provision as “Beyond Reasonable Doubt”*

The standard of proof is a basic issue in the system of criminal procedure. In China, the ancient legislation has the provisions as: “evident” and “no doubt”. The current criminal procedural law followed the tradition and prescribed “reliable and sufficient evidence” as the standard of proof. In the revision of criminal procedural law in 2012, legislators made “beyond a reasonable doubt” the new explanation of the standard. Here, the author will outline the problems of understanding and application under the new situation. The article goes on to track the improvement of the standard of proof in criminal cases and discover the background and significance of the new revision, then suggest that, in order to get a correct understanding of “beyond reasonable doubt”, people should study its specific contents and unique value, as well as the consistency with “reliable and sufficient evidence”, and realise that it should never be implemented in isolated conditions.

### Mr Xiaodong Dai

Xiaodong Dai is Ph.D. Candidate at Institute of Evidence Law and Forensic Science, China University of Political Science and Law (“the Evidence Institute, CUPL”). He received J.D. from University of New South Wales, Australia. He obtained LL.B. and LL.M. from China University of Political Science and Law.

Xiaodong Dai’s research area focuses on evidence law. His bachelor graduation thesis and master graduation thesis, were awarded the title of Outstanding Graduation Thesis.

Xiaodong Dai has obtained Chinese Legal Qualification and been admitted as a lawyer to Supreme Court of New South Wales, Australia. He had internships in different levels of the courts (eg, Supreme People’s Court of the P. R. China) during his Chinese LL.M. program and had a part-time job as a paralegal in a Sydney law firm during his J.D. program. Meanwhile, he had obtained the winter intern opportunity in Orrick LLP HK office. Recently, he is undertaking an internship in a leading law firm in the fields of foreign direct investment and corporation litigation.

#### *The Value of the Right to Privacy in the Context of Criminal Investigation: the Necessary Consideration for Legislative Reform of Exclusionary Rules in China*

As at the release of the *New Criminal Procedure Law of PRC (2012 Revised)*, exclusionary rules are established in the form of law in Mainland China. *New Criminal Procedure Law* refers to the exclusionary rules in articles 54 – 58. It may be surmised that illegally obtained evidence is constituted by that which is outlined in these articles, including evidence obtained by torture, force and coercion, which might cause physical or mental harm to the suspect. Meanwhile, these articles only mention the evidence obtained during the formal enquiry by the investigation authority or during the custody. They do not refer to the evidence obtained during an illegal search (without warrant), which seriously infringes the privacy right of the suspect. This is because the Chinese legislators do not



realise the relationship between right to privacy and the exclusionary rules. Tests for dealing with the problems on the application scope of exclusionary rules have been brought forward in many jurisdictions. Nevertheless, the approach that really works is to ascertain principles and concepts underlying these tests, not to update the tests frequently. This paper will emphasise the theoretical and conceptual foundations of privacy, seek to search for an appropriate method to define privacy and explore the value of the right to privacy in criminal investigation. Finally, an appropriate framework for Chinese exclusionary rules reform will be introduced.

## Assistant Professor Fei Zheng

Fei Zheng is Assistant Professor of Law at School of Law, Beijing Jiaotong University (“the Law School, BJTU”), Adjunct Fellow of the “2011 Plan” of the PRC national government – Collaborative Innovation Center of Judicial Civilization (“CICJC”). He was Visiting Scholar of School of Law, Northwestern University (in USA, 2012-13). He received Ph.D. in Evidence Law from China University of Political Science and Law – Institute of Evidence Law and Forensic Science in 2014, and M.A. in Jurisprudence from China University of Political Science and Law – School of Law in 2011.

Professor Zheng joined BJTU after getting Ph.D. in July 2014. His teaching and research areas include evidence law, civil & criminal procedural law, and Jurisprudence.

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## Social Control through Evidence Law

Many kinds of social anomie phenomena in China, brought about by an array of complex factors, necessarily require the intervention of a legal system. However, the absence of some evidence rules in the Chinese current evidence system has resulted in the inability of the legal system to respond to social anomie phenomena, and are even capable of making the situation more serious. Evidence Law, as the legal norm regulating fact-finding in the trial, has two functions: one is promoting the discovery of truth and the other is maintaining some common social values. In the weighing process of seeking truth and seeking the upholding of values, evidence law is helpful to solve some social anomie phenomena. Through the evidence filtering mechanisms, evidence incentive mechanisms, behaviour sanction mechanisms, motivation protection mechanisms and evidence verdict relief mechanisms, evidence law can perform the direct social control function of reducing the risk of misjudged cases, curbing judicial corruption, guaranteeing the human rights of the accused and the indirect social control function of protecting social relations and improving social welfare. Therefore, we should take evidence law seriously.

STREAM 1C (Napier 102)

## Forensic Identification Evidence: Methods and Proof

### Associate Professor Jeremy Austin

I grew up in Tasmania and completed a Science Degree and PhD at the University of Tasmania. Since then I have worked on ancient DNA projects at the Natural History Museum (London) from 1994-2000, a brief stint with a marine ecology consultancy company undertaking marine park surveys along the Victorian coastline, comparative phylogeography of rainforest vertebrates at the University of Queensland (2000-2003), phylogeography and molecular systematics of Australian owls and lizards at Museum Victoria (2003-2005), taught a one semester third year course in human evolutionary genetics at Latrobe University (2004) and have been based at the University of Adelaide since 2005. My research uses ancient and modern DNA to understand the impacts of human activities over the last 200 years on threatened and endangered species, the impacts of climate change on genetic diversity and demography over the last 50,000 years and the phylogeography of a range of vertebrates.

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### *The Identification of Missing Persons using DNA: the Technology and Challenges*

Identifying the remains of missing persons, either natural mortalities or victims of murder, natural disaster, terrorism, wars and/or humanitarian violations, is a growing global issue with significant social, legal and cultural impacts. Ongoing work by the Australian Defence Force (ADF) to locate and recover Australian military remains in Europe (e.g. Fromelles, ~ 400 British and Australian WWI war dead recovered), Korea (where 42 Australians are still MIA) and the Pacific (e.g. Papua New Guinea, thousands of Australian WWII MIAs) highlights the scale and time-span over which identification of Australia's war dead is required. Recovery and identification of war dead is complex and requires sophisticated DNA analysis. Traditional forms of identification (dental records, personal effects, identification tags) may not be sufficient. Over the past seven years, I have established advanced DNA forensic research expertise, infrastructure and capabilities at the University of Adelaide. I have used this expertise to assist the ADF (Navy and Army) with DNA-based identification of human remains recovered from WWII and later conflicts. In this talk, I will describe the challenges of working with highly degraded human remains and discuss some of the cutting-edge science being applied to the identification of Australian missing persons and war dead.

## Dr Charanjit Singh

Dr. Charanjit Singh is Head of Subject and Research at the University of West London's School of Law. He is a Barrister and Certified Civil and Commercial Mediator, a member of the Right Honourable Society of the Inner Temple and a Senior Fellow of the UK's Higher Education Authority. His career in academia so far spans over fourteen years; his research is interdisciplinary covering the fields of criminal evidence, education and employment law. Dr. Singh has built up extensive expertise in criminal evidence and his current research focuses on biometric and forensic evidence, terrorism and serious and organised criminality. He is currently working on a study that explores the evidentiary reliability of new forms of after-the-event prosecution evidence. Dr. Singh is an internationally recognised and established author – he has published research and a number of textbooks on the law of criminal evidence. His work is always well received and notable academics have commented that Dr. Singh has a very natural strength in 'organis[ing] complex detail and [in the] clarity of argumentation.' He is Editor-in-Chief of two notable, impactful and internationally published journals: *International Commentary on Evidence Law and Theory*, and *Issues in Legal Scholarship*.

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### *Quis custodiet ipsos custodiet? Should Justice Beware: a Review of Voice Identification Evidence in light of Advances in Biometric Voice Identification Technology*

The debate relating to the quality of voice identification evidence in the United Kingdom continues against the backdrop of advances being made in the use of biometric voice identification evidence (BIVE) and the technology (BVIT). Anecdotal evidence shows that BVIE is being adduced in criminal prosecutions across the United Kingdom (UK) predominantly in cases involving terror crimes. This also suggests that the courts are willing to accept BVIE as being reliable even though experts in the fields of phonetics and law disagree as to its veracity. The argument against admission rests on the lack of sophistication in the traditional ear-witness voice identification methods of acoustic and auditory analysis (AAA), and now biometrics because of its infancy. Experts, therefore, argue that scientific reliability should be demanded from such evidence if it is to be used for criminal prosecutions and this not currently achieved.

Therefore, a number of issues arise as a result of this. For example the potential erosion of civil rights and the legal implications that relate to obtaining and using mixed biometric voice identification evidence (MBVIE) – this is the evidence of an ear-witness verified using BVIT. Related to this is the notion that the jury and lawyers need to be educated on how such evidence should be received and used. Presently, there is insufficient guidance on where the UK's courts should draw the line in admitting potentially hazardous evidence such as this. Exactly when BVIE becomes unreliable in a legal and scientific sense remains unclear. This significantly contributes to the debate surrounding the codification of evidence law and the introduction of a reliability test, along the lines of that used in other jurisdictions including the United States of America, to mitigate the risks that lie in admitting unreliable evidence.

The purpose of this article is to contrast ear-witness and BVIE by exploring the contemporary debates that surround their admission and the notional extent to which BVIT is being used to police the UK. Furthermore, to review whether the advances made in BVIT can contribute to the reliability of the evidence by reducing error rates and false-positive identification.

## Mr Rongliang Ma, Huan Liu, Ke Han and Hao Wu

Dr Rongliang Ma is a senior forensic scientist and manager in Institute of Forensic Science (IFS), Ministry of Public Security (MPS) which is the highest forensic institution in China. He is experienced in fingerprint techniques and crime scene investigation by working in IFS since 1997. He got his PhD from Centre for Forensic Science, University of Technology Sydney, Australia in 2012. He has dealt with over 2,000 serious cases and trained over 4,000 forensic technicians all over China. He is a member of the AFIS working group of Interpol. He has published over 30 academic papers in peer-reviewed journals and spoke in numerous international conference on forensic sciences. He has worked as a secondment in Australian Federal Police (Forensic Services) and South Australian Police (Fingerprint Bureau). He received scholarships from both Chinese and Australian Governments for his achievement in forensic science.

Dr Ma's research area and interests include fingerprint detection and identification techniques, AFIS, the combined application of forensic evidences, microbial forensics, the comparison of domestic and international forensic management systems, the accreditation of forensic laboratories. He has been involved in numerous research projects as primary or main investigators.

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### *The Current Status and Future Directions of Automated Fingerprint Identification Systems (AFIS) in China*

Automated Fingerprint Identification System (AFIS) is one of the fundamental instruments in modern criminal investigation. AFIS has been applied universally in policing in China. In 2014 over two hundred thousand criminal cases were solved using AFIS at provincial level in China. And more than eight thousand criminal cases have been uncovered by cross-provincial assistance of AFIS (or national level) in China.

In the future Chinese AFIS will be developed in the following directions:

1. The National Fingerprint Assistant Search Platform (NAFSP) that would help in cross-provincial searches for fingerprints may be developed.
2. Systematic Accreditation of Provincial AFIS that would eliminate the barriers of different vendors and improve the information communication among different AFIS may be developed.
3. Abatement of the repeated data and the AFIS for duplicate prints may be strived toward.
4. The National AFIS may be established to meet the need to prevent crime.

In summary, the barriers of there being different vendors in each province of mainland China significantly hinder the in-depth application of AFIS. Many approaches have been tried to improve the efficiency of current AFIS. The establishment of National AFIS would be the final solution, although this huge project may take a decade to be completed.

## Testimonial Evidence in Criminal Proof: Common and Civil Law Comparisons

### Associate Dean Zhong Zhang

Zhong Zhang is Associate Professor of Law at Institute of Evidence Law and Forensic Science, China University of Political Science and Law ("the Evidence Institute, CUPL"), a member of the "2011 Plan" of the PRC national government – Collaborative Innovation Center of Judicial Civilization ("CICJC") Doctor of Law, Post Doctorate in Sociology; Visiting scholar of Northwestern University Law School.

While teaching at CUPL, Professor Zhang serves as Associate Dean of the Institute of Evidence Law and Forensic Science, an Executive Committee Member of the 5th International Conference on Evidence Law and Forensic Science. He also serves as Director at the Evidence Institute, CUPL.

Professor Zhang's teaching and research areas include evidence law, criminal procedural law.

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### *Where are the Witnesses? The System of Witness Appearance in Court and its Breakdown in Criminal Procedure in China*

The witness appearance system has achieved a great deal in China in the past thirty years. However, there are serious challenges in implementing the system. The problem of the non-appearance of witnesses has not been solved. Notifying the police officer of the requirement for an appearance in court is more difficult. These factors result in pre-trial testimonial transcripts being used very frequently. Even if the witness comes into court, his/her testimony lacks an effective guarantee for the authenticity. The main reasons for the witness not to testify in court are the flaws in the witness protection system and the lack of financial compensation. In addition, a witness privilege system needs to be established.

### Mr Michael O'Connell APM

Mr Michael O'Connell APM, Commissioner for Victims' Rights, South Australia, which is a position he has held since 2006 when he became the first such Commissioner in Australia. Before this appointment Michael was the State's first Victims of Crime Co-ordinator. Earlier, he served over 20 years in the South Australia Police, including several years as the inaugural Victim Impact Statement Co-ordinator. A life member of the World Society of Victimology, he is also that Society's current Secretary-General. Michael lectures and writes on Victimology, crime prevention and criminal justice. In 1995 he was awarded the Australia Police Medal for his diligent work for, among others, victims of crime; he was a finalist in the 2004 Australian of the Year Awards (South Australia); and in 2010 Victim Support Australasia presented him with its national award in recognition of his efforts in advancing Victimology and promoting victims' rights domestically and internationally.

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### *Victims as Witnesses in Australia's Criminal Justice System*

To paraphrase Andrew Karmen, the criminal justice system would probably collapse without the co-operation of victims, so one would expect that such an important resource would be treated with

respect, dignity and protected from undue hardship. Consistent with this, victims expect to be treated justly, fairly and equitably. Instead, too many victims feel they have been thrust into an overly daunting world governed by legal principles and practices that 'protect the guilty' and impede truth recovery. Some victims describe their experiences in criminal proceedings as 'trial by ordeal'. To alleviate victims and other witnesses concerns, vulnerable witness protection laws and practices have been introduced; witness assistance services have been established; and, modern court-houses have been designed to minimise contact between victims and other state witnesses and accused people, their family and friends. In some circumstances, victims can have legal counsel during criminal proceedings.

### Associate Professor Shanshan Zhao

During 1998 to 2011, she has obtained the degree of Bachelor of Laws from China University of Political Science and Law (CUPL), the Master of Laws from the University of Munich, the Master of Laws and the Doctor of Laws from CUPL. She was the post doctorate in Renmin University of China during 2011 to 2013. Currently she is the Associate Professor of Criminal Justice College under CUPL focusing on the research of criminal procedural law and law of evidence.

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### *The Appearance of Witnesses in Chinese Criminal Proceedings*

It is of great significance for witnesses to appear in court in criminal cases so as to safeguard the right of confrontation of the defendant and achieve judicial justice. However, often the witnesses in criminal cases refuse to appear in court and only give written testimony, and this has become a long-standing problem in the judicial practice of China. In order to solve this problem, the Criminal Procedure Law of China amended and improved the system of the witness appearing in court in 2012. Nevertheless, if the underlying problems in the judicial system of China aren't settled, the system of the witness appearing in court in criminal cases still cannot turn into practicable measures.

### Dr Jacqueline Wheatcroft

Jacqueline Wheatcroft is a Chartered and Practitioner Psychologist (Forensic Specialism). She leads the Witness Research Group in the Institute of Psychology, Health & Society, University of Liverpool, UK. Her interests are broadly in the enhancement of evidence, information and intelligence with a focus on procedural and questioning techniques to increase accuracy and confidence in those information forms.

She upholds interdisciplinarity and her latest work (with Caruso and Krumrey-Quinn) is known to Lord Carlway's Office (Procedure and Evidence Review) in Scotland. The 'rethinking leading' paper, published in *Criminal Law Review*, breaks new ground when cross-examination techniques are under scrutiny as never before. Her work has contributed widely, including witness familiarisation to cross-examination, to the legal and law enforcement agencies Witnesses Charter, The Advocates Gateway, and Judicial College.

Jacqueline is also known nationally and internationally for her development of the Liverpool Interview Protocol (LIP; with Wagstaff); adopted by law enforcement agencies in Canada, used in the UK as



an interview tool and post-incident management protocol, and by the United Nations and Government in investigations.

Jacqueline's vision is that all witnesses and interviewees can be supported to give of their best evidence, in investigations, interviews and judicial settings worldwide.

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### *The Appearance of Witnesses in Chinese Criminal Proceedings*

Since the 1700s lawyers have controlled interactions with witnesses in court. Witness familiarisation endorsed in *R v Momodu* [2005] aimed to demystify the process and, through practical guidance, assist witnesses to give their best evidence in legal proceedings, with the result that they are less likely to be confused, misled or unduly influenced by the process of cross-examination. This paper outlines

empirical research, which indicates familiarisation can be helpful; though argues that justice systems should develop to best practices for elicitation of accurate evidence and not leave it to witnesses to combat the system's shortcomings. Given this is particularly acute for vulnerable witnesses (and familiarising witnesses to cross-examination is in its infancy), the paper suggests refinement of the question form shown to create the primary mischief in meeting trial goals. It draws attention to *R v Lubemba* [2014], which suggests there is no right to put a case to a witness in child cases.

STREAM 3C (Napier G04)

## New and Emerging Medical Forensics

### Professor Roger Byard AO PSM

Professor Roger Byard holds the George Richard Marks Chair of Pathology at the University of Adelaide and is a Senior Specialist Forensic Pathologist at Forensic Science SA in Adelaide, Australia. He qualified in medicine in Australia in 1978 and became a licentiate of the Medical Council of Canada in 1982. He has published, or has in press, over 600 papers in peer-reviewed journals, and coedited *Sudden Infant Death Syndrome* (Arnold, 2001), the four volume *Encyclopedia of Forensic and Legal Medicine* 2nd ed. (Elsevier/ Academic Press, 2015) and the two volume *Forensic Pathology of Infancy and Childhood* (Springer, 2014), wrote *Sudden Death in the Young* (3rd ed) (Cambridge University Press, 2010) and coauthored the *Atlas of Forensic Pathology* (Springer 2012). He is the Editor-in-Chief/Managing Editor of *Forensic Science Medicine and Pathology*. He was awarded the Humanitarian Overseas Service Medal (HOSM) and the Australian Federal Police (AFP) Operations Medal for disaster victim identification work in Bali after the bombings in 2002 and in Thailand after the tsunami in 2004.

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### *The Forensic Implications of Herbal Medicines*

Forensic issues that have arisen around the world with herbal medicines include contamination with heavy metals such as mercury and lead, substitution of cheaper and more toxic materials for more expensive ingredients, and the addition of standard pharmaceutical drugs such as steroids, antihistamines and antiepileptics. In addition there have been well-documented interactions between certain herbs and prescription medications. The pathologist performing a coronial autopsy relies on information provided by investigating police officers at the death scene which often includes a list of prescribed medications. Unfortunately this information rarely, if ever, includes herbal remedies. Other problems that occur in clinical assessments are that herbal preparations may alter laboratory test results and also predispose to bleeding problems. It is for this reason that the

American College of Anesthesiologists recommends that herbal medicines should be stopped for at least two weeks before any surgical operation. As it is not standard practice to check for herbal medicines in forensic evaluations, and as toxicological testing for organic molecules is very difficult, it is simply not clear what role herbal medicines may be playing in medicolegal cases. There is a case for establishing a new sub-discipline of forensic herbal toxicology.

### Professor Xu Wang

Xu Wang is Professor of Forensic Science at Institute of Evidence Law and Forensic Science, China University of Political Science and Law ("the Evidence Institute, CUPL"), leader of Forensic Clinical Medicine Subject and Master Supervisor. She is also a Council Member of Chinese Association of Legal Medicine; the expert of Judicial Technology Identification Council of the Supreme People's Court; and is the expert of Medical Negligence Identification Council of Chinese Medical Association.

Professor Wang has been engaged in Teaching, Researching Legal Medicine and Forensic Service for a long period. She has participated more than 10000 cases of appraisals, and has rich experience in her field. She has been presided two National Natural Science projects and three provincial level projects, and published more than 50 papers.

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### *Clinical Forensic Medicine in China: History, Current Situation and Development*

Clinical Forensic Medicine (CFM) in China has developed rapidly during the past 30 years and formed characteristics of its own under the special legal system. Although appraising injuries of the living body, which has a long history in China, it did not become a professional technical work performed by professional appraiser until the late 1970s. At present, it has become the most active branch subject of forensic science and has assisted to solve many problems

concerning living body injuries which related to law, including: appraising the degree of living body's injury, evaluating the disability associated with personal injury, identifying the relationship between injury and diseases estimating medical malpractice and so on. Until 2013, according to incomplete statistics, CFM had 2951 separate forensic agencies (including universities, hospitals, the Institute of Forensic Sciences of the Ministry of Justice and others) and 19278 experts who finished 961989 cases. CFM has obtained many academic achievements in recent years.

## Dr Stephen Wills

Originally from the United Kingdom and graduated in dentistry in 1993 from the University of Birmingham and following a year in general dental practice, trained in Oral Surgery and Oral Medicine, gaining Fellowship in Dental Surgery from the Royal College of Surgeons of England and an MSc in Oral Pathology from the University of London. Graduated in Medicine in 2001 from the University of Birmingham and subsequently trained in Anatomical Pathology in Leeds and in Forensic Pathology in Liverpool, gaining Fellowship of the Royal College of Pathologists in 2008. He was a Consultant Pathologist to the UK Home Office until November 2009 when he migrated to Australia, initially as Staff Specialist in the Department of Forensic Medicine in Glebe, NSW and gaining Fellowship of the Royal College of Pathologists of Australasia. He was subsequently appointed as an examiner for the FRCPA in

Forensic Pathology. Moved to Forensic Science SA in 2012 and has been involved in the introduction of post-mortem CT and MRI imaging into casework at FSSA, gaining further training at the Victorian Institute of Forensic Medicine and at the University of Zurich.

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## *Cross-Sectional Imaging in Medico-Legal Autopsy Practice: An Overview*

Although the use of cross-sectional imaging (CT and MRI) is routine in clinical medicine, its use in medico-legal autopsy practice has been more limited. More recently, the advantages that this imaging technology can bring to autopsy practice have become apparent, research and publications in the field have expanded significantly and its use in forensic practice has become more widespread. Differences in the availability and application of this technology are apparent both nationally and internationally. Imaging technology has the potential to augment the post-mortem examination and has been proposed as a potential alternative to the autopsy in some circumstances. Images generated by this technology have significant potential for use as evidence in Court. However, imaging the deceased is not without issues, including questions regarding diagnostic accuracy as the sole means of determining the cause of death to the necessary legal standard, cost and availability, differences in interpreting findings in the deceased compared to the living, issues regarding continuity and admissibility in Court and the crossing of professional boundaries within medicine between Pathologists and Radiologists.

STREAM 1D (Napier 102)

## Miscarriages of Justice: Lessons of Proof and Practice

### Associate Professor Hongqi Wu

Hongqi Wu is Associate Professor of Law at Institute of Evidence Law and Forensic Science, China University of Political Science and Law ("the Evidence Institute, CUPL"), a member of the "2011 Plan" of the PRC national government – Collaborative Innovation Center of Judicial Civilization ("CICJC"). He received Ph.D from China University of Political Science and Law. He began his research career in Law School of Xiamen University (2010-2013) and joined CUPL in January 2014.

While teaching at CUPL, Professor Wu serves as an editor of *Evidence Science* – a leading Chinese law journal focusing on studies of evidence law and forensic science.

Professor Wu's teaching and research areas include evidence law, civil & criminal procedural law, and legal ethics. He has published *The Logic of Transformation: Circumstance and Construction of Evidence Law* (treatise), *Rethinking Evidence: the Exploratory Essays* (translation), *Theories of Evidence: Bentham and Wigmore* (translation) and dozens of papers on evidence law.

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### *Miscarriage of Justice and Responsive Reform of Evidence Law in China*

The reform of evidence law in China in recent years has been carried out in the way of responding to the wrong convictions which has been exposed more and more frequently. The basic steps of this responsive reform include finding of Miscarriage of Justice, public opinion and political affection, issue of judicial interpretation and adoption of litigation and so on. The responsive reform of evidence law is carried out in the special social background in China. By comparing the 'model of case by case' of the U.S and the 'model of systematic responding' of the UK, we will find many features and constraints of the reform. This reform has advantages of focussing on problems and going with the flow, but also has some disadvantages, such as lacking comprehensive consideration and supporting institutions.

## Adjunct Professor Barbara Etter APM

Barbara is the Principal of B*ET*ter Consulting, a boutique legal practice based in Hobart which specialises in post-conviction reviews, coronial matters and possible Miscarriage of Justice cases (see [www.betterconsult.com.au](http://www.betterconsult.com.au)). She has had 30 years of distinguished police service in various jurisdictions and reached the rank of Assistant Commissioner in WA Police. In 2008 was awarded the Australian Police Medal (APM) in the Australia Day Honours List.

Barbara is a member of the Australian and New Zealand Forensic Science Society and the Australian Academy of Forensic Sciences. She holds a Pharmacy degree, an Honours law degree, an MBA, a Master of Laws and the AICD Company Directors Course Diploma. She is a Fellow of the Australian Institute of Company Directors (FAICD), a Fellow of the Australasian College of Biomedical Scientists (FACBS) and an Adjunct Professor within the School of Law and Justice at Edith Cowan University. She is also a University Fellow with Charles Darwin University.

In 2006, Barbara won the WA Telstra Businesswoman of the Year. In 2014, she was inducted into the Australian Businesswomen's Network Hall of Fame.

Barbara is currently involved in seeking to get the Sue Neill-Fraser 2010 murder conviction back before the courts in Tasmania.

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### *Miscarriages of Justice: What have we Learned (or Not Learned!) 30 Years on from Chamberlain*

In 2010, Ms Susan Neill-Fraser was convicted of murdering her long-time partner, Mr Bob Chappell, in the yacht *Four Winds*, moored off Sandy Bay Hobart, on Australia Day 2009. On the morning of 27 January 2009, the yacht was found sinking and there was no sign of Mr Chappell. Indeed, his body has never been found. The Court acknowledged that this case was an entirely circumstantial one. In fact, there was no body, no weapon, no eyewitnesses, no admissions or confession and no forensic science linking Ms Neill-Fraser to the crime. The Crown case contended that the victim had been hit from behind in the saloon of the vessel with a wrench or stabbed by a screwdriver. No weapon was ever presented to the court as an exhibit. The DNA of a homeless girl found on the deck of the yacht was suggested by the DPP to have come in on the bottom of someone's shoe. An appeal to the Tasmanian Court of Criminal Appeal failed as did an application for special leave to appeal to the High Court.

Ms Neill-Fraser continues to vehemently protest her innocence. The paper will outline some startling new developments in the case, including new independent expert evidence on the DNA evidence in the case. The speaker poses the question whether forensic science, many years on from Chamberlain and Splatt, is still experiencing similar issues given what appear to be serious, and possibly systemic, issues in the interpretation and presentation of presumptive testing results concerning luminol. The issue of forensic standards and their implementation and enforcement will also be covered.

The paper will outline the reluctance of the system to admit that it may have made a mistake and the legal and cultural challenges in overturning a wrongful conviction. The importance of engaging productively with the media, legal champions and academics will also be covered.

The paper will talk about the much needed reform that is required to ensure the prevention of future miscarriage of justice cases as well as the value of initiatives such as Innocence Projects, further right to appeal legislation and the establishment of a Criminal Cases Review Commission in Australia, as in the UK. Such initiatives will be invaluable in "Curing Injustice".

Finally, the paper will cover the landmark Henry Keogh decision in SA in late 2014 and developments in Tasmania in relation to the introduction of further right to appeal legislation.

## Dr Delia Qinghong Lin

Delia Lin obtained her PhD from the School of Humanities at Griffith University in politics and culture. Her research centres on political discourse, politics of emotions and socialisation of ideas. She is completing her manuscript on civilising projects in post-Mao China.

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### *Notions of Justice: a Comparative Cultural Analysis*

Whereas Western philosophical accounts of justice focus on understanding justice in terms of respecting individuals as equally free and rational agents, this is hardly the case with Chinese traditional political philosophies. This paper places Confucian and Legalist notions of justice under scrutiny by surveying the various uses of justice, expressed by *yí*, as well as its related concepts, in two Confucian canonical texts, *the Analects of Confucius* and *Mencius* and the representative Legalist text, *Hanfei*. It argues that there is significant dissonance between the kind of justice as a moral doctrine directly connected with legitimacy and moral supremacy of the ruler and a person in a social structure, coined high justice, and the kind of justice that matters to fair treatment of individuals with grievances, coined low justice. What a disconnection between high and low justice means to a political society is that there can be an infinite number of miscarriages of justice and grievances can be as entrenched and this does not affect the moral supremacy of governance. Unless open, critical philosophical debates on different conceptions of justice are allowed and encouraged, building a sustainably just society may remain a Chinese dream for the distant future.



## Reasoning and Efficiency in Modern Litigation

### Professor Ronald J. Allen

Professor Allen is the John Henry Wigmore Professor of Law at Northwestern University, in Chicago, IL. He did his undergraduate work in mathematics at Marshall University and studied law at the University of Michigan. He is an internationally recognized expert in the fields of evidence, criminal procedure, and constitutional law. He has published seven books and over 100 articles in major law reviews. He has been quoted in national news outlets hundreds of times, and appears regularly on national broadcast media on matters ranging from constitutional law to criminal justice. The New York Times referred to him as one of nation's leading experts on constitutional law and criminal procedure. He has worked with various groups in China to help formulate proposals for legal reform, and he was recently retained by the Tanzanian Government to assist in the reform of their evidence law.

#### *Probability as a Tool of Plausible Reasoning*

Conventional probability theory, including Bayes' Theory, is a useful heuristic for understanding various aspects of juridical proof. However, it does not capture the essence of juridical proof and is completely virtually useless regarding prescriptions for juridical proof. This is because the essence of juridical proof is captured by plausible, not probable, reasoning. These ideas are explained and their implications demonstrated in this paper.

### Mr Martin Hinton QC SG

Martin Hinton QC is Solicitor-General for South Australia. He was appointed to that position in August 2008. Prior to that he was the Deputy Director of Public Prosecutions. He has undergraduate degrees from the University of Adelaide and has undertaken post graduate study at the London School of Economics and Political Science. He is an Adjunct Professor of Law at the University of Adelaide.

#### *Hearsay, the Expert and Cross-Examination*

The subject of this paper is the occupational experiential witness, in particular the specialist law enforcement officer. Such witness possesses specialist knowledge by dint of their experience in areas ranging from accident reconstruction and blood spatter analysis to gun and drug trafficking and the nature and operations of outlaw motorcycle gangs. Law enforcement being what it is, this specialist knowledge is often shared amongst similarly experienced officers in different jurisdictions. More than that, it often becomes the focus of agreed rules between authorities in different jurisdictions that govern the gathering, collation, synthesis and distribution of this knowledge. Allied to this is the dissemination of publications such as briefing papers, bulletins and intelligence updates that serve to update and inform officers. Shared knowledge and these publications and their content quickly form part of the knowledge base of the occupational experiential witness. The question arises, this material being hearsay, to what extent may the occupational experiential witness rely upon it as forming part of the basis of his or her opinion, and, if they may rely upon it, what should the cross-examiner do?

### Mr Zhefeng Xu

Zhefeng Xu is a traffic policeman of Guangzhou Public Security Bureau. He has obtained the senior qualification for road traffic accident handling, the title of traffic management technology projects engineer and master's degree in law. He is hired as legal expert by Traffic Management Bureau of Guangdong Provincial Public Security Department, specially invited researcher of Guangzhou Public Security Bureau, guest professor of Pearl River Delta's Public Security Research Institute of Guangdong Police College and Guangzhou Public Security Key Research Base, part-time instructor of Traffic Management Bureau of Guangdong Provincial Public Security Department, Guangzhou Public Security Bureau and Guangdong Police College. Zhefeng Xu is mainly engaged in the work of road traffic accidents handling and professional training. He has published many professional papers in the field of road traffic accident handling, and once participated in the research work for the legislation of Guangdong Province Road Traffic Safety Regulation.

#### *The Application of the Logical Rules in the Evaluation of Indirect Evidence Chain in Hit-and-Run Traffic Accident Cases*

The logic rules are a set of judgment rules for people to reflect, induce and deduce the development law of the world. Logic rules applied in the investigation and judgment of evidence can help to find the direct or indirect link between evidence and the facts of an accident, therefore providing support and assistance for accident identification. It is particularly necessary to apply logic rules to evaluate an indirect evidence chain in the investigation of hit-and-run traffic accidents. This article demonstrates the specific application of the rules to the investigation of a serious hit-and-run traffic accident cases. During the investigation process, through the comprehensive analysis of all indirect evidence such as site inspection data, video monitoring data, witness testimony and expert conclusions, along with the direct evidence of the parties' statements, a complete chain of evidence can be formed to identify the suspect's vehicle and accident facts. It is submitted that effective application of logic rules in the evaluation of indirect evidence in hit-and-run traffic accident cases can provide more clues and narrow the scope of investigation, as well as improving the efficiency and accuracy of investigation. This, therefore, helps to identify the facts of an accident.

### Associate Professor Gefei Ji

Professor Gefei Ji is a faculty member of China University of Political Science and Law. She has worked as visiting scholar in Oxford University for one year. For the past years, she has four books published, one book as author, 3 books as co-author, and submitted over 15 academic articles on academic CSCI (Chinese Social Sciences Citation Index) magazines. She was involved in about seven projects sponsored by the China Law Society, Ministry of Justice P.R.C, Ministry of Justice P.R.C and National Program of Philosophy and Social Science. Her paper of Modern Transfer of Traditional Evidence Law, won first place prize in the 2nd National Outstanding Science Research Awards of Youth Civil Procedural Law from Chinese Law Association, September 2009.

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### *Western Mechanisms and the Chinese Solution on the Effect of “Issue” in Evidence Law*

Against a different procedural background, common law and civil law countries base their issue regulation on “due process” and “realty” grounds, which are devoted to the different regulation of the “collateral estoppel” rule and the “official documentary evidence” rule. The common law/civil law divide in legislation is decided by the following factors: whether judicial resources can be saved greatly by the broadened preclusion effect; the extent of the fact being investigated; the possibility of using prior judgment; and the possibility of inconsistency by new trial. China has more common traits in process structure and trial mechanism with civil law countries, which suggest that we should put focus on the “realty” of the former judgment, and make the evidentiary use of the correct findings in prior actions. This also means that we should pursue a consistency of judgment on the basis of justice.

### **Dr Anna Olijnyk**

I am a lecturer at Adelaide Law School. My PhD thesis, for which I received a Dean’s Commendation and Bonython Prize, examined the role of the judge in mega-litigation. My research focuses on the role of courts in government and society, spanning the areas of constitutional law, administrative law and civil procedure.

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### *How do Judges Reconcile the Aims of Justice and Efficiency in Mega-Litigation?*

Extremely complex civil litigation (sometimes known as ‘mega-litigation’) places enormous demands on the justice system. A single case of mega-litigation can monopolise a judge for months or even years. These cases are a drain on public resources and divert court time from the many other cases within the court system. Therefore, when judges deal with mega-litigation, considerations of efficiency inevitably enter into decisions about how to manage the case. How can judges reconcile the aim of efficiency in mega-litigation with the duty to do justice between the parties in the case?

My paper draws on interviews with judges who have experience in mega-litigation (as either trial judge, pre-trial case managing judge or as head of jurisdiction). I identify the techniques and philosophies that judges use to avoid and, where necessary, resolve, tension between justice and efficiency in mega-litigation.

## Electronic Data Preservation, Recovery and the Internet in Modern Litigation

### Ms Felicity Gerry QC and Dan Svantesson

Felicity Gerry QC was called to the Bar in England and Wales in 1994 and took silk in 2014. She is also admitted to the Supreme Court of the Northern Territory of Australia where she is coordinating a legal clinic, launching an innocence project and has a grant funded project on women's health and the law. She has been recognised in the UK Legal 500 as a "Fearless and effective advocate" and "Tenacious in court" and "An expert in the field of sex offences" and in Chambers and Partners UK as "A vastly experienced advocate noted for her experience in serious sexual cases, homicides and frauds". At the independent Bar, Felicity has prosecuted and defended in numerous cases involving major, serious and complex crime, often with an international element. This has included cross-jurisdictional rape, murder by foreign nationals involving evidence obtained from abroad, conspiracy to import illegal immigrants and international fraud. Her significant trial and appellate experience has also led to an expertise in online offending in the context of online abuse and exploitation, money laundering and online fraud. She has, for example, used data and metadata as evidence in criminal cases. Since 2013, Felicity has also held a research active post in the School of Law at Charles Darwin University, in the Northern Territory of Australia, focussing on transnational criminal law and human rights, particularly in the context of violence against women and girls and the rule of law online. She lectures in advanced crime, evidence and contemporary issues and is Chair of the Research and Research Training Committee in the School of Law at Charles Darwin University. Felicity is also co-author of *The Sexual Offences Handbook* (2nd Edition 2014) that sets out all the English law, practice and procedure from 1957 to date in this difficult field of law and has a dedicated chapter on online offending. She is on the Professional Board for Computer Law and Security Review. She regularly publishes in the broadsheet and legal press as well as peer reviewed papers. Her research into the global law on human trafficking recently enabled her to assist transnationally in the reprieve from execution of Philippine national Mary Jane Veloso. Felicity has published papers on human trafficking, female genital mutilation and global cyber law in the context of human rights. She recently provided a report for the ILRC of the American Bar Association Justice Defenders Programme on the draft cyber law for Cambodia. She is a popular speaker and can be followed on twitter @felicitygerry.

### *Access to Extraterritorial Evidence: The Microsoft Cloud Case and Beyond*

A case involving Microsoft that is currently before the US courts has raised important issues between the respective legal regimes in the European Union and the United States, particularly in relation to the protection of personal data. The case in question has given rise to a degree of legal uncertainty and the outcome could have potentially serious implications for data protection in the EU. By seeking direct access to data held in the EU through the US judicial system, existing legal mechanisms for mutual assistance between jurisdictions may be being effectively bypassed. There are fundamental issues at stake here as regards the protection of personal data that is held within the European Union. This is clearly an area where technological advances have taken place in a very rapid fashion. The right to

privacy should be afforded maximum protection whilst ensuring that law enforcement agencies have the necessary mechanisms at their disposal to effectively fight serious crime.

### Mr Xiaodong Xu

Xiaodong Xu is a computer forensic expert at Fada Institute of Forensic Medicine & Science, China University of Political Science and Law. He received Master Degree from Henry C. Lee College of Criminal Justice and Forensic Sciences in 2008. He joined CUPL in July 2011, after two years of service as a teaching assistant in UNH.

Mr Xu's research interests include digital evidence forensic, cyber crime, evidence law research and comparison. He joined the national project *Spooled Print Evidence Research* and drafted documents and relevant regulations. He is also an editor of *Journal of Forensic Science and Medicine* which is the first English version of forensic journal in China.

### *Cybercrime in China: from PC Internet to Mobile Internet*

According to the latest report by the China Internet Network Information Center (CNNIC), China had 649 million internet users by the end of 2014, which is the largest internet population, with 557 million of those using handsets, such as a smartphone or tablet to go online. The Chinese government is developing the "Internet Plus Action Plan" to integrate the mobile internet, cloud computing, big data and the "Internet of Things" with modern manufacturing. It is obviously that the mobile Internet is replacing the PC Internet in China. To put matters in perspective, the Internet, especially the mobile Internet, has become an integral part of the lives of Chinese people, by providing a more convenient and efficient life. However, on the other hand, cyber criminals have found a big playground in this new technology. They adapt to the new environment by adjusting and improving their criminal method. Actually, mobile Internet cyber-crime has become a growing concern because of its potential for widespread impact, stealth of network, and devastating financial impact. China has been experiencing a sharp rise in cybercrimes from all aspects of the mobile Internet. To understand the situation it is important to compare the details of PC internet cyber-crimes and mobile internet cyber-crimes. This article addresses this issue on three aspects: in the first part, traditional PC internet cyber-crimes are reviewed; in the second part, mobile internet cyber-crimes are examined in detail; in the third part, comparisons of these two periods of cyber-crimes are presented in order to set forth the countermeasures against cyber-crime in the mobile internet era.

### Mr Nigel Wilson

Nigel Wilson has practised law in all areas of commercial and civil litigation for over twenty years, including as a Barrister at Bar Chambers since 1995. Nigel holds degrees in Law (Honours-First Class) and in Economics from the University of Adelaide and a Masters degree, the Bachelor of Civil Law degree, from the University of Oxford.

From 2011 to 2015 Nigel was also Senior Lecturer at the University of Adelaide Law School where he was the Course Co-ordinator of the Evidence subject in the undergraduate programme and of both the Insurance Law and Technology, Law and Society subjects in the Master of Laws programme. He has also been the Director of the Technology Regulation and Information Policy Research Group and Special Counsel (Legal and Regulatory) of the Convergent Communications Research Group at the University of Adelaide.

Nigel was the Chair of the *International Workshop on e-Forensics Law* for the *e-Forensics 2009 Conference*. He was a joint author of a Report to the Commonwealth of Australia's Department of Broadband, Communications and the Digital Economy in relation to the privacy, security and identity management implications of cloud computing.

Nigel has a particular interest and expertise in the law of evidence, digital forensics, insurance law, risk management, security and technology. He has presented and published nationally and internationally in his areas of expertise.

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### ***Matter, Metadata, Miniaturisation and the Misty Cloud: Challenges for Preservation and for Discovery Protocols in the Digital Age***

Recent cases in Australia, and internationally, demonstrate that digital evidence continues to present considerable challenges in the pre-trial stage.

Developments in information and communications technologies, principally the preservation and retrieval of metadata, the miniaturisation of technologies and the ubiquitous impact of cloud computing, are the key drivers of change and the key challenges for effective, cost-efficient litigation processes. Discovery protocols have had both procedural and trial impact, particularly where there has been non-compliance with court orders.

Future challenges will arise from Australia's implementation of the European Convention on Cybercrime, which will require mutual assistance to be given by both law enforcement agencies and industry to expedite the interception, real-time collection, access to, preservation and disclosure of digital evidence.

The "Internet of Things" is estimated to be in the many billions of devices and is taking hold in the Digital Age. Courts, both technology-aware and adept, will play a leading role in protecting rights and in ensuring the due administration of justice.

### **Assistant Professor Zhuhao Wang**

Zhuhao Wang is Assistant Professor of Law at Institute of Evidence Law and Forensic Science, China University of Political Science and Law ("the Evidence Institute, CUPL"), a member of the "2011 Plan" of the PRC national government – Collaborative Innovation Center of Judicial Civilization ("CICJC") and a member of the "111 Plan" of the PRC national government – Base for Evidence Science Innovation and Talent Recruitment ("BESITR"). He received J.D. from Indiana University Bloomington – Maurer School of Law, and L.L.M. from University of Pennsylvania Law School. He joined CUPL in December 2012, after two years of law practice in cross-border mergers & acquisitions and corporate transactions with Locke Lord LLP in Dallas, United States.

While teaching at CUPL, Professor Wang serves as Associate Executive Director of the International Association of Evidence Science, an Executive Committee Member of the 5th International Conference on Evidence Law and Forensic Science and is a member

of the International Association of Procedural Law. He also serves as Director of International Cooperation and Exchange at the Evidence Institute, CUPL and is an editor of *Evidence Science* – a leading Chinese law journal focusing on studies of evidence law and forensic science.

Professor Wang's teaching and research areas include evidence law, civil & criminal procedural law, and international business transactions. He is a recipient of multiple grants from the PRC national government, including a grant from the "2011 Plan" – CICJC and a grant from the PRC Ministry of Education for his teaching and research.

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### ***A New Evidentiary Frontier: Considerations in Admissibility of Electronic Evidence from a Comparative Law Perspective***

Electronic communications have revolutionized how the world does business, learns about and share news, and instantly engages with friends and family. Various forms of electronic writings are increasingly being used in both civil and criminal litigations all over the world, and challenge evidentiary rules grounded in a more tangible former reality. Because electronic evidence is vulnerable to manipulation and questions of authorship are often hotly disputed, the requirement to "authenticate" is usually the most difficult challenge to overcome. Each of the major categories of electronic evidence – website data, social network communications, email, instant text messages and computer stored/generated documents – poses unique problems and challenges for proper authentication and deserves independent consideration. This paper examines considerations in admissibility of electronic evidence by a comparative study of United States and China's experience. A classic five-step analytical framework provided in a judicial opinion that came out of a U.S. federal district court in 2007 takes us a good step toward understanding how electronic writings can be admitted as evidence under the traditional evidentiary rules. On the other hand, although China is also accelerating into the Digital Era, its legislations and judicial practice are still at the very preliminary stage in handling the validity of electronic evidence.

### **Ms Xiaoming Chen and Shaopei Shi**

Xiaoming Chen is master student at Institute of Criminal Justice, East China University of Political Science and Law, who is joint trained by Institute of Forensic Science, Ministry of Justice, PRC. Her major is Forensic Sciences and law, due to the complex structure of cross-disciplinary knowledge, she studies more spacious.

Participation in Research projects of the National "Twelfth Five-year" Plan Support Programs for science and Technology- "On key technologies of Judicial Identification", presiding over two graduate students academic activities of innovative projects improved her research ability. 6 Papers published on "*Computer Science*" and other journals, 3 awards in the 5th "United Nations Asian crime Prevention Foundation" Academic Innovation Competition and other academic competitions, actively participation in China-US outstanding Youth Project and Cross-strait Youth Exchange Program all witnessed her progress.

Her tutor, Mr. Shaopei SHI, is the Deputy Director of Department of Criminalistics at IFS, Ministry of Justice, PRC. His research areas include Electronic Forensics and Evidence Law. During the internship, she mainly engaged in judicial authentication case practice and evidence theoretical learning under her mentor's guidance. Based on strong interest and the instructions of her tutor, a certain amount of research was done on rules of reviewing electronic data evidence.



Evidence law and Forensics are her research areas. Her hard work in the study laid a more solid theoretical foundation and guaranteed her the National Postgraduate Scholarship. She feels honored to participate in this academic feast, and looking forward to a good communication.

Rule and Best Evidence Rule. We research its applications from the perspective of the Court and Procuratorate and we can find the supervision system of reviewing electronic data evidences. So, some assumptions about the rules of reviewing electronic data evidences can be given in our society.

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### *On Rules of Reviewing Electronic Data Evidences*

Electronic data evidence is a result of the scientific development of information technology. Its effect on proving the facts of cases is becoming more and more obvious. There has been significant research into this in academic circles. Its appearance also brings new problems of reviewing evidence in judicial practice. It will necessarily bring the impact of traditional evidence rules. However, in China, the lack and lag of the electronic data evidences legislation and rules of reviewing evidence block the application. This thesis will contrast the domestic and foreign rules of electronic data evidences, such as Hearsay Rule, Illegal Evidence Exclusionary Rule, Corroboration

STREAM 1E (Napier 102)

## International Issues of Law and Forensics – Specialist Session: Evidential Issues and Proof in International Arbitration

### Ms Fan Yang

Ms Yang is a CIETAC arbitrator and a mediator of the CCPIT/CCOIC Mediation Center. She is also a member of the CI Arb.

Ms Yang joined CIETAC in 2003, and she is now the Deputy Director of the Arbitration Research Institute of CIETAC. She has administered over 100 international and domestic arbitration cases involving trade, investment and other commercial disputes, and has worked with arbitrators from different jurisdictions. She also had experience of cases applying arbitration rules other than CIETAC Rules, such as UNCITRAL Arbitration Rules. She has scrutinized over 100 jurisdictional rulings and over 400 arbitral awards. She is an editor of the Periodical *Arbitration and Law*, the drafter of the CIETAC Construction Dispute Review Rules, and a member of the CIETAC Case Compiling Committee.

M Yang is a qualified PRC and New York lawyer. She received her LLB and LLM degrees from China Foreign Affairs University (formerly known as Foreign Affairs College) in 2000 and 2003 respectively, and received her LLM degree from New York University School of Law in 2011. She is currently a Ph.D. candidate at Tsinghua University School of Law.

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### *Evidence and Proof in CIETAC Arbitration*

In today's international commercial arbitration, in line with its goals and features, few people would apply the stringent evidence rules employed in litigation. Party autonomy being the highest value in arbitration, evidence rules applied in arbitration are mainly left to the discretion of the arbitral tribunals and the parties. The different

traditions of the Civil Law and the Common Law do have great impact on the evidence practice in arbitration. The most frequently used evidence rules in international arbitration, the IBA Rules on the Taking of Evidence in International Arbitration ("IBA Rules") is a product of compromise between the two major legal systems.

The presentation will focus on the current evidence rules and practice in CIETAC arbitration, which are incorporated and reflected in the new CIETAC Guidelines on Evidence ("Guidelines") effective as of 1 March 2015. Fitted in China's legal framework and its Civil Law tradition, the new Guidelines also draw on the successful experience of the IBA Rules. It is an effort to answer the needs of arbitration to deal with issues of evidence in a more efficient manner as well as in a cross-culture setting. The presentation will introduce the new Guidelines from four aspects: (1) Burden of Proof, (2) Submission, Taking and Exchange of Evidence, (3) Examination of Evidence, and (4) Assessment of Evidence, along with discussions on CIETAC's practice.

### Mr Andrew Robertson

Andrew Robertson is a partner at the national Australia law firm Piper Alderman where he practices in the area of dispute resolution. He has over 20 years experience acting in commercial, contractual and construction disputes across Australia.

He has bachelor degrees in Economics, Law (with Honours) and Commerce from the University of Adelaide and a Masters in Construction Law from the University of Melbourne. During his studies at the University of Melbourne he was the prize winner in Advanced Construction Law.

He is a Fellow of multiple arbitral bodies: Chartered Institute of Arbitrators, Institute of Arbitrators and Mediators Australia, Australian Centre of International Commercial Arbitration and Philippine Institute of Arbitrators Inc. He is a panellist with many of these bodies and the Kuala Lumpur Regional Centre for Arbitration and Hong Kong International Arbitration Centre. He has spoken and written on arbitration and ADR at conferences in Australia and overseas, and has been published.

He is co-chair of the South Australian Law Society's International Legal Practice Committee and is a member of ADR and construction law committees with Australian and international professional bodies. He is a foundation and continuing director of the Society of Construction Law Australia.

He is also an accountant and a Fellow of CPA Australia.

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### *An International Approach to Evidence – Can there be One?*

The global nature of international arbitration requires a process retaining that which is essential and encourages rejecting that which may be culturally dear but is not necessary for a binding award. Discerning the difference is the difficulty but it is an endeavour which many have attempted. From an Australian perspective this is demonstrated by publications such as the International Bar Association's "Rules on the Taking of Evidence in Arbitration". CIETAC has however made its own attempt to identify the essential evidential steps. Underlying these steps is also the potentially differing priorities seen as implicit in the process. The common law system can have misgivings with the Chinese emphasis on mediation in arbitration. How can we go about to further distilling the common elements to the rules of evidence from a Chinese and a Western perspective?

### **Ms Edwina Kwan**

Edwina is a Senior Associate with Herbert Smith Freehills specialising in international arbitration and cross-border litigation. She is currently based in Sydney having recently returned from 7 years practising law in Beijing and Hong Kong.

Edwina advises commercial clients, governments and state owned entities in the private equity, telecommunications, construction, energy & resources, banking & finance and international trade sectors. She has experience representing clients in arbitration proceedings before tribunals in a number of jurisdictions including under the ICC, HKIAC, LCIA, SCC, SIAC, CIETAC, ACICA and UNCITRAL arbitration rules.

Prior to working as a disputes lawyer in the corporate sector, Edwina worked on a landmark Native Title case in Western Australia and as an advisor to the Commonwealth Attorney-General's Department on national security matters, including providing legal advice on the status of Australian detainees in Guantanamo Bay. She has also been active as a pro bono lawyer for asylum seekers detained on Christmas Island regarding their refugee status in Australia.

Edwina is a Co-founder of the China Young Arbitration Group in Beijing, is a guest lecturer for the Masters of Law program in International Arbitration and Dispute Settlement at Tsinghua University, Beijing and is a faculty member for the Chartered Institute of Arbitrators Diploma in International Commercial Arbitration. Edwina is admitted in New South Wales, Hong Kong and the High Court of Australia. She is a native English speaker and is also proficient in Mandarin.

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### *Privilege in International Arbitration: An Asia-Specific Perspective*

Privilege issues often arise in international arbitration and the outcome of any privilege claims have an important impact on the admissibility of evidence. Despite the frequency with which privilege claims are asserted, there is no firm consensus on the relevant law applicable to privilege claims and inconsistency in the approach arbitrators take in determining privilege claims. This is chiefly due to the fact that there is a general divide between the approach to privilege in common and civil law jurisdictions and arbitration rules offer little guidance on how to approach privilege claims. This lack of consistency means that businesses operating across borders are at particular risk of exposing often sensitive and damaging documents to disclosure in jurisdictions in which they are active, despite the fact that the same documents may be protected in their home jurisdiction. The fact that a certain document may be considered privileged in one jurisdiction does not mean that it will be similarly protected in other jurisdictions. This presentation will review the law of privilege in key jurisdictions across Asia-Pacific and will review common approaches to privilege claims with the aim of providing some clarity and practical tips on what can be a complex evidentiary issue.

## Unlawfully Obtained Evidence in The East: The Effect of Western Ideology

### Professor Zhiyuan Guo

Guo Zhiyuan is a Professor of Law at China University of Political Science and Law (CUPL) and a member of the “2011 Plan” of the PRC national government – Collaborative Innovation Center of Judicial Civilization (“CICJC”). Prof. Guo is a Phi Beta Kappa graduate of CUPL (LL.B in law, 1997). She also received her Master's Degree and Ph.D in Criminal Procedure from CUPL in 2000 and 2003 respectively.

While teaching at CUPL, Prof. Guo serves as the Deputy Director of the Center for Criminal Law and Justice. She is an Adjunct Professor at Buffalo State College (US) and Chinese University of Hong Kong. She is also a Non-resident Senior Research Fellow at US-Asia Law Institute, New York University School of Law. Prof. Guo was appointed as Guanghua Visiting Scholar at NYU School of Law from 2008-2009 and as Sohmen Visiting Scholar at Faculty of Law, Hong Kong University in spring 2011. She was just appointed as Fulbright Research Scholar for 2015-2016 and will visit Stanford Law School this fall.

Prof. Guo has published extensively on academic journals in both Chinese and English languages. Her research interests include the exclusionary rules of evidence, Plea Bargaining, Effective Counsel, and Criminal Mental Health Law. Prof. Guo is a reviewer for *Asia Pacific Law Review*.

### *Exclusion of Illegally Obtained Confessions in China: an Empirical Perspective*

The exclusion of illegally obtained evidence has long been the focus of theoretical research and legislative reform in China. After years of efforts, the exclusionary rules have finally found a foothold in Chinese statute. However, the initial reform fervor has given way to a difficult slog of changing actual practice. This article is based on a comprehensive empirical survey on the implementation of the exclusionary rule conducted by the author as the primary investigator.

This article will address three key issues that stood out in the empirical surveys: the definition and scope of illegally obtained confession, proof of illegally obtained confession, and suppression hearings. In addressing each issue, the author will follow the similar structure. First, the author will share the empirical findings on the implementation of the exclusionary rule across the country. Then, the author will examine the contributing factors causing the failure of implementation and identify the existing challenges China encountered in implementing the new rules. Finally, the author will put forward some potential solutions to these problems based on a comparative study and the special situation in China.

### Assistant Professor Chuanming Fan

Fan Chuanming is an assistant professor in East China Normal University Department of Law. He got his PhD degree from China University of Political Science and Law in July 2014, and was a visiting scholar in Ohio Innocence Project (from 12/2012 to 7/2013) and Case Western Reserve University School of Law (from 8/2013 to 12/2013). His research area includes evidence law, criminal procedure and judicial system. His recent papers (published in

Chinese law journals) include *Free-Proof Principle and Evidence Rules* (2014), *The Source of Risks of Error in Judicial Proof* (2013), *The Future of Chinese Exclusionary Rule for Illegally Obtained Evidence* (2013), *The Incentive Function of Exclusionary Rules* (2013), and *The Application of Proportionality Principle in Policy's Criminal Investigation* (2013). He also participates in the research projects “Reports on the Development of Chinese Evidence Law” and “Index of Justice Progress in China”.

### *The Internal Conflicts and Compromise of the Chinese Confession Rule System: a Comparative Analysis with the Western Typical Model*

The current Chinese confession rule system was established by the 2012 amendment to the *Criminal Procedural Code* and several accompanying judicial interpretation documents. Contrasted with the “typical model” in Western law, some obvious conflicts can be observed inside the Chinese confession system. The principle against self-incrimination is explicitly expressed, whereas the right to silence seems to be denied by an “obligation to truthfully answer” provision. Some procedures have been established to regulate the interrogating process and protect the suspect's rights, but, compared to the Western model, they are very incomplete and not linked to certain sanctions such as exclusion of evidence. The exclusionary rule for illegally obtained confession has been legislated, but, unlike in a Western model, judicial interpretation restricts its application by a “severe pain or suffering” criteria. These conflicts are mainly attributed to the fact that, the reform of confession system in China has to strike a balance between transplanting rules from western law and giving consideration to native judicial practice. For the sake of further improvement, a transition in research methodology is proposed.

### Professor Weimin Zho

Weimin Zuo is Professor of Law at Sichuan University, He received his Ph.D. from Southwest University of Political Science and Law. He joined Sichuan University in 2012. He holds the prestige Yangzi-river professorship granted by China's Ministry of Education. He had been a visiting scholar in Yale University, Harvard University and Columbia University.

While teaching at Sichuan University, Professor Zuo serves as the Vice Dean of the Graduate School of Sichuan University, the vice chair of China's Criminal Procedure Association, and an expert advisor to China's Supreme People's Procuratorate.

Professor Wang's teaching and research areas include evidence law, criminal procedure, judicial system and dispute resolution.

### *Application of the Exclusionary Rule to Illegal Evidence in China: a “Hot” or “Cold” Practice?*

The exclusionary rule of illegal evidence is a hot topic that has been attracting the attention of the academics, legislature and judiciary as well as the general public in China. By contrast, however, the application of such rule is “cold” in judicial practice: very few courts launched the investigation procedure of reviewing the legality of such evidence in dispute. The rate of application by the defence for

the exclusion of evidence illegally has also historically been minimal, and even if the defence applied for such exclusion, very few judges were really interested in investigating the legality of the evidence concerned. As for the result of the application, few decisions would be made by the court to exclude the illegal evidence, and even if there are some excluded evidence, it would not have any substantive impact on the disposition of the case. The paradox of "hot discussion" and "cold reaction" of the exclusionary rule reflected in essence the contest between the state power and individual rights in China's criminal justice. The exclusionary rule of illegal evidence in judicial practice is factually provided with the cover of protecting personal rights in some ways but wrapped with the potential rule of giving priority to the state power. In the long run, China needs to make structural readjustments in order to solve such problems in the application of the exclusionary rule of illegal evidence.

### Assistant Professor Run Ni

Run Ni is Assistant Professor of Law at Procedural Law Research Institute, China University of Political Science and Law (CUPL), a member of the "2011 Plan" of the PRC national government – Collaborative Innovation Center of Judicial Civilization ("CICJC"). She received PhD. from Hokkaido University in Japan, and then worked in Hokkaido University as Assistant Professor, teaching Japanese

criminal procedure law and comparative criminal procedure law. In September 2014, she joined CUPL. She is member of Criminal Law Society of Japan, visiting scholar of the Max Planck Institute for Foreign and International Criminal Law of Germany. Professor Ni's research areas include Chinese criminal procedure law, comparative criminal procedure law and evidence law.

### *The Exclusionary Rule for Illegally Obtained Evidence in Japan*

An exclusionary rule concerning illegally obtained evidence is a core rule in evidence law in Japan, which has greatly promoted the development of evidence law in Japan from its establishment in 1978. In 1978, the Japanese Supreme Court firstly confirmed the exclusionary rule of illegally obtained evidence in the "Osaka drug case", holding that it is improper to confirm the admissibility of illegally obtained evidence, with the view of preventing illegal interrogation in the future, occurring when the illegal search seriously violates the regulations related to the writs. Later, "serious violation" criterion, "illegal inheritance" and "close relevance" criterion were used as the judging criteria of the exclusion of illegally obtained evidence. The admissibility of illegally obtained evidence with the defendant's consent and evidence illegally collected by individuals shall also be discussed in this article.

STREAM 3E (Napier G04)

## Expert Influence and Lay Assessment in Modern Litigation: The Use of Court Appointed Experts and the Future of Juries

### Associate Professor Julia Davis

Dr Julia Davis is an Associate Professor of Law at the University of South Australia.

She has research interests in four main fields, including: juries; the psychology of sentencing; the philosophy of the criminal law; and the concept of justice. She has published articles and chapters in books based on her research on juries, criminal law theory, sentencing, domestic violence and child sexual abuse in Australia, New Zealand, Britain and Europe.

Since 2007, Associate Professor Davis has been involved in three large research projects funded by the Criminology Research Council and the Australian Research Council. These projects have designed and implemented an innovative jury survey methodology aimed at exploring informed public opinion on sentencing.

The first project surveyed and interviewed jurors in Tasmania (2007-2009); the second project has focused on jurors in Victoria (2013-2015) and the current project (2014-present) is a national study designed to gauge informed public opinion on sentencing for sex offences in trials in all higher courts in Australia. Since 2007, Associate Professor Davis and her research colleagues have surveyed over 1,700 Australian jurors and interviewed over 100 about their experiences of the trial and their views on sentencing.

### *Is there a Future for the Jury in a Modern Criminal Justice System?*

The usefulness, fairness and rationality of the jury trial has come under attack from those who argue that there is no place in a modern criminal justice system for an unaccountable, inscrutable and fallible institution made up of members of the public who are often unsuited to their task.

This presentation considers whether the 'archaic' institution of the jury offers anything of value to the criminal justice system or whether the jury is a waste of time and money and a threat to the essential task of doing justice. Informed by over 100 interviews with jurors, this presentation discusses the jury's approach to evidence and decision making, and concludes that, while our understanding of the ordinary person's experience of the criminal jury trial is incomplete, there are benefits for the community in maintaining and supporting the jury system.

### Mr Peng Chai

Chai Peng is a PhD. Candidate of the Institute of Evidence Law and Forensic Science, China University of Political Science and Law. ("the Evidence Institute, CUPL"). He studied legal theory and received LL.M. from China University of Political Science and Law.



Peng Chai's research interest focuses on evidence law, he is also interests in legal reasoning.

Peng Chai's has obtained Chinese Legal Qualification and had a internship experience in HaiDian District People's Court.

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### ***The Influence of Appraiser Court Attendance and Expert Auxiliary System on Judicial Proof***

Forensic science opinion and other scientific evidence have a profound influence on judicial proof and that influence is increasing. The establishment of the systems of appraiser court attendance and expert auxiliary in China have affected the application of forensic science opinion directly and also affected judicial proof. They enable the auxiliary expert to become the subject of cross examination and enrich the contents and methods of cross examination. As the trier of fact lacks special knowledge to deal with the special problems, forensic science opinion and the opinion of auxiliary experts have promoted, as well as retrained, the formation of the inner conviction of the trier of fact. The circumstances of judicial proof, such as the systems of evidence custody and forensic appraisal are also affected.

### **Associate Professor Zhenhui Wang**

Zhenhui Wang is Associate Professor of Law at Procedural Law Research Institute, China University of Political Science and Law, a member of the "2011 Plan" of the PRC national government – Collaborative Innovation Center of Judicial Civilization ("CICJC"). Professor Wang received his PhD and LL.M from China University of Political Science and Law, and did a Post-doctoral research at the College for Criminal Law Science of Beijing Normal University during July 2011 to June 2013. He joined CUPL in July 2013.

Professor Wang participated in Harvard University workshop on empirical research methods for studying Chinese Criminal Justice in May 2010 in Harvard University, U.S. and participated in the empirical research method and the Reformation of China's Criminal justice in July to August 2013 in VERA Institute of Justice, U.S. He is a member of Chinese Research Committee of Criminal Procedure Law.

Professor Wang's teaching and research areas include criminal procedural law, evidence law, and legal empirical research methods. He always concerned with China's judicial reality. Taking advantage of the opportunities to cooperate with judicial organs and some summer internships, he has gained a thorough understanding of the criminal justice system in China, and shows dense interest on both the research and the empirical project. He is a recipient of multiple grants from the PRC national government.

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### ***On Evidential Problems of The Expert Assessor's Appearance Before Court In Criminal Lawsuits***

The second paragraph of Article 192 of *Criminal Procedure Law of the People's Republic of China* amended in 2012 stipulates the system of the expert assessor's appearance before court to offer an opinion on the expert opinion of an the identification or evaluation expert. This is of positive significance for enhancing the confrontation of the main trial, and accurately confirming the truth of criminal cases. However, the law does not explicitly regulate the legal status of the expert assessor, whether or not the expert assessor's opinion can be

used as evidence, whether the expert assessor can get the original materials collected by the judicial organs, etc. The fuzziness of the legal provision has created some problems in juridical practices. To perfect the legal provisions and effectively tackle the practical problems, firstly, the expert assessor must be granted the identity of independent participator and their rights and obligations in criminal lawsuits must be clarified. Secondly, the provisions should confirm the evidence qualification of the expert assessor's opinion, while the reliability of the opinion is verified. The assessor's opinion can be used as a basis for deciding a case. Thirdly, in order to ensure the reliability of the expert assessor's opinion, the expert assessor should be entitled to get the original materials collected by the judicial organs.

### **Associate Professor Li Yuan**

Li Yuan is Associate Professor of Institute of Evidence Law and Forensic Science, China University of Political Science and Law, a member of the "2011 Plan" of the PRC national government – Collaborative Innovation Center of Judicial Civilization ("CICJC"). She received Ph.D. from Chinese People's Public Security University, Beijing, and postdoctoral from Sichuan University.

Professor Yuan's teaching and research areas include forensic medicine, forensic DNA. While teaching at CUPL, Professor Yuan serves as appraiser in forensic medicine and DNA.

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### ***Factors Influencing Expert Opinion Cross-Examination on DNA Evidence in Criminal Cases***

The probability of error in DNA evidence itself and its application is very low, but such an error can directly lead to misjudgment, as DNA evidence is often considered to be authoritative and easily taken for granted. The *Criminal Procedure Law 2012* and the recently initiated judicial reform require the court to strictly follow the principle of evidence judgment in trial and ask the judge to strictly control adoption of evidence for conviction and sentencing. It is necessary to strengthen cross-examination of DNA evidence. Despite the development of the expert appearance, expert advisor and pre-trial evidence disclosure systems, there are some obstacles in existing DNA evidence cross-examination, and minor issues that affect cross-examination efficiency that should be addressed.

# Forensic Evidence Frameworks: A Global Review of Forensic Standards and Legal Frameworks

## Dr Linzi Wilson-Wilde OAM

Dr Linzi Wilson-Wilde gained a BSc and a PGDipSc at La Trobe University and a PhD at the University of Canberra in species identification for wildlife crime investigations using Diprotodontia. Linzi has 19 years' experience in forensic science and has worked on the investigation of a number of high-profile murder cases, cold case reviews and the highly publicised mass DNA screen in the town of Wee Waa. Linzi also served on the Working Party on Law Enforcement and Evidence for the Australian Law Reform Commission Report into the Protection of Human Genetic Information, released in 2003 and coordinated the DNA analysis of all samples involved in the disaster victim identification and criminal investigation of the Bali Bombing in October 2002. Recently Linzi has been involved in the development of forensic specific standards and is the current Chair of ISO TC272, developing international standards. Linzi has received a Medal in the Order of Australia for her work. Linzi is currently Acting Director of the National Institute of Forensic Science at the Australia New Zealand Policing Advisory Agency.

### *Australian and Global Developments in Forensic Standards*

Historically forensic science has relied upon quality based standards applied in a forensic setting to establish the basis for forensic science services. In some instances these quality standards have been supplemented by other standards or guidelines, such as, in the USA by the American Society for Testing and Materials (ASTM International) standards and more recently, the National Institute of Standards and Technology (NIST) Organisation of Scientific Area Committees (OSAC) and in Europe the UK Forensic Science Regulator Codes of Practice. Australia has also played a leading role in the development of forensic based standards with the AS5388 – Forensic Analysis series. Forensic specific standards play a crucial role in the application of consistency in forensic services between agencies, jurisdictions and even countries to promote best practice and the reliability of forensic science as a whole.

Recently there has also been a move to develop forensic specific standards at the regional level under the International Organisation for Standardisation (ISO) or the European Committee for Standardisation (CEN). The ground swell of support to develop further international standards is increasing, with multiple countries signalling their interest to participate. The key will be to only produce standards where required and appropriate, without duplication and conflict. The impact of the proliferation in the development of country and regional forensic standards on laboratories and the accreditation process, highlighting potential issues, will be discussed.

## Dr Alex Biedermann, Professor Christophe Champod and Dr Sheila Willis

Alex Biedermann graduated from the University of Lausanne (UNIL) in 2002 (studies in forensic science). He then worked (until 2010) as a forensic scientist within the Federal Department of Justice and Police in Berne (Switzerland), with a continuous collaboration in research, teaching and casework with the School of Criminal Justice of UNIL. His PhD studies (2002-2007) at UNIL focused on graphical models and probabilistic inference for evaluating scientific evidence in forensic science. Since then, he pursued several postdoctoral research projects with a statistician at the University Ca' Foscari of Venice and a philosopher of science at the IUAV University of Venice, jointly supported by the Swiss National Science Foundation (SNSF) and the Italian National Research Council. Since 2010, Alex Biedermann works as a Senior Lecturer at UNIL. The current research of Alex Biedermann concentrates on graphical modelling for evidential reasoning and decision making in forensic science. It is multidisciplinary and involves forensic science, law and various topics in probability and decision theory. Alex Biedermann was recently awarded a SNSF/ERC-Starting-Grant for a 5-years research project (<http://wp.unil.ch/forensicdecision/>), starting in 2016. Currently, Alex Biedermann is visiting researcher at University of Adelaide Law School's Litigation Law Unit (LLU).

### *Development of European Standards for Evaluative Reporting in Forensic Science: the Gap Between Intentions and Perceptions*

Criminal justice authorities of EU countries currently engage in dialogue and action to build a common area of justice and to help increase the mutual trust in judicial systems across Europe. This includes, for example, the strengthening of procedural safeguards for citizens in criminal proceedings by promoting principles such as equality of arms. Improving the smooth functioning of judicial processes is also pursued by works of expert working groups in the field of forensic science, such as the working parties under the auspices of the European Network of Forensic Science Institutes (ENFSI). This network aims to share knowledge, exchange experiences and come to mutual agreements in matters concerning forensic science practice, among them the interpretation of results of forensic examinations. For example, through its Monopoly Programmes (financially supported by the European Commission), ENFSI has funded a series of projects that come under the general theme 'Strengthening the Evaluation of Forensic Results across Europe'. Although these initiatives reflect a strong commitment to mutual understanding on general principles of forensic interpretation, the development of standards for evaluation and reporting, including roadmaps for implementation within the ENFSI community, are fraught with conceptual and practical hurdles. In particular, experience through consultations with forensic science practitioners shows that there is a considerable gap between the intentions of a harmonized view on principles of forensic interpretation and the way

in which works towards such common understanding is perceived in the community. In this paper, we will review and discuss several recurrently raised concerns. We acknowledge practical constraints such as limited resources for training and education, but we shall also argue that addressing topics in forensic interpretation now is of vital importance because forensic science continues to be challenged by proactive participants in the legal process that tend to become more demanding and less forgiving.

## Md. Abu Hena Mostafa Kamal

Md. Abu Hena Mostafa Kamal is a Lecturer of Department of Law of Dhaka International University and associate lawyer at Patway Jurists and Associates. He has completed LL.B (Hon's) and LL.M. Mr. Kamal is an active young practicing lawyer and appeared in many significant reported cases. He attended many national and international conferences namely "International Conference on Rule of Law and Terrorism" 2012 at Delhi, India, "10th Asia Pacific conference on Tobacco or Health" at Chiba, Japan on Aug 2013, "5th Global Social Business Summit 2013" at Malaysia, "The Union South Asia Conference 2014" at Dhaka on March 2014 and also attended "3rd International Conference on Social Business Academia 2015" at Dhaka, Bangladesh. Mr. Kamal is a member of Bangladesh Bar Council, Tobacco Control and Research Cell and Social Business Academia Cell of Dhaka International University.

### *Forensic Evidence Practice in Bangladesh*

This presentation examines how new cutting-edge forensic techniques are currently being applied or have the potential to be applied in judicial proceedings in Bangladesh. The forensic services of the country are delivered partly by academic staffs of government medical colleges, medical officers and later applied for the judicial proceedings concerning an accidental or unnatural death. Forensic evidence includes medical jurisprudence, the legal aspect of medical practice and many ethical matters. All branches of medical science can be called into play to assist in medico legal problems. Truth, or the nearest reasonable approach to it, is possible from what is observed in sudden, unexplained, suspicious, unnatural and violent deaths where determining the causes and manner of death is the sole aim. Eventually, forensic science dealt in the matter of Raman spectroscopy, quantum chemistry, lithium in DNA analysis, and the burgeoning area of toxicogenetics. In each case legal issues are addressed, including such as admissibility of evidence resulting from these techniques. The practice in Bangladesh is discussed.

## Professor Thomas Yunlong Man

Thomas Yunlong Man is Professor from Practice of Peking University School of Transnational Law. He holds a Ph.D. in U.S. constitutional history from The Johns Hopkins University and a J.D. from Indiana University Maurer School of Law, Bloomington (IUMSL). He joined STL in 2014 after 17 years of law practice in cross-border mergers & acquisitions and corporate transactions with a number of leading international law firms in Chicago, Shanghai and Beijing, including as a partner with Baker & McKenzie, Orrick, Herrington & Sutcliffe, Hogan Lovells and Morrison & Foerster. Prior to law practice, Professor Man taught in the History Department of Peking University and was a visiting fellow at the Harvard-Yenching Institute.

While practicing in Beijing, Professor Man was an adjunct professor at China University of Politics and Law (CUPL). He is a member of the Board of Directors of CUPL-ZhongGuanCun Hi-Tech Park Legal Service Company and continues to serve as one of the two foreign

legal advisors on the committee of the Institute of Evidence Law and Forensic Science, CUPL, commissioned by the Supreme People's Court to draft the uniform rules of evidence for the People's Courts. He also is co-director of the Academy for the Study of Chinese Law and Comparative Judicial Systems at IUMSL, a research program jointly sponsored by CUPL and IUSML, and a contributing editor of CCH China Business Law Guide.

Professor Man's teaching and research areas include evidence law, constitutional law and comparative judicial process, dual language contract drafting and interpretation, and anti-bribery and ethics in international business transactions. He is a recipient, through the Collaborative Innovation Center of Judicial Civilization at CUPL, of a grant from the "2011 Plan" of the PRC national government for his research in forensic examination and comparative judicial systems.

### *Chinese Forensic Examination: An Institutional and Functional Analysis*

Forensic examination (*SiFa JianDing* or *JianDing*) occupies a uniquely important place in the judicial system of the People's Republic of China ("PRC" or "China"). Under the prevailing statutory and academic interpretations, this terminology may be understood in two similar, yet slightly different contexts. The first context encompasses all types of dispute resolution mechanism ranging from formal, judicial proceedings (such as civil and criminal trials) to arbitration and other modes of quasi-judicial proceedings (such as mediation and various administratively administered dispute resolution procedures). In this context, forensic examination assumes its expanded definition and refers to the activities performed by designated expert examiners to provide answers or explanations to specialized issues using scientific and technical methods. By contrast, when forensic examination is performed in connection solely with formal judicial proceedings, i.e., civil and administrative trials and criminal investigation, prosecution and adjudication, it assumes its narrow definition and refers only to the activities conducted by designated expert examiners to perform examination of specialized issues involved in the litigation using scientific and technical methods or specialized knowledge. Normally but not always consistently, when used in the former context, forensic examination is called by its shorter, more generic name "*JianDing*," and when used in the latter context, it is called by its longer, more specialized name "*SiFa JianDing*." The present paper intends to provide an interpretative description of forensic examination in its narrow definition viewed in the more confined context of formal judicial litigation proceedings with a view to achieving better understanding of the role of forensic examination in the Chinese judicial process.

## Mr David Dick

David Dick is a DIBP Forensic Image Facial Comparison Specialist and Specialist Trainer, and is an authorised departmental examiner in the provision of court room opinion of facial comparison outcomes. David has a Forensic and law enforcement background in Identity related issues spanning over thirty years at both Commonwealth and State level and has a diverse knowledge base of forensic and biometric issues. With qualifications in Psychophysiology and Psychology, David regularly provides guidance and advice to forensic practitioners in methods, techniques and issues associated with facial comparisons, Imposter detection, Document examination and related human behaviour. David travels extensively delivering specialised facial comparison training to border and law enforcement staff of foreign governments and associated private service providers throughout the Asia basin and the GCC.

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## *Facial Image Comparison: An Evolving Natural Experiment in the Determination of Human Error in Operational Environments*

In legal settings, where expert evidence of facial comparison is desired to be lead, many views exist as to the qualifications required of the expert, the relevance of the literature and the methodology employed. Several high profile cases of facial misidentification and related forensic issues have further focused arguments on error rates, or levels of human error or performance. Rarely have there been suggestions on how such rates could be determined or whether error rates detected in research reflect that of real world environments. Whilst legal and forensic discussion continues, the real world has experienced an unabated expansion in biometric applications. In particular, Facial biometric systems are increasingly found in everyday uses from opening a notebook computer to crossing international borders. Various computer hardware and social media applications such as Facebook, are now routinely using biometrics such as the face to 'identify' people within large databases. By sheer practical necessity, virtually all governments have resorted

to the use of biometrics in anchoring individuals to an identity such as in the use of Facial images in passports and related visa requirements. With the evolving national security environment and nature of identity awareness, the ability of humans to compare facial images to determine whether they are the same or different person is increasingly tested as never before. Prior to biometric systems, random local populations of faces that display natural variations and differences traditionally made identity assessments low risk. Armed with the capacity to quickly sort large international databases of faces into 'similar' looking groups of people however, attention has now turned to human performance on facial images where biometric systems return images as a 'match'. Such comparisons would arguably test the limits of human skill in facial matching ability and thereby provide real information on skill and related error. Biometric System providers often refer to natural innate skills that people are alleged to possess in order to conduct facial verifications without having established whether such skill exists.

STREAM 2F (Ligertwood Lecture Theatre 2)

## Comprehending Forensics within the Courtroom: Judge and Jury Challenges

### Professor Rob Morrison

Professor Rob Morrison is a freelance science communicator and broadcaster, and Professorial Fellow at Flinders University.

His more than 40 books on science include *A Field Guide to the Tracks and Traces of Australian Animals*; the first on this topic, which led to his involvement as an expert witness in the Chamberlain trials. A science and environment broadcaster for forty five years, he co-hosted the national television program *Curiosity Show*, which won many awards and screened in 14 countries.

He has been science reporter and producer for Channel Ten News and the Australia Network's Nexus program, the writer and editor of regular columns in various journals and has delivered many talks for the ABC's Science Unit.

His national and international awards include two Eureka Prizes, one being the *Australian Government Eureka Prize for the Promotion of Science*, the *Michael Daley Award for Science Journalism* and the inaugural South Australian Government award for *Excellence in Science Communication*.

He is Patron of *National Science Week SA*, Chair of *SciWorld*, South Australia's science education organisation, past president of *Zoos SA* and chair or board member of many scientific and conservation bodies. He was the 2008 Senior Australian of the Year for South Australia.

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### *The Evidence of Foot and Mouth: The Dingo Goes on Trial*

Perhaps the most famous criminal footprints in Australia – those of a dingo - led to an equally famous controversy – did the dingo do it? In the various trials and enquiries that followed the disappearance of Azaria Chamberlain at Uluru in 1980, the conflicting approaches to seeking the truth were as stark as they could be. Indigenous observation versus western science, science versus pseudoscience, reputation versus reason, headlines versus argument; all in a legal setting where the adversarial process often obscured rather than revealed the truth. Dr Rob Morrison was an expert witness in the *Morling Enquiry into the Conviction of the Chamberlains*. A wildlife television broadcaster and author of *The Field Guide to the Tracks and Traces of Australian Animals*, he was initially engaged to clarify apparently conflicting indigenous evidence in the first two trials regarding dingo footprints but went on to conduct various forensic tests on dingos, their footprints and gaits, their jaws and the extent to which they can open them. He found the dingos more congenial than some of the lawyers involved in this internationally famous legal episode that can still destroy a good dinner party.



## Dr Kristy Martire

Kristy Martire is an Australian Research Council Discovery Early Career Research Fellow and Senior Lecturer in the School of Psychology at the University of New South Wales where she teaches into the Master of Forensic Psychology Program. She has been examining the impact of expert evidence on lay decision-making for more than 10 years. Together with her co-authors she has published in the *Australian Bar Review* on issues relating to the cross-examination of forensic science experts; as well as in the *Melbourne Law Review* and *Sydney University Law Review* on the topic of expert identification evidence.

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### *Are Jurors Hard of Hearing or is Meaning Just Hard to Hear?*

In this session I will present evidence examining lay interpretations of expert evaluative opinions. Specifically, opinions provided in the format of a verbal likelihood ratio. This research shows a substantial disconnect between the intentions of the experts and the message understood by the decision-maker. These results will be considered in light psychological evidence relating to the interpretation of verbal expressions of uncertainty and in the context of the scale structures proposed for use in a range of forensic science disciplines.

## Ms Loene Howes

Loene is a lecturer in Criminology at the University of Tasmania. Her conference paper presents research conducted as part of her PhD project on the communication of expert opinion to police, lawyers, and judges. The interdisciplinary project was sponsored by the Australian Federal Police. Formerly a languages teacher, Loene became interested in policing-related research while completing her honours degree in Psychology. Her current research interests include police education and practices, forensic studies, and communication in criminal justice.

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### *Can Science ever be Understood in the Courtroom?*

This presentation considers the effectiveness of communication about forensic science in the criminal justice system from the perspectives of Australian practitioners. Twenty-seven case-reporting forensic scientists (forensic biologists or trace evidence examiners) and twelve legal practitioners (Supreme Court judges, Crown prosecutors, and criminal defence barristers) participated in semi-structured interviews about their experiences of the communication. Forensic scientists and legal practitioners reported a number of impediments to communication between them, both inherent in the system and in the ways that they can enact their roles within it. A high level of technicality of language and limited case-specific detail made reliance on expert reports a challenge for legal practitioners in various roles. Although forensic scientists were reportedly willing to clarify reports for criminal defence barristers as for prosecutors, there was low uptake of this opportunity amongst defence barristers. Participants from all groups reported that communication at pre-trial conferences facilitated both leading and presenting expert evidence effectively during a trial. However, while participants concurred that making forensic science comprehensible to the judge and jury was a shared responsibility, forensic scientists' opportunities to explain clearly in court were impacted by the questions asked of them by lawyers. Implications for practice are discussed in terms of ensuring that forensic science is understood well, presented clearly, and used effectively in criminal trials.

## Associate Professor Luping Zhang and Ms Meng Li

Luping Zhang is an Associate Professor of Language and Law. He holds a Masters of Linguistics from the Guangdong University of Foreign Studies. After working in legal practice, Professor Zhang commenced a career in Higher Education at China University of Political Science and Law, where he became Head of English in 2014.

Professor Zhang has extensive experience of collaborative course development and has designed and managed dual qualifying Law degrees with a range of jurisdictions, particularly Britain. He is a firm internationalist and is strongly committed to the integration of international opportunities and perspectives for all Law students. Professor Zhang's research interests include Comparative Law and Legal Education, Evidence Law and Forensic Linguistics, areas in which he has published widely. He has also undertaken significant contract research projects on Internationalisation through the Prime Ministers Initiatives and the British Council. He has presented at conferences worldwide on language and translation, student mobility, internationalisation of the curriculum and comparative legal education.

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### *An Investigation Into Translation Criterion And Strategies – Based on the English Translation of “物证”*

Through the analysis of Deborah Cao's *Translation proficiency*, the criterion and strategies of translating legal terms are proposed and then applied in translating legal term “物证” with the reference of law dictionaries and common usages in American, UK, Hong Kong and Taiwan.

## Professor Roger Byard AO PSM

Professor Roger Byard holds the George Richard Marks Chair of Pathology at the University of Adelaide and is a Senior Specialist Forensic Pathologist at Forensic Science SA in Adelaide, Australia. He qualified in medicine in Australia in 1978 and became a licentiate of the Medical Council of Canada in 1982. He has published, or has in press, over 600 papers in peer-reviewed journals, and coedited *Sudden Infant Death Syndrome* (Arnold, 2001), the four volume *Encyclopedia of Forensic and Legal Medicine* 2nd ed. (Elsevier/Academic Press, 2015) and the two volume *Forensic Pathology of Infancy and Childhood* (Springer, 2014), wrote *Sudden Death in the Young* (3rd ed) (Cambridge University Press, 2010) and coauthored the *Atlas of Forensic Pathology* (Springer 2012). He is the Editor-in-Chief/Managing Editor of *Forensic Science Medicine and Pathology*. He was awarded the Humanitarian Overseas Service Medal (HOSM) and the Australian Federal Police (AFP) Operations Medal for disaster victim identification work in Bali after the bombings in 2002 and in Thailand after the tsunami in 2004.

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### *How to Respond to Questions in Court*

This session will examine court room proceedings from the viewpoint of the expert. The types of questions that are often asked will be examined with possible reasons for their formulation and potential responses that may be used. Typical questions for the pathologist include: How much force was required? What would have been the response to the injuries? What was the direction of the blow? What is the minimum number of blows? and how long would the victim have survived? More focused questions then move on to: There is no experimental data to support your position is there? You have

read the literature on the topic haven't you? I put it to you that you have simply no idea of the mechanism of injury in this case, do you? and finally, you are not really an expert are you? The usefulness of research will be mentioned as well as ways of dealing with alternative expert opinions.

STREAM 3F (Napier G04)

## International Issues of Law and Forensics – Specialist Session: Proof And Evidence Preservation in International Conflict and Security

### Associate Professor Captain Dr Dale Stephens CSM RANR

Dr Dale Stephens is an Associate Professor at Adelaide University Law School. He spent more than 20 years in the Royal Australian Navy as a Legal Officer before taking up his current University appointment. His operational deployments include East Timor in 1999 and 2000, as well as Iraq in 2005 and 2008.

In 2004, Dr Stephens completed a Master of Laws degree at Harvard University Law School. In February 2014 he completed his Doctor of Juridical Science at Harvard Law School. His dissertation topic was 'Lawfare or Law Fair? The Role of Law in Military Decision Making'.

In the early 2000's Associate Professor Stephens was part of the Australian delegation to UNESCO negotiating the Underwater Cultural Heritage Convention. In the mid 2000's he taught at the U.S. Naval War College located in Newport, Rhode Island as a faculty member of the International Law Department. In 2010 was seconded to the Department of the Prime Minister and Cabinet as a senior advisor on Afghanistan. He attained the rank of Captain in the Navy and is the recipient of the Conspicuous Service Medal, the US Bronze Star and a Maritime Commander's Commendation.

He is currently Head of the SA Navy Legal Reserve Panel and also Director of the Adelaide University Research Unit on Military Law and Ethics.

### *Evidence Collection and Fact-Finding in Armed Conflict and Peace-Keeping*

The collection of evidence and fact finding in times of armed conflict and peacekeeping pose considerable challenges. Battlefield control is rarely complete and obtaining host state or even non-state actor cooperation in the investigation of crimes is usually difficult to obtain. Nonetheless, International Criminal Law imposes obligations upon Commanders to make enquiries and report crimes and actually deems certain knowledge on the part of Commanders in the face of apparent war crimes. At the same time, International Tribunals have traditionally applied a liberal attitude towards establishing and admitting facts obtained by NGO's. Initiatives by George Clooney to obtain evidence of war crimes through the Satellite Sentinel project are an emerging feature of contemporary practice in this field. Despite the obligation to ensure that justice is done, Commanders in Peace Operations often have to make a choice whether to sacrifice the prospect of obtaining a successful prosecution by focussing on more immediate needs of force protection and the safety of a civilian population. These challenges pose intractable dilemmas and this presentation will identify the challenges and emerging practice in this field.

### Ms Miiko Kumar

Miiko Kumar is a Senior Lecturer in the Faculty of Law at the University of Sydney and is a practising barrister, Jack Shand Chambers. Miiko teaches Procedure, Evidence and Advanced Evidence. Miiko is a co-author of *Uniform Evidence Law: Commentary and Materials* (4th edition, 2012), *Principles of Civil Procedure in New South Wales* (2nd edition, 2012) and *Secrecy, Law and Society* (2015). She is the author of articles and chapters on evidence and procedure. She serves on the editorial board of the Australian Alternative Dispute Resolution Law Bulletin. She was on the Advisory Committee for the Australian Law Reform Commission's review of the Evidence Act.

### *Evidence and Open Justice: Public interest Immunity and Closed Process in Australia and the UK*

The aim of this presentation is to examine developments in the doctrine of public interest immunity and open justice. In particular, the presentation will look at the radical reforms in the United Kingdom for civil claims where information may harm national security. The United Kingdom's reforms for closed procedures will be examined and compared with Australian law.

### Dr David Gilbert

David has extensive operational experience in the national security space. He has been employed by various government departments and law enforcement agencies in areas of intelligence and counter-terrorism capability development. David has a Master's degree in translating and interpreting studies and completed his PhD at RMIT in the field of forensic translation with relevance to Australia's national security. His doctoral thesis titled 'Electronic surveillance and systemic deficiencies in language capability: Implications for Australia's national security' identified shortfalls in language capability upon which Australian law enforcement agencies rely to combat serious and organised crime. The data were drawn from a range of sources including discourse analysis of translated transcripts from electronic surveillance proffered as evidence in court. He recently presented the findings of his research at the U.S. National Association of Judiciary Interpreters and Translators conference in Atlanta and the National Security Australia conference in Melbourne.

David is a nationally accredited professional Vietnamese to English translator and is currently Chair of the Vietnamese panel of examiners for the National Accreditation Authority for Translators and Interpreters, a position he has held for the past four years. His military awards include the Australian Active Service Medal with clasps 'Kuwait' and 'Special Operations'.

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### *Electronic Surveillance and Systemic Deficiencies in Language Capability: Implications for Australia's National Security*

Australian law enforcement agencies increasingly deploy electronic surveillance techniques to combat serious and organised crime to maintain national security. The criminal justice system is an important source of data that can shed light upon non-traditional security challenges. Telephone interception and listening device recordings often comprise conversations conducted in languages other than English containing alleged jargon and/or code words associated with criminal activity. Community translators and interpreters are relied upon to translate these conversations into English for evidentiary purposes. Unlike ongoing language capability development in the military in support of meeting traditional security objectives, language capability supporting non-traditional security areas of law enforcement has remained relatively unchanged for at least the past three decades. Using qualitative interviewing methods and discourse analysis of court transcripts, this research investigated the strengths and weaknesses of language capability available to support law enforcement agencies. Systemic deficiencies in language capability and associated causal factors are identified. It is argued that language capability supporting the criminal justice sphere is seriously under-resourced adversely affecting the integrity of the judicial system and having significant implications for Australia's national security defined to include non-traditional security challenges.

### **The Honourable Michael David QC**

The Honourable Michael David was appointed as a Justice of the Supreme Court of South Australia in 2006, an office he held until his retirement in October 2014. Prior to his appointment to the Supreme Court he was educated at Rostrevor College and Adelaide University, graduating in 1967. He was admitted to practise in 1969 and went to the Independent Bar in 1973 specialising in criminal law. Justice David was Senior Defence Counsel in three war crimes trials. He was appointed Queen's Counsel in 1986 and remained at the Bar until his appointment as a Judge of the District Court of South Australia in 1996. Justice David is a member of the SANFL Appeals Board. Justice David is married to Rosemary David and has five children and three grandchildren.

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### *Evidence and Procedure in War Crimes Prosecutions*

The Honourable Michael David will address issues arising with respect to proof and procedure in the prosecution and defence of Polyukhovic.

## Law and Forensics of Character and Misconduct Evidence

### Ms Felicity Gerry QC, Catarina Sjolin and Associate Professor Gregor Urbas

Felicity Gerry QC was called to the Bar in England and Wales in 1994 and took silk in 2014. She is also admitted to the Supreme Court of the Northern Territory of Australia where she is coordinating a legal clinic, launching an innocence project and has a grant funded project on women's health and the law. She has been recognised in the UK Legal 500 as a "Fearless and effective advocate" and "Tenacious in court" and "An expert in the field of sex offences" and in Chambers and Partners UK as "A vastly experienced advocate noted for her experience in serious sexual cases, homicides and frauds". At the independent Bar, Felicity has prosecuted and defended in numerous cases involving major, serious and complex crime, often with an international element. This has included cross-jurisdictional rape, murder by foreign nationals involving evidence obtained from abroad, conspiracy to import illegal immigrants and international fraud. Her significant trial and appellate experience has also led to an expertise in online offending in the context of online abuse and exploitation, money laundering and online fraud. She has, for example, used data and metadata as evidence in criminal cases. Since 2013, Felicity has also held a research active post in the School of Law at Charles Darwin University, in the Northern Territory of Australia, focussing on transnational criminal law and human rights, particularly in the context of violence against women and girls and the rule of law online. She lectures in advanced crime, evidence and contemporary issues and is Chair of the Research and Research Training Committee in the School of Law at Charles Darwin University. Felicity is also co-author of *The Sexual Offences Handbook* (2nd Edition 2014) that sets out all the English law, practice and procedure from 1957 to date in this difficult field of law and has a dedicated chapter on online offending. She is on the Professional Board for Computer Law and Security Review. She regularly publishes in the broadsheet and legal press as well as peer reviewed papers. Her research into the global law on human trafficking recently enabled her to assist transnationally in the reprieve from execution of Philippine national Mary Jane Veloso. Felicity has published papers on human trafficking, female genital mutilation and global cyber law in the context of human rights. She recently provided a report for the ILRC of the American Bar Association Justice Defenders Programme on the draft cyber law for Cambodia. She is a popular speaker and can be followed on twitter @felicitygerry.

Dr Gregor Urbas is an Associate Professor of Law at the University of Canberra, where he teaches Criminal law and Procedure, Cybercrime and Evidence Law. He previously taught at the Australian National University, and had earlier appointments at the Australian Institute of Criminology, the Law Council of Australia and IP Australia.

### *Patterns of Sexual Behaviour: The Law of Evidence: Back to the Future in Australia and England*

A recent Victorian Court of Appeal ruling [in Australia] has sparked concerns that a clamp down on the way child abuse cases are handled could thwart convictions. The Court of Appeal justices ruled only cases that are "remarkably" similar would go before the same jury, making it harder for allegations from multiple complainants to be heard together. There are concerns that this will reduce the number of convictions for sexual offences, especially for those against children. This article explores the approach in England and Wales, and Australia to evidence of a pattern of behaviour, focussing on when it is adduced in cases involving sexual abuse. We first consider the shared common law history of the two jurisdictions before exploring how common law and legislative changes have led to surprisingly different positions in the two countries. We conclude by suggesting a simpler and more rational approach which has started to emerge and could be adopted in both countries, and indeed should be considered in any jurisdiction.

### His Honour Judge Steven Millstead

Admitted as a practitioner of the Supreme Court of South Australia in 1976. Employed as a prosecutor in the office of the Director of Public Prosecutions, South Australia (DPP) between 1979 and 1995. Held the position of Crown Counsel in the DPP from 1995 to 2003. Practised at the South Australian Bar in 2003 and 2004. Appointed Queens Counsel in 1996 and Judge of the District Court of South Australia in 2004.

### *The Admission of Character Evidence in South Australia and Lessons for Emerging Evidence Systems*

Part 3, Div 3 of the Evidence Act 1929 (SA) regulates the admissibility of evidence suggesting that a defendant in a criminal trial has engaged in discreditable conduct other than conduct constituting the charged offence. Division 3, which came into force on 12 June 2012, was enacted to overcome perceived complexities in the common law governing discreditable conduct evidence and to provide for less restrictive tests of admissibility, at least in respect of 'propensity' and 'similar fact' evidence.

Division 3 creates an 'exclusionary rule' for discreditable conduct evidence to which there are two broad exceptions (non-propensity reasoning evidence and particular propensity reasoning evidence). Paradoxically, the exclusionary rule is arguably wider than its common law counterpart and the tests for the exceptions give rise to their own complexities. This paper explains the nature and scope of the relevant provisions, their modification of the common law and discusses problems that may arise from their application.

The paper concludes by considering lessons that emerging evidence systems may gain from the Australian experience in respect of the admission of discreditable conduct evidence including whether the test advocated by McHugh J in his strong dissenting judgment in *Pfennig v R* constitutes a more simple and logical test for the admission of such evidence.



## Professor Edward J. Imwinkelried

Edward Imwinkelried is the Edward L. Barrett, Jr. Professor of Law Emeritus at the University of California, Davis. He is the former chair of the Evidence Section of the American Association of Law Schools. He has served as: a member of the National Institute of Science and Technology expert group on fingerprint examination, a member of the legal issues working group of the National Commission on the Future of DNA Evidence, and the legal consultant to the Surgeon General's Commission on Urinalysis Testing in the Armed Forces. He has written over 100 law review articles. He is a coauthor of *McCORMICK, EVIDENCE* (7th ed. 2013) and *SCIENTIFIC EVIDENCE* (5th ed. 2012) and is the author of *THE NEW WIGMORE: EVIDENTIARY PRIVILEGES* (2d ed. 2010), *UNCHARGED MISCONDUCT EVIDENCE* (rev. 2014), *THE METHODS OF ATTACKING SCIENTIFIC EVIDENCE* (5th ed. 2014), and *EVIDENTIARY FOUNDATIONS* (9th ed. 2015).

## *Uncharged Misconduct Evidence in the United States*

After discussing the new American legislation selectively abolishing the character evidence prohibition in certain types of cases, Ed Imwinkelried will address several recent refinements of the uncharged misconduct doctrine in the United States. The substantive refinements include both the tightening of the "plan" theory of admissibility and a growing rejection of the *res gestae*/inextricably intertwined theory. The procedural refinements include new pre-trial notice requirements and improved limiting instructions.

STREAM 2G (Ligertwood Lecture Theatre 2)

## Criminal Psychology and Mental Functioning: The Legal and Forensic Response

### Mr Qiang Liu

Qiang Liu is Ph.D candidate in Evidence Law at Institute of Evidence Law and Forensic Science, China University of Political Science and Law ("the Evidence Institute, CUPL"), a member of the "2011 Plan" of the PRC national government – Collaborative Innovation Center of Judicial Civilization ("CICJC") and a member of the "111 Plan" of the PRC national government – Base for Evidence Science Innovation and Talent Recruitment ("BESITR"). He also obtained the Master degree of Criminal Procedural Law in CUPL.

His Chinese advisor is Professor Jinxi Wang, law professor in CUPL. At present he is a joint-educated Ph.D candidate and studying evidence law in University of California, Davis, USA, and Professor Edward J. Imwinkelried is his America advisor.

### *The Motive System of the Criminal Evidence Law of China: A Tentative Study*

Motive is a certain behavioral driving force that is activated by need and inducement, and the motive approach could be considered as a logic line and research method which connects the evidence law with the factors that might impact the formation and application of evidence rules. This study focuses on these factors in this approach in the field of the Criminal Evidence Law of China which views = fact-finding as the primary goal and value, and whose operations may be influenced by the circumstances concerning criminal policy, criminal law as well as criminal procedure law. The criminal evidence law develops a disincentive mechanism restraining the negative motives and incentive mechanism supporting the positive motives, and the interaction between the criminal evidence law and those evidentiary motives also exist during that process. This new study approach could also be adopted to the more wide scope in the field of evidence law.

### Professor Aiyan Zhang

Aiyan Zhang is a Professor of Law at Key Laboratory of Evidence - Identification in Universities of Shandong, Shandong University of Political Science and Law (SUPL).

She received Bachelor of Medicine from Shandong Medical University in 1995 and Bachelor of Law from Shandong University in 1999. Then she got Master of Law in 2003 and Ph.D. in 2010 from Renmin University of China. She was a visiting scholar at Indiana University Robert H. McKinney School of Law, U.S.A. from February, 2013 to March, 2014.

While teaching at SUPL, Professor Zhang serves as Executive Deputy Director of Key Laboratory of Evidence - Identification in Universities of Shandong. She also serves as Deputy Director of Judicial Appraisal Center of SUPL.

Professor Zhang's teaching and research areas include criminal law, forensic medicine, and Anglo-American Law. Her doctoral dissertation *Judgment of Criminal Responsibility of Mental Disorders* won the second prize of "National Excellent Criminal Law Dissertation" in 2012.

### *Psychiatric Evaluation and Criminal Responsibility*

With the occurrence of a number of major vicious criminal cases in recent years, determination of criminal capacity of persons with mental disorders is getting more and more attention and becoming controversial in China. Now China needs to address two issues: "In what way should the criminal capacity of person with a mental disorder be determined?" And "How should criminal capacity of person with a mental disorder be determined?" the two issues have not been given sufficient attention in China's criminal law, criminal procedure law and other laws and regulations. Unification of legal and medical terminologies is the best choice, and it is more reasonable

to institute “mental illness” with “mental disorder” in Article 18 of the Criminal Law. The party concerned and his/her counsel and agent ad litem should be given the right to apply for initial psychiatric expertise and right of relief. Meanwhile, China should introduce provisions on forced initiation of psychiatric expertise on the basis of maintaining public security and judicial authorities’ right to initiate psychiatric expertise. A more reasonable approach is to make the psychiatric expert evaluate the medical element of criminal capacity and implement collaboration focused on judicial officer and supplemented by expert for determination of the psychological element.

## Professor Jinian Hu

Jinian HU is a professor in forensic psychiatry, consultant psychiatrist. He got his Master’s Degree of Medicine from Institute of Mental Health, Beijing Medical University in 1996, and worked as a visiting scholar with Department of psychology of University of Chester, UK. From 2002 to 2003.

Professor HU is Member of Academic Committee of Forensic Psychiatry, Chinese Society of Psychiatry, Member of Academic Committee of Forensic Psychiatry, Chinese Forensic Medicine Association, Member of Evaluation Committee for Senior Professional Titles, Ministry of Justice, Specialist of Proficiency Testing for Forensic Psychiatry, Ministry of Justice, Editorial Member of Chinese Journal of Forensic Medicine, Member of International Association of Forensic Mental Health Service (IAFMHS).

Professor Hu’s teaching and research areas focus on law and psychiatry.

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## *On Rules of Proof in Forensic Psychiatric Evaluation*

Forensic psychiatrists collect and evaluate the information or evidence related to the evaluatee’s mental state, based on which they give their expert opinions on the evaluatee’s legal competence or legal relationship. In this process, forensic psychiatrists have to support his/her opinions with evidence. In other words, forensic psychiatrists have to prove their expert opinions. Therefore, forensic psychiatric evaluation is a “proving activity”.

Different rules of proof will lead to different expert opinions. However, shall some rules of proof be observed? What rules of proof should be observed? What differences are there between the rules of proof in clinical psychiatric diagnosis and that in forensic psychiatric evaluation? Such questions have not been studied properly so far, however, answers to these questions are of great significance to forensic psychiatric evaluation.

Based on the comparison of the characteristics of the proving activity in forensic psychiatric evaluation and that in judicial proof, the author concluded that forensic psychiatric evaluation has the nature of quasi-judicial proof and therefore should observe similar rules of proof that are adopted in the court trial.

## How To Cross-Examine Forensic Scientists: Guide for Lawyers

*This session will discuss 'How to cross-examine forensic scientists: A guide for lawyers' (2014) 39 Australian Bar Review 174*

This article is a resource for lawyers approaching the cross-examination of forensic scientists (and other expert witnesses). Through a series of examples, it provides information that will assist lawyers to explore the probative value of forensic science evidence, in particular forensic comparison evidence, on the voir dire and at trial. Questions covering a broad range of potential topics and issues, including relevance, the expression of results, codes of conduct, limitations and errors, are supplemented with detailed commentary and references to authoritative reports and research on the validity and reliability of forensic science techniques.

### Professor Gary Edmond

Gary Edmond is a law professor in the School of Law at the University of New South Wales, where he directs the Program in Expertise, Evidence and Law, and a research professor (fractional) in the School of Law at Northumbria University, UK. Originally trained in the history and philosophy of science, he studied law at the University of Sydney and took a PhD in law from the University of Cambridge. An active commentator on expert evidence in Australia, England, the US and Canada, he is Vice-President of the Australian Academy of Forensic Sciences, a member of Standards Australia's forensic science committee, a member of the editorial board of the Australian Journal of Forensic Sciences, and served as an international adviser to the Goudge Inquiry into Pediatric Forensic Pathology in Ontario (2007-2008). With Andrew Ligertwood he is co-author of *Australian Evidence: A principled approach to the common law and the uniform acts* (5th ed. LexisNexis, 2010).

### Associate Professor Richard Kemp

Associate Professor Richard Kemp is based at the School of Psychology, University of New South Wales, where he is director of the Master of Psychology (Forensic) program. Richard's background is in experimental and applied cognitive psychology. He was awarded his PhD from University College London in 1995 for his research into of human face perception. In recent years Richard's research has focused on the application of psychological knowledge to issues relating to the legal system and Policing. His current research interests include Forensic science evidence, the use of photo-ID documents to establish identity, biometrics, eyewitness memory and eyewitness identification, expert evidence.

### Dr Kristy Martire

Kristy Martire is an Australian Research Council Discovery Early Career Research Fellow and Senior Lecturer in the School of Psychology at the University of New South Wales where she teaches into the Master of Forensic Psychology Program. She has been examining the impact of expert evidence on lay decision-making for more than 10 years. Together with her co-authors she has published in the *Australian Bar Review* on issues relating to the cross-examination of forensic science experts; as well as in the *Melbourne Law Review* and *Sydney University Law Review* on the topic of expert identification evidence.

### Emeritus Fellow Andrew Ligertwood

Andrew Ligertwood is currently an Emeritus Fellow in Law at The University of Adelaide having spent a number of decades at that University of Adelaide teaching, researching and writing in the field of Evidence. His principal publication is his treatise *Australian Evidence*, 5th Ed, LexisNexis, 2010 with co-author Professor Gary Edmond. He has been involved with the ICELFS since its inception in 2007, is a Vice President of IAES, and currently teaches at CUPL in the Institute of Evidence Law and Forensic Science program.

### Dr Kaye Ballantyne

Kaye Ballantyne is a Senior Research and Development Officer, Office of the Chief Forensic Scientist VPFSD and an Adjunct Associate Professor, School of Psychology & Public Health, La Trobe University. Kaye has published extensively in books and peer-reviewed journals in the fields of forensic science and molecular genetics, and provided seminars and workshops both nationally and overseas. Kaye's research interests include cognitive forensics, statistics, evidence interpretation, Bayesian logic and the logical framework, and applications of Y chromosome DNA profiling to genetics and forensics.

### Ms Mehera San Roque

Mehera San Roque joined the Faculty of Law in 2002, having previously taught at the University of Sydney. She is currently the Director of JD Studies and an elected member of UNSW's Academic Board. In the Law Faculty she currently teaches Evidence (Court Process, Evidence and Proof), Introducing Law and Justice, Legal Writing In Context and an elective on Expert Evidence. She also teaches Law for Psychologists 2 and Law, Psychology, Expertise and Forensic Science for the School of Psychology. Her research interests include Evidence, Feminist Legal Theory, Law and visual/popular culture and surveillance studies, and she has a particular interest in cross-disciplinary collaborations. She is a Chief Investigator on an ARC funded multidisciplinary and international project examining the participation of deaf citizens as jurors, working with linguists, NSW Legal Aid, interpreters and colleagues from Interpreting and Translation Studies.



# Chair and Co-Chair Biographies

## Mr Michael Abbott AO QC

Michael Abbott has appeared in the Supreme Courts of all States and Territories of Australia and has appeared extensively in the Federal Court of Australia and successfully (& unsuccessfully) argued a number of cases before the High Court of Australia.

Michael Abbott was appointed a Queen's Counsel in 1984 and practices primarily at the South Australian Bar and at the Northern Territory Bar, although he regularly appears in the Courts of other Australian States.

In addition to his career as one of South Australia's leading Queen's Counsel, Michael Abbott has also appeared in a number of Royal Commissions. Significant Royal Commissions in which he has acted as lead Counsel are (1) The Vietnam Moratorium Commission of 1966, where he represented the rights of those who marched. (2) The Prison Royal Commission where he represented the rights of Prisoners. (3) The Splatt Royal Commission where he represented Mr. Splatt. (4) The Salisbury Royal Commission where he represented the Australian Newspaper. (5) The Hindmarsh Island Bridge Royal Commission where he represented the so called dissident "women". (6) The State Bank of South Australia Royal Commission where he represented the entire Board of Directors other than the Executive Director as well as the entire Board of Beneficial Finance and recently (7) the inquiry into the Australian Wheat Board in Sydney where he represented six of the senior executives of Australian Wheat Board before Commissioner Cole.

Michael Abbott currently acts as advisor to a number of national and international Corporations and is briefed by most of the larger legal firms in South Australia that specialise in Corporate and Commercial Litigation. Michael Abbott has acted as an advisor to parties involved in litigation in India, Indonesia and Malaysia.

He has spoken at many conferences and seminars on a variety of topics ranging from forensic science, cross examination, commercial trials, and the rights and duties of directors of companies.

Michael Abbott has been the Chair of the Criminal Law Committee of the Law Society of South Australia and has served with distinction on other committees of The Law Society in the past. He also served as the President of the South Australian Bar Association for 3 years and has been the representative of South Australian Bar Association to the Australian Bar Association.

Currently Michael Abbott is the Chairman of the Legal Services Commission of South Australia and is in the process of creating significant changes to that organisation so that it is better able to serve the public and the legal profession.

## Ms Margaret Castles

Margaret Castles is a senior lecturer at the Adelaide Law School, teaching Civil Procedure, ADR and clinical legal education. She manages the two Law School legal advice services. She is a barrister and solicitor in South Australia and previously practised in civil litigation and administrative law with the Federal Government of Australia.

## Ms Liesl Chapman SC

Liesl regularly appears as counsel in the criminal jurisdiction for State and Commonwealth offences and as counsel in the Health Practitioner Tribunals. She also appears as counsel in courts and tribunals in other areas of law in South Australia and interstate. She has a particular interest and experience in expert evidence including all forensic sciences (eg DNA, gunshot residue, forensic pathology), forensic medicine, HIV phylogenetics, explosions, accident reconstruction and forensic accounting (eg fraud). She was Counsel Assisting the Mullighan Inquiry into the deaths and sexual abuse of children in State care (SA) (2007 - 2008). She was Senior Counsel Assisting the Eastman Inquiry (ACT) (2012 to 2014). She is an appointed member of the Legal Practitioners Disciplinary Tribunal and a member of the Sentencing Advisory Council and the ANZFSS (Australian and NZ Forensic Science Society). Author of 'Playing forensic science monopoly' published in the *Australian Journal of Forensic Sciences*, 2014.

## The Honourable John Jeremy Doyle AC QC

Former Chief Justice Doyle was admitted to the degree of Bachelor of Laws from the University of Adelaide in 1966 and to the degree of Bachelor of Civil Law from Oxford University in 1969. He was the 1967 Rhodes Scholar for South Australia. He was admitted as a barrister and solicitor of the South Australian Supreme Court in 1970. He was a partner in an Adelaide firm of solicitors from 1970 to 1977. From 1977 until 1986 he practised at the Bar in Adelaide. His work at the Bar involved most branches of the law with a substantial



involvement in appellate work. He was appointed a Queen's Counsel in 1981. In 1986 he was appointed Solicitor-General of the State of South Australia in which position he represented the State before the High Court of Australia and the Supreme Court of South Australia in constitutional, criminal and other cases. He was appointed Chief Justice of South Australia from May 1995 to June 2012. Companion of the Order of Australia was conferred in June 2002.

He was the Chairman of the National Judicial College of Australia from its establishment in 2002 until 30 June 2007. The College has been established to provide professional development for the Australian judiciary. He is chair of the College's Program Advisory Committee.

For a number of years he was a part-time lecturer in law and examiner in the Faculty of Law at the University of Adelaide. From 1972 until 1979 he was a member of the Council of the Law Society of South Australia. He was a member of the Legal Services Commission of South Australia from its establishment in 1978 until 1986, and at the time of his appointment as Solicitor-General he was Chairman of the Commission. He was President of the Bar Association of South Australia from October 1993 until his appointment as Chief Justice and had previously served a term as President of that Association from June 1989 until November 1990.

He has presented papers at many conferences and seminars, and has contributed chapters to several books.

He was a member of the Council of Flinders University from 1986 to 2001 and a Pro-Chancellor of the University from 1988 to 2001. He was Chairman of Directors of Flinders Technologies Pty Ltd, a company established by the University to promote the commercial development of intellectual property originating from Flinders University, from the formation of the company in 1987 until his appointment as Chief Justice.

He was awarded Doctor of Laws (*honoris causa*) by the Flinders University of South Australia in December 2002.

He was awarded Doctor of the University (*honoris causa*) by the University of Adelaide in December 2008.

Awarded Centenary of Federation Medal, May 2003.

He was Chairman of the Council of Mercedes College (a co-educational Reception to Year 12 school) from 1987 to 1992.

He is married with five children.

## The Honourable Kevin Duggan AM RFD QC

The Honourable Kevin Duggan was a judge of the Supreme Court of South Australia from 1988 to 2011.

In addition to his role as a judge he was the Judge Advocate General for the Australian Defence Force from 1996 to 2001.

He also held the rank of Major General in the Army Reserve and, upon his retirement from the Army, was appointed a member of the Defence Force Discipline Appeal Tribunal.

He was the Honorary Colonel of the Adelaide Universities Regiment from 2003 to 2010 and is the Colonel Commandant of the Australian Army Legal Corps.

He was made a member of the Order of Australia in the military division of the Queen's Birthday Honours List in June 2002.

He has served as Governor's Deputy and acting Chief Justice.

He was technical adviser for the film "Breaker Morant"

Kevin Duggan graduated from the University of Adelaide in 1963. After being admitted to the bar, he was appointed associate to Sir Edward McTiernan of the High Court of Australia and served in that role in 1965 and 1966.

He was the Chief Crown Prosecutor for South Australia from 1971 to 1979 and was appointed Queen's Counsel in 1979.

He was in private practice as a barrister from 1980 to 1988.

He was President of the SA Bar Association from 1986 to 1988 and Vice-President of the Australian Bar Association during that period.

He has held positions with a number of sporting bodies including the South Australian National Football League and The South Australian Cricket Association.

He is a Life Member, Vice-Patron and member of the Hall of Fame of the South Australian National Football League.

He lectured in Criminal Procedure at the Law School, University of Adelaide from 1971 to 1986.

Since retirement he has acted as a consultant to the Federal Court, assisting in the preparation of a Bench Book and Rules of Court to assist judges presiding in trials for cartel offences.

He is an Adjunct Professor of Law at Flinders University.

He has also been appointed inaugural Chair of the Sentencing Advisory Council.

Kevin Duggan is married to Rosemary. They have four children, three of whom are legal practitioners. Ben is a partner in the firm of Tucker Fox, Tom practices at the bar as a senior counsel in Adelaide and Sam is at the Sydney bar. Their daughter Emily had the good sense not to enter the law and concentrated instead on childcare. Rosemary and Kevin have nine grandchildren.

## Professor Clement Macintyre

Professor Clement Macintyre has degrees from Murdoch University and The University of Cambridge. He has taught politics at The University of Adelaide for more than 20 years. He is currently Chair of the University's Academic Board and a member of the University Council. His research interests are in British and Australian politics, particularly South Australian political history, and in Australian constitutional and parliamentary arrangements and reform. He is a regular media commentator on Australian State and national politics.

## Mr Albert Monichino QC

Albert is the President of the Australian branch of the Chartered Institute of Arbitrators. He holds the degrees of B.Ec, LLB (Hons) from Monash University, an LLM from the University of Cambridge and a Grad Dip Intell Prop Law from the University of Melbourne.

Albert practises as a barrister, arbitrator and mediator.

Albert has a general commercial litigation practice in the superior courts of Australia, and also in commercial arbitrations (domestic and international). He has over 25 years' experience.

Albert has acted as arbitrator, or as counsel in arbitrations, in wide-ranging commercial disputes.

He is a member of the ACICA, IAMA, SIAC, KCAB, KLRCA, SZAC and the NZDRCA Arbitration Panels.

## Mr David Morfesi

David Morfesi is the Executive Director of the Institute for International Trade and Director of the EU Centre for Global Affairs at the University of Adelaide. The Institute conducts technical assistance and capacity building training in trade-related areas for government officials worldwide, administers academic programs including a Professional Certificate in International Trade (PCIT), a Masters in

International Trade and Development (MITD) and a Ph.D. (Research), and conducts targeted, multidisciplinary research for organisations such as the WTO, World Bank, OECD, ADB, ASEAN Secretariat, and the Australian Department of Foreign Affairs and Trade (DFAT). The Institute also incorporates the Centre for International Economic Studies, promoting research, education and training on matters involving international and development economics.

David came to the University from Minter Ellison Lawyers, where he is Special Counsel and Director of the International Trade Group, specialising in assisting public and private sector clients with cross-jurisdictional business operations on matters involving international trade and intellectual property.

David previously served as an international trade negotiator and diplomat for the United States Government, including serving as Senior Director for Intellectual Property and Innovation in the Office of the US Trade Representative (USTR), as Attorney-Advisor in the Office of Legislative and International Affairs at the US Patent and Trademark Office (USPTO), and as IP Attaché to the US Mission to the WTO in Geneva. In Geneva, David also served as Chair of Group B at the World Intellectual Property Organisation (WIPO). His experience also includes serving as a negotiator for fifteen US bilateral and regional free trade agreement negotiations (including the Australia-US FTA), and as technical advisor and counsel for WTO dispute resolution.

David has instructed at the WIPO Worldwide Academy, and several universities across Australia and the United States, and he has developed and conducted training and technical assistance for government officials from over 120 countries worldwide.

## Professor Chris Pearman

Chris is currently Director of Forensic Science SA. He holds a Bachelor of Science Degree majoring in Botany and Zoology from the University of Adelaide and an Executive Masters in Public Administration from Flinders University. He is also a Professorial Fellow of Flinders University. Chris has spent his whole career in forensic science; first as a botanist with the South Australia Police and then with Forensic Science SA. He was Manager of the Biology Group during the introduction of the DNA Database and several changes in technology.

Chris is Chair of the National Association of Testing Authorities (NATA) Forensic Science Accreditation Advisory Committee and on the Executive of the Senior Managers of Australian and New Zealand Forensic Science Laboratories. He is a former President and committee member of the SA Branch of the Australian and New Zealand Forensic Science Society.

He has given evidence in 100s of trials in the Supreme and District Courts of South Australia, New South Wales, Queensland and Northern Territory, and has made numerous presentations at workshops, seminars and conferences. In the early 2000s, Chris was involved in several major challenges to the current DNA technology, including the Karger trial here in South Australia where he gave evidence for 38 days.

## Mr Rocco Perrotta

Rocky Perrotta was admitted to practice in South Australia in 1985. Since 1990 Rocky has specialised in criminal law. He prosecuted for the Commonwealth Director of Public Prosecutions for 20 years until 2010. In the early 1990s Rocky was the senior instructing solicitor in Australia's first WWII War Crimes Prosecution, *R v Polyukhovich*. It remains the only War Crimes prosecution that went to trial. From

1993 to 2010 Rocky's particular area of speciality was corporate/commercial crime. Rocky now practices on his own account primarily as a barrister. Rocky is President of the Law Society of South Australia and has been the Chair or Co-Chair of the Criminal Law Committee since 2009.

## Mr Jean-Pierre du Plessis

Jean-Pierre joined Ferrier Hodgson in 2003 after migrating from South Africa to start the Forensic IT and Fraud investigation practice in Adelaide.

Jean-Pierre has spent more than 19 years in fraud investigations, the last twelve focussed primarily on computer forensics. He started his career in forensic auditing with the South African Postal Services, which led to major investigations into postal theft, credit card fraud and corruption.

Jean-Pierre later headed up the forensic auditing division of a multi-national conglomerate, leading investigations in organised crime, money laundering and asset misappropriation schemes. During this time he practised in South Africa, England and the United States of America.

Jean-Pierre has prepared independent expert reports in a number of legal proceedings and has provided advice to litigators in a number of matters in respect of data collection and analysis.

## Mr Tony Rossi

Tony graduated with an Honours Degree in Bachelor of Laws in May 1982 and has been admitted to practice in the Supreme Court of South Australia and Federal and High Courts of Australia from December of that year.

He is a senior member of the profession with extensive experience as both solicitor and counsel in most civil jurisdictions. He has appeared as counsel for Rossi Legal and a number of other law firms in the High Court, Federal Court, Supreme Court, District Court, Workers Compensation Tribunal, Industrial Court of South Australia, Fair Work Australia, Medical Practitioners Disciplinary Tribunal, Administrative Appeals Tribunal and Equal Opportunities Tribunal.

Tony has been involved in many of the leading cases in the areas of common law damages claims for personal injury, defamation, workers compensation and industrial law.

## The Honourable David M. Smith QC

Judge Smith graduated from the University of Adelaide Law School in 1968. He was appointed a judge in the District Court in 1999.

Prior to his appointment, Judge Smith was a barrister for approximately 20 years. In 1997 he was appointed a Queen's Counsel.

He has worked as a counsel in a wide range of civil and criminal areas. He was counsel assisting the National Crime Authority during their early time in Adelaide in the late 1980s, and in particular, prosecuted in the case against the disgraced head of the SA Police Drug Squad, Mr Barry Moyse. Judge Smith was also counsel assisting the Commissioner in the Royal Commission into the Hindmarsh Bridge in 1995.

As a barrister, Judge Smith had an interest in aviation law and was briefed regularly by Commonwealth government instrumentalities such as the RAAF and Department of Civil Aviation (as it then was) to appear in Inquests and civil actions arising out of fatal air accidents – one being the Hot Air Balloon Collision over Alice Springs in 1989. He is married, with two sons and one grand-daughter.

## **The Honourable Justice John Sulan**

The Honourable Justice Sulan was born on 28 April 1946 in Prague, migrating with his Family to Australia in 1949. He practiced as a partner at Thomson Simmons & Co and acted as Senior Counsel of the Commercial Crime Unit in Hong Kong between 1982 and 1988. He was appointed to investigate the affairs of Bond Corp Holdings Ltd in March 1990 and was appointed Her Majesty's Counsel in and for State of SA in the same month. He was a judge of the District Court of South Australia between 1997 and 2003 before being appointed as a justice of the Supreme Court of South Australia, where he remains today. He is a former chair of the Indigenous Justice Issues Committee (SA Chapter) and is chair of the Abraham Institute. His honour's outstanding contribution to the promotion of multiculturalism earned him the 2013 Governor's Multicultural Award.

## **Ms Kellie Toole**

Kellie Toole is a Lecturer at the Adelaide Law School. She teaches in Evidence Law, Criminal Law and Procedure and Military Disciplinary Law, and is undertaking a PhD on the offices of the Australian Directors of Public Prosecutions. She joined the Law School in 2011 having previously worked as a criminal defence lawyer.

## **The Honourable Justice Richard White**

Justice White was a member of the Independent Bar in South Australia for 22 years. During that time he practiced in a wide range of jurisdictions. He was appointed silk in 1997, to the Supreme Court of South Australia in 2004 and to the Federal Court of Australia in 2013.

## **Professor John Williams**

Professor John Williams is the Dean of Adelaide Law School, The University of Adelaide. John's main research interest is public law and in particular Australian constitutional law, The High Court of Australia, comparative constitutional law, federalism and legal history.





