

Year in Review

2016

Focused on the Future



Actuaries
Institute



Focused on the Future

2016 saw the actuarial profession build for the future as trusted advisors to business and government on key societal challenges. Longevity risk; the impact of big data on insurance; and the objectives of Australia's superannuation system were just some of these issues that benefited from actuarial analysis in 2016.

Actuaries are expert at predicting future uncertain outcomes. But with two major unexpected election results in Brexit and Trump's victory, 2016 proved how unpredictable outcomes can be.

On a highly connected global stage, business models and products are rapidly evolving. That's why in 2016, the Institute's Council met to envisage the actuarial skill-set in a range of future 'Big Scenarios'. This will ensure Institute strategy takes account of key and relevant future trends and looks far enough ahead to seize opportunities.

Maintaining the quality and relevance of actuarial qualifications is of utmost importance to the profession. That's why in 2016, the Institute began rolling out a stronger CPD program. New online delivery modes saw heightened engagement with members across the globe.

The profession's connection to both the banking industry and its data analytics community also grew stronger in 2016. Events, workshops and technical competitions gave members the chance to gain new insights and align their skills to enhance future employment prospects in these fields.

The *See what we see* campaign continued to bolster the profession's reputation in 2016, showcasing actuaries as thought-leaders in the important public policy debate on the impact of big data.

Continued positive engagement with external stakeholders and the international actuarial community has also made 2016 a productive year. These relationships helped progress new actuarial research which strengthens brand 'Actuary' now, and into the future.

At the heart of the profession's success stands actuaries' analytical skills and business acumen. The Institute, with its operations at HQ and with over 500 valued volunteers, is committed to empowering members and positioning the profession to take full advantage of future opportunities.





Welcome
Lindsay Smartt
President

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From the President

Lindsay Smartt

As your president for 2016 my role has been to lead the profession and further its standing and prospects. It was a great honour to be President and I was mindful of the trust placed in me and felt the responsibility that accompanied the honour.

I started the year ***focused on the future*** and spoke in my Presidential Message on my themes for the year of:

- **Relevance**
- **Sustainability**
- **Community** – our place in business and society

While these themes were ‘forward looking’ they were also informed by where we had come from as a profession. I remarked how I had observed over my career that the profession had not only remained relevant and sustainable but it had actually grown in its areas of influence, most notably in general insurance.

During 2016, the practice area of data analytics (or big data or predictive analytics) lived up to the rapid developments that we expected over the year. Council had identified data analytics as a key new area of focus and undertook strategic discussions with key practitioners from the Data Analytics Working Group. The topic occupies increasing footprint in our major events and we sold out our hands-on seminar in September. The facilitated MOOC and our second Kaggle competition are also proving to be very popular. I had the opportunity of addressing the global profession in May in Europe on the future of this exciting new area for the profession and showcasing the achievements made by the significant and rapidly growing number of our members working in this field.

Through the course of 2016, I have been surprised at just how rapidly the landscape changes. We commenced a fundamental review of our qualification education system as, in keeping with my theme of sustainability, Council needed to ensure that our education system and business model was appropriate and sustainable. Even through the course of the review, we continue to witness key developments in the global profession.

A guiding principle I have taken through 2016 as President is to always ask “is this in the interests of members”? We

have continued our efforts in making a valued contribution to public policy in many different areas. Not only do these enhance the quality of public debate on important topics but they also serve our members, many of whom practice in the relevant areas.

I have been keen to ensure that Council is effective in its deliberations and decision-making. This comes through constructive debate and challenge and also through continued efforts in transparency and diversity.

I’ve valued the opportunity to meet and engage with many members and never cease to be impressed at the achievements of our relatively small profession. This is in no small measure thanks to the efforts of our large number of volunteers. The team at HQ work for the members and took steps in 2016 to make the work of volunteering even more effective and rewarding. My sincere thanks to all involved.

We as a profession, more than ever, need to be ***focused on the future***. Over the course of 2016, we witnessed two unexpected public voting outcomes in Brexit and the US presidential election. It is very appropriate that as Council prepares itself for the year ahead, it is taking into its strategy discussions some well thought through scenarios to help ensure its thinking remains responsive to change.

Of course, while we will only see in time how things unfold in the future, actuaries are very well placed to understand current and future risks and to respond accordingly. As we remain focused on the future, the success of our profession will best be ensured by:

- taking our core traits of communicating key business insights with professional rigour from analysing complex and often long-term future uncertain situations; and
- adapting to the new world of rapidly changing and diverse large data sets.



From the CEO

David Bell

Your Institute: Focused on the future

While I firmly believe that the Institute is in a good position it's important not to fall into the trap of complacency. With this in mind I believe that the five biggest challenges the Institute faces, are:

1. Making sure our **Strategic Plan takes account of key and relevant future trends**, and looks far enough ahead when doing so. Council will be addressing this when it reviews the current Strategic Plan in early 2017.
2. **Internationalisation of the profession**. Capital flows, information exchange, laws and standards and the movement of people now happen at a global level. There are opportunities (and threats) for the Australian arm of the profession which we must be far-sighted about, and act upon.
3. Ensuring we have the **best possible qualification education model** in place for the future. Working out what this model is, gaining member support, and then delivering a new approach is a significant undertaking. It's vital work though, because the Institute's actuarial qualification is the *raison d'être* of the organisation.
4. **Expanding the reach of the profession** and actuaries into new areas of practice. Data analytics represents the most significant current opportunity. There will be others and we need to ensure the trends that are relevant for the profession are understood.
5. Making sure the Institute itself is **fit-for-purpose** to be able to deliver on the current strategy and future challenges. The key to this is running a modern, efficient membership organisation, with appropriate governance, which is aligned with the needs and interests of its members.

These, and other challenges, are being addressed through the Institute's Strategic Plan 2015-17.

- **Goal 1: Education renewal.** The need to transform our qualification education system and CPD offering so that they keep up with member demand, new practices, and better ways to deliver information and our education services.
- **Goal 2: Members first.** There is absolute focus on providing members what they want at the best price.

Key elements of this approach have included: greater transparency of our operations (e.g. members can now see Council's minutes), and making sure we live within our means (more on that below).

- **Goal 3: Greater public attention and influence.** These two go hand-in-hand. We have stepped-up not only the number of our quality papers and submissions but also how we market them both through free and paid media, including the already established brand marketing campaign: *See what we see.*
- **Goal 4: Better engagement with our Asia-based members.** We have now recruiting to provide our members support on-the-ground, in Hong Kong. This will allow us to promote member networking, provide student support, build key stakeholder engagement and ensure that there is a clear understanding of the value of the Australian actuarial qualification.
- **Goal 5: Promoting banking and data analytics as mainstream practice areas.** Data analytics, in particular, has a lot of untapped potential, and our energised working group is providing excellent leadership.

Finances

The Institute's finances remain strong and our focus is on sustainable financing of the Institute's operations. We have moved from budget deficits funded by reserves to generating small surpluses from 2016 onwards. Compared to 2014, our expenditure is \$490k (6%) less in 2016 at a total of \$8.3m.

Organisation of HQ

We have now put in place a structure which is focused on delivering the Strategic Plan. The structure also emphasises providing the best possible service to members and making sure we further integrate our operations with the Institute's database management system.

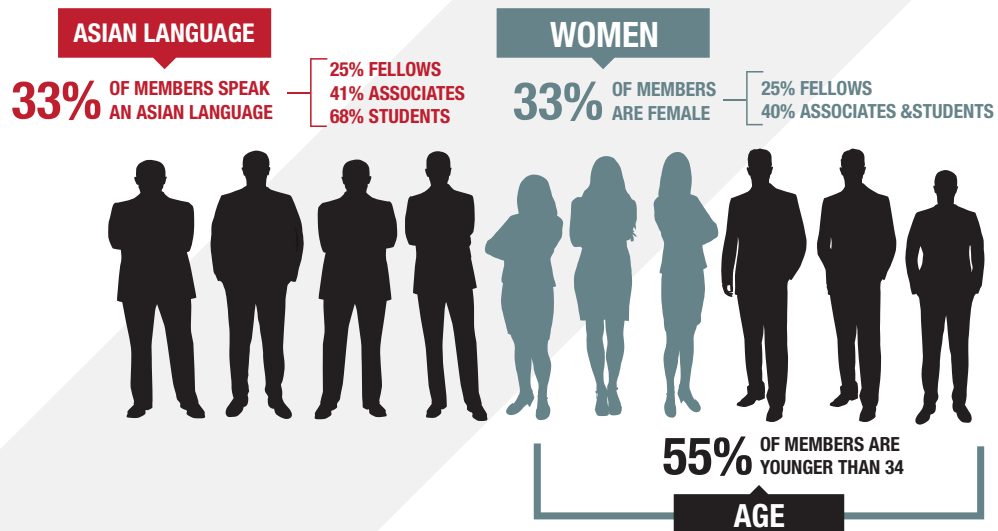
The other major change we've made is to provide better support to our volunteers and committees on whom we rely so much. For all of our many members who have made a contribution this year, and in previous times, I would like to thank you for all your support and hard work.

A black and white portrait of David Bell, CEO, smiling. He is wearing a dark suit, white shirt, and a striped tie. The background is a textured wall. A white diagonal graphic element is in the top right corner.

David Bell, CEO

The Institute's finances remain strong and our focus is on sustainable financing of the Institute's operations.

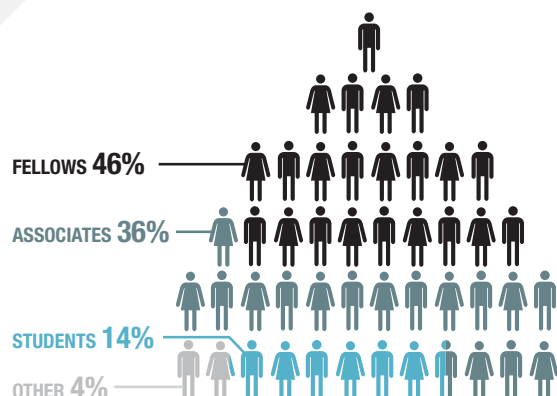
Membership Data 2016



Our Membership diversity (as at 1 September 2016)

Membership by Age								
	<25yrs	25-34 yrs	35-44 yrs	45-54 yrs	55-64 yrs	65-74 yrs	>75 yrs	Total
Accredited	0	10	9	4	1	0	0	24
Fellow	4	614	613	466	242	161	72	2172
Associate	5	337	204	74	29	24	4	677
Student	575	1009	96	15	1	1	0	1697
Affiliate	0	30	40	36	21	7	2	136
Total	584	2000	962	595	294	193	78	4706
%	12%	42%	20%	13%	6%	4%	2%	

Membership by Gender			
	Male	Female	Total
Accredited	19	5	24
Fellow	1629	543	2172
Associate	399	278	677
Student	1013	684	1697
Affiliate	96	40	136
Total	3156	1550	4706
%	67%	33%	



Members by Member Type			
	Australia	Overseas	Total
Accredited	22	2	24
Fellow	1695	477	2172
Associate	506	171	677
Student	1337	360	1697
Affiliate	105	31	136
Total	3665	1041	4706

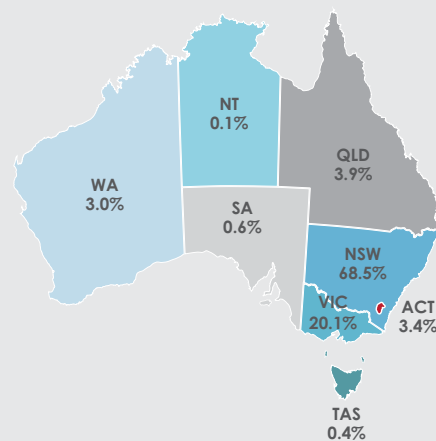


Members in the rest of the world	
New Zealand	167
UK	156
US	42
Switzerland	12
Canada	8
South Africa	6
Germany	5
Ireland	5
France	3
Israel	3
Netherlands	3
Norway	3
Spain	3
Bermuda	2
Fiji	2
Mauritius	2
Brazil	1
Denmark	1
Nigeria	1
Total	425

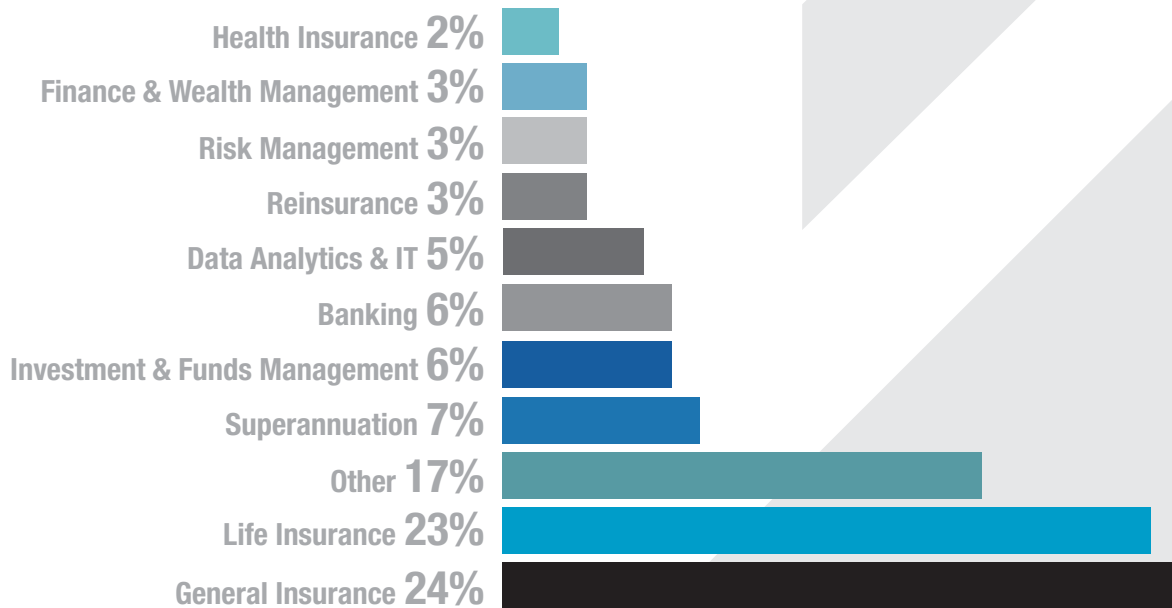
Members in Asia	
Hong Kong	239
Singapore	122
China	112
Malaysia	78
Thailand	20
Japan	11
Indonesia	10
Korea, (S) Republic Of	7
Vietnam	5
India	4
Sri Lanka	2
Taiwan	2
Pakistan	1
Philippines	1
United Arab Emirates	1
Macao	1
Total	616

Members by State	
ACT	125
NSW	2511
VIC	736
WA	108
SA	22
NT	4
TAS	15
QLD	144
Total	3665

Australia-based Members % by State



Member Practice Areas



CHANGING PRACTICE AREAS

LIFE INSURANCE 28% of Fellows; only 19% of Students **23%**

SUPERANNUATION 9% of Fellows; only 4% of Students **7%**

DATA ANALYTICS 2% of Fellows; 11% of Students **5%**

ONLY A SMALL NUMBER OF FELLOWS WORK IN...

BANKING 91

HEALTH 50

DATA ANALYTICS 37

ENERGY AND ENVIRONMENT 10

NO PRACTICE AREA

13% OF MEMBERS
HAVE NO RECORDED
PRACTICE AREA

611

175

RETIRED ACTUARIES

4% OF MEMBERS ARE
RETIRED, BUT MANY
REMAIN ACTIVE IN
INSTITUTE ACTIVITIES

238

QUALIFICATIONS

97 NEW FELLOWS
82 NEW ASSOCIATES
59 CERA

Member Milestones in 2016

New Fellows in 2016

Aaron Blackwell
Evelyn Agustin
James Andruczyk
David Barnes
Fennalia Carle
Danielle Casamento
Darren Catterson
Oliver Chambers
Christopher Chau
Aamir Chaudhry
Guang Chen
Zhe Chen
Gilbert Cheng
Janice Cheng
Michael Cheung
Han Wah Chew
Clayton Chiong
Terence Chiu
Wan Hee Cho
Kee Chou
Michael Clarke
Nathan Colbert
Michael Di Pilla
Nguyen Diep
Didier How Yin Fat
Yining Feng
Luke Fieldes
Kevin Fong
Chao Gao
Babak Golestan Nejad
Harrison Haggith
Timothy Hillman
Justin Ho
Fengjing Huang
Roman Kashkarov
Frederick Kruger
Matthew Larkin
Emily Law
Gwi Weon Lee
Ka Lok Leong
Wilson Leung
Mike Lin
Heng Liu
Su Hong Loh
Kar Kan Loh
Meng Lou
Tian Lu
Cameron Lucas

Stuart Gordon Mainland
Anthony Man
Sidney McCutcheon
Rowan Winston Ming
Rajiv Narotam
Marcello Negro
Ian Nicholas New
Sinn Shun Ng
Evelyn Njoo
Niamh Nolan
Yu Jie Ong
Andrew Pak
Ji Park
Kruti Patel
Christopher James Porter
Julie Anne Rapusas
Paul Rehill
Denise Rhind
Daniel Rose
Greggy Samonte
Arjun Sathasivam
Dimitri Semenovich
Kok Keng Siaw
Christopher Sissons
Yu Sun
Melissa Tam
Yin Kwan Carmen Tam
Yong Tze Tan
Andy Tang
Evelyn Tanudjaja
Leck Tham
Phin Wern Ting
Heidi Tjahjadi
Francesca Trieu
Solailakshmi Valliappan
Christopher Van Riel
Peter Vuu
Tianyang Wang
Monika Weenink
Shirley Weng
Richard Wickremasinghe
Wan Wah Wong
Wei Raun Wong
Wan Jun Xu
Edward Yeldham
Chao Zheng
William Zheng
Yang Zheng
Dan Zhu

Members who achieved Associate/Actuary Designation in 2016

Gaurav Agrawal
Sharifah Farah Alhabshi
Tahvia Andres
Ishan Bapat
Marcus Sheather Burton
Kim Chan
Xiaoyan Chen
Jeremiah Cheung
Queenie Wing Man Chow
Julia Davidson
Xiaoting Deng
Terence Donnelly
Brendan Fehon
Ian Finch
Angelika Fleer
Mingyuan Guan
Yu Guo
Joel Hartmann
Guan Wen Jiang
Farhaad Kachwalla
Lauretta Karreman
Harshana Kiriella
Kieran Kishore
Cindy Komah
Isaac Konstas
Angela Lau
Zhixin Li
Zhetao Lin
Rodney Liu
Zimeng Liu
Anisa Mary Lurthanathan
Luke North
Jun Hyun Oh
Anna Pearce
Y'ng Phoon
Leanne Reynolds
Toni Roberts
Taryn Royeppen
Niroshan Sathiyamoorthy
Trully Catharina Smith
Michiru Takizawa
Justin Tam
Mun Zhe Tan
Angela Tang
Jesse Treharne
Edmund Tsang

Fiona Tsang
John Lawrence Uy
Xu Wang
Dan Wang
Zi Wee
Jeffrey Wong
Leah Wongsodirdjo
Bing Wu
Yudi Wu
Claudia Yan
Rachel Yao
Fan Zhang
Xiaobin Zhong
Zhao Zhong
Sunny Zhou

Members who achieved CERA Designation in 2016

Aaron Blackwell
Danielle Casamento
Chaoran Chen
Zhe Chen
Gilbert Cheng
Janice Cheng
Jeremiah Cheung
Michael Cheung
Terence Chiu
Kee Chou
Nathan Colbert
Robert Gibbs
Yu Guo
Harrison Haggith
Alick He
Fengjing Huang
Timothy Jeffrey
Brendan Jones
Andrew Kight
Kelly Lee
Wilson Leung
Grace Li
Weixuan Li
Mike Lin
Heng Liu
Rodney Liu
Ben Locke
Cameron Lucas
Dean Marcus
Sidney McCutcheon

Rajiv Narotam
Marcello Negro
Colin Priest
Julie Anne Rapusas
Greggy Samonte
Sook Fui See
Kok Keng Siaw
Bill Sun
Yu Sun
Justin Tam
Melissa Tam
Andy Tang
Francesca Trieu
John Lawrence Uy
Solailakshmi Valliappan
Fiona Van Rooyen
Xu Wang
Monika Weenink
Wan Wah Wong
Wei Raun Wong
Wan Jun Xu
Claudia Yan
Peter Yeates
Edward Yeldham
Timothy Yip
Chao Zheng
William Zheng
Yang Zheng
Xiaobin Zhong

Strategic Plan 2015-17

GOAL 1	Actions
Best practice education and lifelong learning Update and modernise qualifications, making them more widely valued and relevant to the region, and build a stronger CPD program.	<ol style="list-style-type: none"> 1. At a high level, define, agree and promote the skills required by an actuary of the future to be in demand domestically and internationally. 2. Design and commence implementation of a commercially-sound CPD program aligned to Member and industry needs in Australia and Asia. 3. Align Parts I & II content, teaching methodology and assessment to deliver the skills required by future actuaries and maintain international recognition. 4. Review and enhance Part III curriculum to meet current and anticipated employer needs and provide career development opportunities. 5. Review and modify internal procedures and systems to facilitate growth.
GOAL 2	Actions
Improved Member and student engagement Increase relevance by improving engagement with Members and students.	<ol style="list-style-type: none"> 1. Increase Council and committee accessibility to improve transparency. 2. Encourage diversity on, and participation in, committees, working groups and taskforces. 3. Improve service to Members by understanding their needs and interests. This will be achieved by enhanced analysis of available Member data to develop tailored value propositions for each group. 4. Individualise communications to increase relevance.
GOAL 3	Actions
More influence and better known Have a significant influence on a range of decision makers and employers, on a range of critical topics, where we have credibility.	<ol style="list-style-type: none"> 1. Develop thought leadership for key long-term themes relevant to the profession. 2. Attentive engagement with corporates, governments and opinion leaders to understand emerging issues relevant to the profession. 3. Develop integrated policy, media, CPD and research strategy to raise awareness of profession's expertise and contribution to business/society. 4. Speak out on areas of public interest where Institute can add expertise. 5. Raise awareness of actuaries' work and value-add to business/society.
GOAL 4	Actions
Reach further in Asia Build stronger relationships with Members and other stakeholders and be a supplier of choice of the local actuarial societies in Asia for CPD.	<ol style="list-style-type: none"> 1. Enhance our regional connections with a range of stakeholders, particularly local actuarial associations. 2. Develop an enhanced and highly professional CPD offering across a wide range of topics. 3. Market our CPD offerings to Members, local professional actuarial associations and other relevant professions. 4. Enhance and maintain a strong country network and our knowledge of country-specific CPD needs.
GOAL 5	Actions
Extend practice reach Extend the reach of actuaries within the data analytics and banking sectors.	<ol style="list-style-type: none"> 1. Increase awareness (including of the profession, employers and media) of the opportunities for actuaries in the sectors. 2. Engage with employers to highlight the value the profession can bring to the sectors and identify any additional skill sets required of actuaries to succeed in those sectors. 3. Design relevant education programs to develop desired skills and provide transitional pathways between current and emerging practice areas.



Public Policy Council Committee

Council in 2016

The Council is the governing body of the Institute. In 2016 it deliberated on, and made decisions about, a wide range of issues affecting the profession and members, including:

- First and foremost, ensuring that the Institute's Strategic Plan 2015-17 remains relevant and is meeting its objective.
- The Education system – the strategic review is looking at the Institute's qualification education system and will be making recommendations on a model to meet the future requirements of members and the profession. Council will be making its decision at the March 2017 Council meeting.
- The Code of Professional Conduct – this review is currently underway and a report to Council is expected in June 2017.
- The Disciplinary Scheme – because any changes to the Code of Professional Conduct could impact the Disciplinary Scheme an extensive review is being undertaken and member consultation will be widely sought. Any changes to the Scheme will be put to members to vote on at the 2018 AGM.
- The review of operational governance of the Institute, covering policies, financial delegations, and the operation of committees.
- Better supporting and recognising the work of volunteers, whose contribution is vitally important to the profession. The plan will be implemented in 2017.
- Meeting regularly with the Practice Committee Convenors for feedback and information sharing.
- Endorsing the strategic review by the data analytics working group.
- Considering the latest developments in the life insurance industry.
- Approving the Institute's second neutral budget in a row.
- Approving changes to the constitution, regarding the election of Councillors, for members to consider.
- Considering reports on the public policy work of the Institute.

The reports following each Council meeting will continue, as they are being well received and provide an opportunity for members to have insight into the varied issues that are being dealt with by your Council. Members are also asked to provide their views to Councillors before each Council meeting.

CEO David Bell (right) acknowledges Lindsay Smartt's leadership contribution in 2016



Lindsay Smartt – President 2016



Jenny Lyon – Senior Vice President



John Evans – Vice President



Andrew Brown



Hoa Bui



Bill Konstantinidis



Michale O'Neill



Chao Qiao



Barry Rafe



Nicolette Rubinsztein
Incoming Vice President 2017



Lisa Simpson



Andy Yang



Lindsay Smartt handing over to
incoming 2017 President, Jenny Lyon

Education

Education and CPD developments during 2016 were led by two key groups: the Education Council Committee (ECC), whose members are from a range of practice areas, including the universities, and the HQ Education Team.

Major Education Review

A comprehensive review of the Institute's qualification education system kicked off in the second half of 2016. It is useful to step back and review our education program from time to time, and there are several reasons for undertaking such a review now:

- We need our education program to produce actuaries who are equipped to operate in a world where (for example) the use of data and data analytics are increasingly important.
- Changes are happening in the education environment – including the introduction of new methods of delivering content and learning.
- The qualification system has been under increasing pressure over the last decade.
- A new international actuarial syllabus is being implemented.

The Institute is working on the review with an external consultant, David Bowser of Curio Advisory, who has broad and relevant education experience. The review covers all aspects of the qualification education program – Parts I, II and III – and incorporates research and consultation with members (did you have your say?), employers, accredited universities and other stakeholders.

The review will report to Council in March 2017, and provide alternatives/options to the current approach to qualification education. As well as meeting the future requirements of the profession and individual actuaries, each option will need to be practical, affordable and sustainable.

Part III education

Developments in Part III education during 2016 include:

- The new ERM workshop and online discussion forum were implemented (to very positive feedback).
- Data analytics was introduced into the Commercial Actuarial Practice program.
- A Part III Banking course has been approved for development – the current target is to introduce the course in Semester 2 2017, at the earliest.
- A range of measures which are intended to improve the Part III learning experience are being implemented.

CPD

This year, CPD in data analytics was offered in the form of a MOOC and an associated actuarial study group. Feedback was favourable. The group was over-subscribed and it will be run again in 2017.

The content and structure of the Institute's CPD offerings is being improved, in a project that will continue into 2017. Changes being made will mean CPD is more targeted to members' needs, and will be more accessible.

Thanks to our Education Volunteers!

Once again, ECC and the HQ Education Team continue to be very grateful for the many Education Volunteers – members of committees and working groups, the University Accreditation Panel, External Examiners, Course Examiners, Course Developers, Course Tutors, Exam Writers and Markers, Discussion Forum Moderators, etc.

Running the Institute's education program depends on the volunteers giving up their valuable time, and bringing passion and expertise to the job. Each group of newly qualified actuaries owes a big debt to the volunteers who've made their education possible. For a full list of 2016 Education volunteers, please see page 46.

Gae Robinson

Convenor, Education Council Committee



Monika Weenink and Lindsay Smartt



L-R: Mingyuan Guan, Xiaoyan Chen, Alan Wu, Tim Wee – Melbourne Presidential Dinner



New Fellow Millie Lou giving Vote of Thanks in Sydney



L-R: Marcello Negro, Oliver Chambers, Melissa Tam, Stephanie Chou, Janice Cheng, Cameron Lucas, Steven Diep– Melbourne Presidential Dinner

International

During 2016, the International Council Committee was firmly focused on activities that are relevant to the future of the Australian profession.

The Actuary of the Future

During the year the Education Committee of the International Actuarial Association (IAA) formally adopted a new syllabus to better equip actuaries to meet the challenges of the future. However, official adoption by the IAA is being deferred whilst the governance surrounding the syllabus is clarified. In the meantime, the Actuaries Institute can, and will, press ahead with changes to our own syllabus. Fortunately our changes are aligned to the IAA's proposals.

There were two other international developments in respect of education that will affect the future in Australia. The first is that the Society of Actuaries (SOA) has accredited three Australian universities as Centres of Actuarial Excellence. Note that, unlike the Institute's university accreditation, the SOA does not provide exemptions for subjects passed at universities. The second development is that the SOA and the Institute and Faculty of Actuaries of the UK (IFOA) have combined to offer the Certified Actuarial Analyst (CAA) course. This course was previously offered by the IFOA only. The qualification is relatively technical, and it is expected to be particularly relevant in developing countries where there is a shortage of actuaries.

Both these developments will be incorporated into the Actuaries Institute's Education Review.

Data analytics and banking

The IAA formed two new Working Groups in 2016 – one in respect of Data Analytics and one in respect of Banking. These are areas of growth for the profession, as identified by the Actuaries Institute. Australia has representatives on both these Groups. Australian actuaries can contribute to these Working Groups because of our expertise, and we

can also benefit from the experience of other associations that have made significant inroads into these disciplines.

International Congress of Actuaries 2022 (ICA 2022)

Although it is still six years away, work continues behind the scenes in preparation for ICA 2022, which is being held in Sydney at the soon to be opened International Convention Centre. About 1500 actuaries from around the world are expected to attend, and this is a great opportunity to showcase our innovative profession and our wonderful country.

During the year meetings were held with the German actuarial profession, which is hosting ICA 2018. It is very likely that ICA 2018 will be a resounding success, and we are learning from Germany's experience.



Supranational organisations

The commercial environment within which actuaries work is becoming increasingly global, and the IAA provides actuaries with the opportunity to influence supranational organisations.

The International Association of Insurance Supervisors (IAIS) is committed to developing a new global regulatory framework of capital standards for insurance companies. The IAA is working collaboratively with the IAIS to ensure that the standards are actuarially sound. Similarly through the IAA actuaries have a constructive dialogue with the IASB (International Accounting Standards Board) and thereby assist the IASB in formulating the

accounting standards as they affect insurance companies and superannuation funds. Australian actuaries are represented on the IAA Committees in these areas, and ensure that the Australian point of view is taken into account.

Public policy

International developments can provide valuable CPD for Australia.

- The Population Issues Working Group (PIWG) of the IAA completed its paper in 2016 *Determination of Retirement and Eligibility Age: Actuarial, Social and Economic Impacts*, and is close to completing a paper on Long Term Care.
- The Mortality Working Group continues to develop its mortality Data Base, which features relevant research into various aspects of mortality.
- Chapters in the IAA Risk Book continue to be rolled out. The IAA Risk Book provides a set of high quality reference materials for use in managing the uncertainty of insurance risks.

People

- After three years as President elect, President and Past President, Fred Rowley will leave the leadership group of the IAA at the end of 2016. Fred's leadership of the IAA over this period has been outstanding.
- During 2016 Bozena Hinton was appointed Chair of the IAA's Education Committee. This appointment was acknowledgement of the outstanding work that Bozena has carried out in respect of education over many years, both internationally and in Australia.
- Also during 2016, Tim Furlan joins the International Council Committee. Tim is a senior actuary practising in superannuation and is a worldwide expert in accounting aspects of superannuation funds.

Martin Stevenson

Convenor, International Council Committee



Lindsay Smartt and David Bell, Staple Inn, Institute and Faculty of Actuaries



President Lindsay Smartt, and CEO of the Institute and Faculty of Actuaries, Derek Cribb, 17th China Actuarial Annual Conference



Members in Beijing

Leadership and Career Development

The Leadership and Career Development Committee is responsible for:

- Promoting to members the importance of managing their career path and of thinking more broadly about the notion of career.
- Raising awareness of the value of developing leadership and communication skills to members.
- Raising awareness of the leadership capabilities of members of the profession to stakeholders. This includes employers, government, professional bodies, members, new entrants to the profession – school leavers and university students.
- Encouraging interaction with other professionals for purposes of interdisciplinary education and relationships.
- Advising Council on recommended leadership initiatives.

Leadership Events and *Actuaries Digital*

In August 2016, the first Leadership Development Seminar – Stepping Up was successfully held, taking the form of a paid half-day seminar solely focused on the themes of career development and leadership. The Committee also arranged a number of leadership forums in Sydney and Melbourne, with a range of internal and external speakers, as well as a session focused on *Actuaries of Tomorrow* at the General Insurance Seminar in November. A regular leadership column entitled *Actuaries Taking the Lead* also appeared in *Actuaries Digital*, covering a wide range of topics. (<http://www.actuaries.digital/2016/08/14/inspiring-new-generations-of-leaders/>)

High School Program and Careers

The Committee continues to support the high school program in which actuaries can present to careers advisers and senior high school students about becoming an actuary, with a strong interest from members of the profession to assist with high school visits. In 2016, our volunteers visited 30 high schools. The Institute was also well represented at the Sydney CBD Schools Careers Convention and the UNSW and Macquarie University Open Days, with great engagement from students and careers advisers at both events.



Jan Swinhoe interviewing 'actuarial royalty' (Jan's words, and backed up by their extremely impressive CVs) – Trevor Matthews (Chairman AMP Life) and Ian Pollard (Chairman, Billabong International and RGA Reinsurance). The focus of this session was *Actuaries as Leaders*.

Mentoring Program

The Mentoring Program has been running for some years and has continued to grow throughout 2016, with the most recent intake in August. A 'control cycle' approach is employed and comprehensive feedback is sought from those who participate in the program, both as mentees and mentors, in an effort to continually improve and tailor the program to their needs. The program focuses on supporting these relationships, and encouraging mentees to take initiative in organising and managing the process.

Practice Update Video

As part of the new CPD Program currently being developed, the first instalment of the Leadership and Career Development Practice Update Series was released in December. Approximately five minutes in length and presented by Louise Campbell and Anthony Lowe, the update aims to keep members informed on the committee's focus for the last year and plans for the year ahead, useful sources of CPD, details of committee members, key headline news and any important changes to legislation, regulations, standards etc.

Committee Membership

Following the resignation of Jan Swinhoe towards the end of 2016, expressions of interest were sought to fill two positions on the Committee, ensuring that the Committee extended its focus and had diversity in age, gender, practice area and location.

Thank you to Jan Swinhoe who was a very active member of the Committee for many years.

Welcome to Elizabeth Martin and Tim Gorst – we look forward to working with you in 2017.

Looking Forward

The Committee recognises the challenges in ensuring that its activities are directly relevant to the needs of the profession across a spectrum of skills and experience. We will continue to engage with members and other Committees to ensure our activities are fresh and relevant for the changing needs of the profession in 2017 and beyond.

Louise Campbell

Convener, Leadership and Career Development Committee

**Leadership skills are essential
for actuaries in the business
world of tomorrow.**

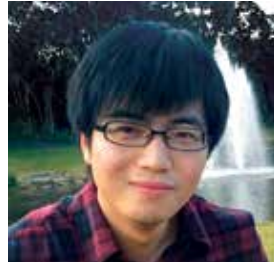
Education Prizes

Semester 1				
C2A	Life Insurance	Andrew Prescott Prize	David Barnes	Sydney, Australia
C2B	Life Insurance	Andrew Prescott Prize	Yiu Hon Chan	Auckland, New Zealand
C3A	General Insurance	Katherine Robertson Prize	Jordan Pedder	Sydney, Australia
C3B	General Insurance	Katherine Robertson Prize	Yuenan Li	Sydney, Australia
C5B	Investment Management & Finance	Andrew Prescott Prize	Jinqing Li	Beijing, China
C6A	Global Retirement Income Systems	Andrew Prescott Prize	Paul Thomson	Melbourne, Victoria
C10	Commercial Actuarial Practice	Andrew Prescott Prize	Timothy Hillman	Sydney, Australia
Semester 2				
C2A	Life Insurance	Andrew Prescott Prize	Samuel Stewart	Auckland, New Zealand
C2B	Life Insurance	Andrew Prescott Prize	Chen Yang	Melbourne, Australia
C3A	General Insurance	Katherine Robertson Prize	Tianyu Qi	Sydney, Australia
C3B	General Insurance	Katherine Robertson Prize	James Yap	Sydney, Australia
C5A	Investment Management & Finance	Andrew Prescott Prize	Richard Dunn	Sydney, Australia
C6B	Global Retirement Income Systems	Andrew Prescott Prize	Wen-Han Koh	Sydney, Australia
C10	Commercial Actuarial Practice	Andrew Prescott Prize	David Barnes	Sydney, Australia

Semester 1



David Barnes



Jinqing Li



Jordan Pedder



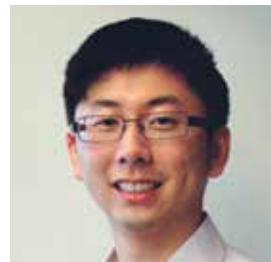
Paul Thomson



Timothy Hillman



Yuenan_Li_(Nancy)



Yui Hon Elton Chen

Semester 2



Chen Yang



David Barnes



James Yap



Richard Dunn



Samuel Stewart



Tianyu Qi (Cathy)



Wen Han Koh

Public Policy

The Actuaries Institute provides expert commentary on public policy issues to better inform policy debates and increase awareness of the profession.

We are guided by public interest and the principles of transparency, fairness and good regulation. We focus on challenges of an ageing population, financial sustainability and positive consumer outcomes, societal challenges and technology opportunities and risk.

In 2016, we explored how the family home could help mitigate longevity risk and improve retirees living standards through our Green Paper *Unlocking Housing Wealth – options to meet retirement needs*. We also released *The Impact of Big Data on the Future of Insurance* Green Paper which found that greater risk transparency can facilitate better behaviour but government will need to tackle issues such as privacy, and unaffordable premiums. Both papers received significant media coverage.

APRA released an important discussion paper on the role of the Appointed Actuary and actuarial advice within insurers. Working across practice areas, this presented a great opportunity for our profession to consider how this vital role could be improved to ensure better prudential and strategic outcomes.

We have built up a cordial and productive relationship with the Productivity Commission, responding to three submissions this year; Competitiveness and efficiency of the superannuation system; Proposed superannuation system-level objectives; and Data Availability and Use. In superannuation, we have also continued to push our concerns on product dashboards disclosure. We have organised industry stakeholders to consider the development of a long term risk metric; a move welcomed by the Productivity Commission. In general insurance we have written submissions and attended roundtables on CTP scheme

review and National Injury Insurance Scheme Queensland and in life insurance we have written on robo advice.

As always, we have significant engagement with Treasury, the regulators and the government, providing our pre-budget suggestions as well as feedback on the major superannuation proposals in the 2016 Federal Budget. We also had four very successful media roundtables in Sydney, Melbourne and Canberra building our relationships with senior trade press journalists. We've engaged with Senator Katy Gallagher, Wayne Byres, Geoff Summerhayes, Helen Rowell, Kevin Davis, David Murray and Graeme Samuel



In line with our strategic plan, we ran an Insights session to encourage and empower members to improve their influence and speak out on areas of public interest. The Climate Change Working Group also ran an Insights session and examined *Climate Risk Management for Financial Institutions* in a paper for the 2016 General Insurance Seminar.

Next year, we want to continue to focus on relevant public policy issues – in particular mental health and future life insurance products. Following previous collaborations with the UK and American actuarial organisations, we will also be publishing a comparison of

retirement adequacy across the three countries. We will continue to have a strong engagement program with our key external stakeholders.

I would like to thank all our members in Practice Committees, the Public Policy Council Committee and others who have been involved in developing public policy and thought-leadership for the Actuaries Institute. A special thanks to Andrew Boal, who has given nine years of public policy insight as convener of the Superannuation Practice Committee.

Elayne Grace
Deputy CEO and Head of Public Policy



Ian Cook, Stephanie Quine, Insights session – *Do you want to have more influence and be better known?*



Jennifer Lang, David Bell – *Do you want to have more influence and be better known?*



Sharanjit Paddam presenting on *Climate Risk Management for Financial Institutions* at 2016 General Insurance Seminar

The Impact of
Big Data on the
Future of Insurance
GREEN PAPER

Our expert
commentary has
been well received
by mainstream
media, regulators,
government
agencies and
politicians.

Practice Committees

● Banking

The Banking Practice Committee is focused on three major work streams: developing a Part III Banking course; establishing a network of actuaries working in the industry; and, engaging in public policy discussions on relevant topics.

Only 6% of the profession works in banking despite the variety of roles that exist for people with the actuarial skill set. The Committee's primary aim at the moment is to establish a Part III banking course to create a smoother pathway for actuaries that want to move into banking. We anticipate our first student intake will be in 2018.

Our second goal is to establish a network of actuaries already in banking that can support the profession working within the sector and also provide guidance and assistance to those who want to migrate to banking.

We have organised well-attended seminars to discuss topical issues, hear from regulators, such as APRA's Wayne Byres, and listen to actuaries that have carved out successful banking careers. We intend to host similar networking opportunities in 2017.

Banking is a highly regulated industry and the Committee is prepared to comment on topical issues where it has relevant expertise. A paper on Banking Capital is being developed in 2017 to inform discussion about system resilience.

Philip Everett

Convenor, Banking Practice Committee



Michael Cant and Nicolette Rubensztein



L-R: David Bell, Steven Münchenberg, Wayne Byres, Kevin Davis, Lindsay Smartt – 2016 Banking on Capital Seminar

Practice Committees (continued)

● Data Analytics

The Data Analytics Working Group was established in 2015. The ability to process and analyse vast quantities of data is at the frontier of digital disruptions, thus the Working Group aims to provide relevance for current and future actuaries in the field of Data Analytics.

Key achievements in 2016 include:

- The launch of the Actuaries in Data Analytics microsite <http://www.actuaries.asn.au/microsites/actuaries-in-data-analytics>.
- Building a presence at industry conferences.
- Providing exceptional plenary speakers at forums such as the Actuaries Summit and a host of other events.
- Running the second annual Data Analytics Seminar where attendees discover emerging trends from those at the forefront of the industry, and learn about the technical aspects of analysing big data with hands-on workshops.
- Assisting strategic review of formal education offerings in data analytics (ongoing), as well as facilitating CPD via study groups for reputable Mass Online Open Courses (MOOCs) on data analytics.
- Cultivating a community of professionals in data analytics by establishing a LinkedIn group with now more than 300 members.
- Hosting the second Actuarial Kaggle Competition, this time securing VicRoads data to create a problem for participants to predict the number of accidents by road segment in Victoria for the chance to win an IAG sponsored prize of \$5,000.

In 2017, we will aim to further support the formal education review for some pivotal first quarter dates, build the presence of data analytics at industry conferences, grow the community of professionals in data analytics and expand the success of Kaggle competitions to Hackathons.

Mitch Prevett

Convenor, Data Analytics Working Group



Bob Williamson, Data is Power Seminar



Alex Macoun, Data is Power Seminar



Mitch Prevett and Alan Whitelock-Jones lead the hands-on workshop of the Data is Power Seminar

Practice Committees (continued)

● General Insurance

In 2016, the General Insurance Practice Committee (GIPC) continued to focus across the broad spectrum of general insurance topics. As a key representative body for your interests we have had a busy year in making sure we maintain, and perhaps even extend, the high regard our stakeholders have for the actuarial profession. Having forums to achieve this has been easy – due to the number of inquiries and public policy issues in the financial services sector.

APRA questioned how we could improve the role and function of the appointed actuary regime within life and general insurance. Working with our colleagues we came to a harmonised position which looks to have the appointed actuary work with a self-defined actuarial function mandate.

In the long tail classes NSW CTP has seen superimposed inflation, not in claim sizes, but in an unsustainable increase in frequency. Policymakers' reaction has been to propose reform, from benefit design to premium systems and we have been at the heart of the debate. Submissions and enquiries on NSW CTP, the State Insurance Regulatory Authority's draft Market Practice and Premiums Guidelines and Licensed Insurer Business Plan Guidelines, plus the Review of CTP Motor Vehicle Insurance for point-to-point transport vehicles, all received our input.

We also worked with other practice areas on some big issues such as the productivity commission inquiry into the availability of data and its use. Thank you to Amanda Aitken, Estelle Pearson and Karen Cutter for their valuable contributions.

With regard to CPD, the major event was the 2016 General Insurance Seminar held in November with two additional events being the Managing Extreme Events and the GI Glimpse Seminars as well as a number of other Insights sessions on topics of interest. The effort put in here requires special mention of David Gifford, Rashmi Bansal and Bo Jiang. In particular the Managing Extreme Events Seminar covered a wide selection of topics from cyber-risk to natural perils, ICAAP and scenarios to man-made losses – demonstrating the broad understanding we need as actuaries to help advise our stakeholders.



Tony Vizza, Susie Amos and Christopher Mackinnon, GI Glimpse Seminar



Hugh Miller, Chris Dolman and Chao Qiao, GI Glimpse Seminar

Data Analytics – Actuaries have always been data scientists and evidence-based business experts, but the field is getting swamped and some of our skills are being overtaken. Nevertheless, the holistic understanding of the insurance value chain; the ability to ask the right questions and the skill to critically examine the data-driven answers, will enable actuaries to continue to contribute and advise in this increasingly data-rich world. The GIPC linked in with the larger Data Analytics Working Group with Jonathan Cohen, Yifan Fu and Amanda Aitken leading the topic.

We continued our liaison with the International bodies through Yifan Fu joining the IAA, David Whittle reaching out and helping run conferences with the CAS and SOA and many of our members putting their hand up for the IFRS 17 discussion.

Whilst benign in terms of natural perils in 2016 – what GI discussion would be without peril and who more able to lead us than Richard Yee and Jeremy Waite? They lead a wide group of practitioners in furthering our understanding and ability to model these – both now and in the future.



Anthony Robinson, Tricia Hobson, Tim Clark, Andreas Schmitt, Managing Extreme Events Seminar

The release of the Institute's public policy position on climate change was a watershed for the profession and places us in good standing with key policymakers.

Keeping you in touch was Arie van den Berg who takes on the never ending task of ensuring you are all aware of topics and discussions.

Following APRA's removal of the requirement for mandatory external peer review, GIPC proposed downgrading PS 315 External Peer Review to a professional guidance note, this was managed by Susan Ley.

Education in 2016 was a year of planning with the Institute taking a strategic look at how we manage and bring newer members of our profession to fellowship (and with skills that will be needed in the future).

Thank you to Mary Poon, who as secretary to our work, has kept us organised despite my best efforts to do otherwise.

The Committee also saw the formation of a Natural Disasters Working Group to proactively develop views on various issues including flood, natural peril mitigation, and government responses to these types of events. This will help the Institute be ready to respond appropriately when required on this topic.

A range of contributions were also made to Institute events in 2016, especially the Data Analytics Seminar, The Changing Face of GI and GI Glimpse Seminars, plus planning for the 2017 Injury Schemes Seminar. Seven GIPC newsletters were

published, together with a number of submissions, including:

- Submission on CTP scheme review.
- Submission on draft Market Practice and Premiums Guidelines and Licensed Insurer Business Plan Guidelines.
- Review of CTP Motor Insurance for Point-to-Point Transport Vehicles.

Other activities included:

- Nominated a representative for the ASTIN Working Party on Worldwide Non-Life Reserving Best Practice.
- Contributed to role of Appointed Actuary discussions.
- Collaborated with international associations in the development of a searchable database.
- Conducted emerging risks literature reviews.
- Participated/contributed to NSW Law and Justice Committee's review into Compulsory Third Party (CTP) business.
- Participated/contributed to independent review of insurer profitability in NSW CTP scheme.
- Contemplated how international actuarial standards would relate to Australian actuarial standards.

In 2017, our activities and interest areas will add further focus to non-natural perils accumulation, application of the actuarial skillset to complex models and disruption due to data and digitalisation.

Tim Clark

Convenor, General Insurance Practice Committee

Practice Committees (continued)

● Health

The Health Practice Committee (HPC) met bi-monthly during 2016. The focus and highlight of the year was the Institute's inaugural Future of Health Seminar. The creation and content for the seminar reflected the Committee's desire for actuaries to partner with industry in solving the challenges facing the private healthcare sector. 100 delegates, from both the health industry and actuarial profession, had the opportunity to hear expert speakers share their views on the challenges of fragmentation, transparency and affordability and what role actuaries and insurers might play in creating a sustainable future for private healthcare. Following excellent feedback the Committee will be organising a second Future of Health Seminar in 2017.

The Committee's other achievements to enhance health policy and actuarial knowledge and insight in the industry in 2016 included:

- The creation of a Wider Health sub-committee to better support and promote actuaries working in public health, health policy and health data analytics.
- A major review of the Institute's Private Health Insurance CPD Course, which has now reached 170 total enrolments.
- Two well-attended Insights sessions – 'Current issues in PHI' presented by Adam Jupp in May and 'How to lose your shirt in Private Health Insurance' presented by Jamie Reid in October.
- Eight editions of the PHI newsletter, with a circulation of over 1,700 including nearly half non-Institute members.
- Attendance at industry and Appointed Actuary roundtables on PHI reform, prudential regulatory changes and the Appointed Actuary Review.
- Review and update of PS600 Financial Condition Reports for Private Health Insurers to reflect the change in regulator from PHIAC to APRA, the review of Capital Standards and to clarify the reporting requirements in respect of non-Health Benefits Fund activities.

Nicholas Stolk

Convenor, Health Practice Committee



Professor Graeme Samuel AC, Jamie Reid, Adam Jupp, James Connors – Panel discussion, Future of Health Seminar



Q&A session at the Future of Health Seminar



Participants at the Future of Health Seminar

Practice Committees (continued)

● Life Insurance and Wealth Management

The Life Insurance and Wealth Management Practice Committee have a very broad and interesting role. Our terms of reference cover everything from education to professional standards to public policy but very simply we are life actuaries who have a passion for furthering the life and wealth management side of the profession.

We meet regularly and discuss these industry challenges, along with reporting back on the six sub committees that are tasked with delivery of the practice's requirements.

This has arguably been one of the most interesting times in recent history to be a life actuary. During 2016, the LIWMPC worked with its sub committees, the Institute, APRA and other practice committees to finalise a number of professional standards, surveys and changes to practice guidelines. We also engaged in sometimes fantastic debates about some of the industry activity and the role that as actuaries we should and shouldn't be playing.

Of note were:

- Providing feedback to Council on APRA's review of the role of the Appointed Actuary.
- Two information notes – the first related to setting of life insurance assumptions and the second around setting of disability income assumptions.
- A review of PS200 which we shared with APRA and endorsement of removal of PG199.01.
- Supporting the Risk Margins Taskforce's stress margins review and review of the IAIA Risk-based Global Insurance Capital Standard note.
- A review of the course notes and textbooks for the 2A and 2B Part III course.
- Delivery of a high quality newsletter on a monthly basis to our members.
- Delivery of regular high quality Insights sessions on life insurance to encourage debate and share learnings.
- Ensuring the committee devoted significant time to discussion of strategic issues at each meeting.
- Engagement with industry stakeholders across regulators, government, the Institute, our peers other cross practice committees and even media to support our profession.



David Miller, Ash Bhalerao, LIWMPC Update on the Australian Life Insurance Industry, Financial Services Forum

Focus for 2017:

As part of a review of strategy, the committee spent time in December 2016 reviewing our plans for 2017 including:

- Identifying new and emerging technical and practice needs of members. The regulatory and landscape changes will play a big part in defining these needs.
- Identifying risk exposures for the profession in life insurance and wealth management.
- Maintaining and developing education materials. The new 2A and 2B Part III Course Notes are expected to be rolled out.
- Identifying continuing professional development needs of members and developing CPD programs and opportunities. Maintaining the level and quality of our insights sessions will be a core focus.
- Identifying potential issues for research and development. Areas such as the retirement income space or changes to global capital standards are likely to be included.

Practice Committees (continued)

- Reviewing and developing relevant Professional Standards and Practice Guidelines. This is arguably the core of our committee.
- Preparing public policy submissions on technical issues affecting life insurance and wealth management and on matters of broader public interest. A focus on the future of life insurance, big data or claims management are likely to dominate our agenda
- Communicating on a regular basis with members (e.g. via e-newsletters and *Actuaries Digital* articles). We continue to make this a priority, along with being braver to share open views on even the more controversial topics.
- Developing links with other actuarial bodies and relevant professional and industry bodies. We are keen

to increase engagement in particular with the regulators but also other practice committees given that the rest of the world doesn't differentiate between actuaries of different practice areas.

More broadly, we are keen to engage in public policy discussions where we can bring our expertise to bear. We are keen to put ourselves out there to show leadership and transparency in constructively having opinions on the changes all around us.

Ilan Leas

Convenor, Life Insurance and Wealth Management Practice Committee



Avanti Patki, Sharanjit Paddam (Chair) and Matt Ralph presenting: 300 Years of Data Analytics in Life Insurance, 2016 Financial Services Forum

Practice Committees (continued)

● Risk Management

The Risk Management Practice Committee (RMPC) is responsible for supporting the Institute and its members' needs in Enterprise Risk Management (ERM).

In the past year RMPC continued to promote actuaries' ability to lead and influence as risk managers, particularly in the role of Chief Risk Officer (CRO). We also aimed to support better risk management as organisations deal with a wide range of future uncertainty.

During 2016 the RMPC and its subcommittees undertook in a number of activities to promote these objectives, including:

- Continuing the CRO Insurance Forum, aimed at both member and non-member CROs.
- Arranged CRO Discussion Groups in Sydney and Melbourne.
- Assisted the Institute to deliver the 2016 ERM Seminar in September.
- Supported risk-related presentations for the Young Actuaries Program and Insights sessions.
- Acted as external examiners to two Chartered Enterprise Risk Actuary (CERA) courses delivered by Australian universities.
- Delivered changes to the practical workshop in the Institute's Part III ERM subject (Course 7A) and supported the Institute's delivery of this course during 2016.
- Interacted with the CERA Global Association (CGA), an international collaboration of CERA member associations to support the CERA brand.
- Contributed to the Institute's public policy discussions and positions that involve risk management.
- Liaised with other practice committees and Institute groups on a range of risk-related topics, including scrutiny of banks, wealth managers and insurers and discussions on cross practice issues such as mental health.
- Published risk management articles in *Actuaries Digital*.
- Reviewed a number of risk management papers and proposals, including proposed international actuarial standards.
- Reviewed and discussed proposed risk management research.



David Murray AO, 2016 ERM Seminar

- Contributed to the oversight of the Institute's own Risk Management Framework, including its risk appetite statement, risk register and considering of emerging risks to the profession.

Our plans for 2017 are to continue supporting the Institute and members in the areas listed above, providing useful risk content and helping members and other practice committees in managing the various uncertainties and risks that are relevant to their roles.

I would like to thank the other RMPC and sub-committee members for their contribution during 2016.

Brett Riley

Convenor, Risk Management Practice Committee



Ross Greenwood, 2016 ERM Seminar



Alan Hudson, 2016 ERM Seminar

Practice Committees (continued)

● Superannuation

At the end of 2015, the Superannuation Practice Committee (SPC) identified four areas of strategic focus:

- Disclosure and consumer protection
- Retirement projections and calculators
- Retirement spending and longevity
- Risk management and analytics

All these areas continue to remain relevant to the profession as we look to the future to assist Australians to cope with longevity and our ageing demographics.

With this in mind, during 2016 the SPC drafted the Institute's submission to Treasury on the objective of superannuation, calling on the government to develop comprehensive guidelines for an equitable and flexible system that allows Australians to live a dignified and comfortable retirement. The SPC also assisted Treasury in considering aspects of the May 2016 Budget superannuation reforms, particularly those relating to defined benefit arrangements.

In addition, the SPC made numerous submissions to Treasury and the regulators related to the Product Dashboard and other disclosure matters, including the development of a Long Term Risk Measure and the disclosure of net investment returns, fees and costs. We also provided some general principles to ASIC relating to the preparation of financial calculators, as well as providing feedback to the Productivity Commission on its review of superannuation efficiency and competitiveness.

Over the last two years, the SPC also consulted with Treasury on its Retirement Incomes Stream Review, which culminated in the release of its final report on 3 May 2016. There are still some important technical matters to be resolved, including the means test treatment of deferred lifetime annuities and similar products, however it is good to see some progress in this important area. In a related area, the SPC contributed to the Institute's Green Paper entitled *Unlocking Housing Wealth*, which continues the discussion commenced by earlier research on longevity risk and retirement incomes, and raises policy options that could help mitigate that risk and improve retirees' living standards.



Objectives of Super Researchy Colloquy



Financial Services Forum 2016 – Plenary 2; *Challenges of an Ageing Population*

In November 2015, the SPC endorsed a set of objectives to establish actuaries as experts in the area of retirement income projections. To commence this initiative, the Superannuation Projections and Disclosure sub-committee (SPD) produced a paper demonstrating the value of actuarial thought when assessing how the Age Pension assets test impacts retiree decisions. Insights sessions were held in Melbourne and Sydney to discuss the paper in February 2016.

The SPC and the Retirement Incomes Working Group (RIWG) jointly ran a Research Colloquy on deciding the objectives of superannuation. Insights sessions were also held in the second half of 2016, drawing on some of the superannuation papers presented at the Financial Services Forum (FSF) held in May 2016. It is worth noting that Tim Gorst presented at the FSF on Superannuation Fund Trustee Capital Management and enhancing risk management in the superannuation industry including operational risks.

In relation to Professional Standards, an updated version of PS405 (Cost of Death and Disability Benefits in Superannuation Funds) was finalised during 2016. PS406 (Unsegregated Superannuation Liabilities) is with the Professional Standards Committee (PSC) for approval to release an Exposure Draft to members. PS406 has been drafted to replace mandatory Guidance Note 451 (Unsegregated Superannuation Liabilities – Certificates

by Actuaries under Sub-sections 283(3) and 283(4) of the Income Tax Assessment Act).

Finally, a Practice Guideline PG499.06 (Australian Accounting Standard AASB 1056) has been drafted in consideration of the actuarial tasks that Members may be requested to undertake when superannuation entities are preparing their financial statements under AASB 1056. An Exposure Draft has been released to members and a final version is in the process of receiving approval.

Andrew Boal

Convenor, Superannuation Practice Committee



Tim Gorst, Financial Services Forum



Andrew Boal and Anthony Asher, Objectives of Super Research Colloquy

2016 Actuary of the Year

Sarah Johnson

Scheme Actuary, National Disability Insurance Scheme, awarded Actuary of the Year for 2016.

The employment of Sarah Johnson as the foundation Scheme Actuary of the National Disability Insurance Scheme (NDIS) was the culmination of a career focused on using actuarial skills and modelling to improve outcomes for people needing support of many kinds. In crystallising this focus, Sarah has taken the actuarial profession into a new and exciting area of social policy, which is increasingly in the news and manifest in emerging government thinking.

Sarah began her professional career as a graduate at PricewaterhouseCoopers in 2004, where she soon displayed an aptitude in areas of actuarial work “outside the box”. She was a member of the team that developed the concepts underpinning the NSW Lifetime Care and Support Scheme legislation in 2004/5, and quickly became involved in work on social disadvantage for the NSW Department of Ageing Disability and Homecare, leading the actuarial team on a project which led to the Stronger Together funding initiative - a major recognition of the unmet need of people with disability, based on actuarial modelling of supply and demand, and a precursor of the NDIS.

This work quickly cascaded into other areas of social disadvantage as its power became clear to government central agencies – areas such as chronic disease, mental illness, homelessness, domestic abuse, child support and “Closing the Gap” on Aboriginal disadvantage. In building this capability, Sarah was at the forefront of life-course modelling of “big data” on the “demand-supply” equation of social disadvantage, the early developments in framing what has become known as the investment approach to social welfare sector. In 2011 Sarah was seconded into the Productivity Commission enquiry which recommended the NDIS - her role was to undertake all the actuarial modelling and projections of the proposed new scheme.

The PC report was handed to government in July 2013, and before the end of that year the Council of Australian Governments (COAG) had agreed to implement the NDIS,

which has been called Australia’s biggest social reform since Medicare.

As Scheme Actuary Sarah is well and truly at the forefront of scheme design and political questioning, and is a critical contributor to the Executive Management Group of the National Disability Insurance Agency (NDIA). She reports directly to the CEO and Board of the NDIA as required by statute, as well as preparing reports for a Joint Parliamentary Committee, the Senate Estimates Committee, a subcommittee of COAG, and both Commonwealth and State shareholder governments.

Sarah has become, with distinction, the face of the actuarial profession in many public forums, highlighting the important role of the profession and skill set in this unique initiative, and its potential to contribute to broader social and economic decision-making.

Most recently, Sarah has worked directly with the NDIA’s Independent Advisory Committee, which directly represents people with a disability, to develop an outcomes framework, pushing the boundaries of actuarial work even further - into the domains of linking financial and economic sustainability with metrics capturing the quality of life and social and economic participation of people with disability.

Sarah’s legacy will be recognised in the development of an in-house actuarial and sustainability capability within the NDIA, embedding the actuarial control cycle into day-to-day operations of the agency and overall governance. The size and impact of this team will grow as the scheme expands to an annual expenditure of \$22 billion over the next three years. Sarah is a strong female leader of this team and is committed to the development of diversity in the workplace and a busy but fun place to work.

Sarah is a worthy Actuary of the Year, and this award signals the potential for more actuaries to become involved in social policy as a legitimate career direction.

Congratulations Sarah.

Citation by John Walsh AM

Sarah Johnson receives her award from Institute President Lindsay Smartt >



Communications and Marketing

Keeping Members informed and showcasing the profession's thought-leadership in important public policy debates now, and into the future, has been a key focus for the Communications and Marketing Team in 2016.

See what we see

First launched in 2014, the *See what we see* campaign in 2016 once again leveraged from the profession's thought-leadership by creating a case study from the Institute's Green Paper *The Impact of Big Data on the Future of Insurance*.

With a tagline of '*Pointed insights from the expanse of big data*', the media campaign launched on 14 November with high impact masthead banners on AFR online, followed by a series of 'always on' targeted and re-targeted display advertisements across a range of business sites. During the campaign, promotional videos by Paul Swinhoe, Kaise

Stephan, Marc Mer, Elayne Grace and David Bell achieved a total 217,699 video views from the campaign ads as well as 549 views via the Institute's YouTube channel and 768 via Facebook.

A series of social media posts also ran during the campaign across LinkedIn and Twitter. The LinkedIn posts specifically targeted Directors, Managing Directors, Owners and CEOs.

The campaign paused on 16 December 2016, and will resume in mid March 2017 for a burst of programmatic advertising following an editorial in the *Australian Financial Review*.

The collection of *See what we see* campaign case studies have now been compiled into a brochure. This is distributed to career advisers and students across our High School Program as well as to university events to demonstrate the broad range of industries where the profession's expertise is highly valued, as well highlighting the potential career opportunities as an actuary.





Actuaries in the Media

In 2016, mainstream media interest in the profession increased once again with 79 articles published across the *Australian Financial Review*, *The Australian* and the *Age / Sydney Morning Herald* – compared to 74 in 2015. Many articles were also duplicated in syndicated publications resulting in 93 mainstream media mentions overall. Both 2016 Green Papers *Unlocking Housing Wealth- options to meet retirement needs* and *The Impact of Big Data on the Future of Insurance* attracted significant media interest.

There were also 66 articles in trade publications compared to 39 in 2015 as well as eight radio interviews.

Social Media – community growth

Our social media platforms continued to grow throughout 2016, particularly YouTube due to the increase in our video production output. Facebook interaction also increased.

- **YouTube** – 12,111 total video views in 2016, up from 6,197 total views in 2015 equating to 57,987 total minutes watched in 2016, compared to 19,822 minutes watched in 2015.
- **Facebook** – 1,142 likes (as of December 2016, up from 627 in December 2015).
- **Twitter** – the number of followers increased to 2525 at December 2016 up from 2055 in December 2015.
- **LinkedIn** – 2,773 followers at December 2016 compared to 2,183 at the same time in 2015.

Actuaries Digital

Following the successful launch in April 2015, *Actuaries Digital* has continued to build on its popularity.

In 2016 the *Actuaries Digital* site was visited 84,020 times (+52% cf.2015) with 46,605 unique visitors (+57% cf.2015) leading to a total of 134,095 page views (+32% cf.2015).

After a quiet start in January and February the site saw an average of 7,400 visits per month for the period March – December 2016)

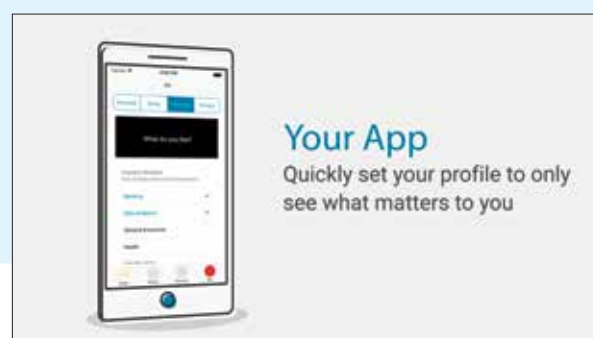
Desktop continued to rank highest as the point of access with 66% of visits (-3% cf.2015), with mobile visits at 29%

(+5% cf.2015) and tablets at 5% (-2% cf.2015). For the reporting period of 1 January to 31 December 2016, 46% of mobile traffic was via iPhones, 13% from iPads and the remaining 41% being a mix of Android devices.

Focusing on 2017

To further promote member and student engagement, with the Institute, and within the profession, the Communications and Marketing Team will be focusing on a number of initiatives in 2017. These include:

- an App to promote ongoing engagement with actuarial students, *Actuarial Sprint* will be launched in March 2017 shortly after the start of Semester 1;



- an App to enhance the Institute's mentoring program;
- improving and enhancing the available member data by launching a member census to update member preferences and drive tailored member communications;
- refreshing the navigation and look and feel of the Actuaries Digital website;
- ongoing use of available analytics to inform a successful, customised member communication and marketing strategy; and
- working closely with the Public Policy Team to promote brand 'actuary' by raising awareness of the profession's thought-leadership and expert contribution to important policy debates.

Katrina McFadyen

Head of Communications and Marketing

Education and Continuing Professional Development

Key 2016 Education activities included:

- Scoping and commencing the Education Strategy Review
- Redesigning and implementing the new ERM Workshop and on-line discussion forum.
- Updating the online Private Health Insurance Course.
- Updating the Part III Life Insurance Course materials.
- Incorporating the Whistleblowing e-Learning Course as part of the Professionalism Course.
- Introducing data analytics into the Commercial Actuarial Practice Program.
- Commencing projects relating to Part III improvements.
- Part III exam centre process improvements.
- Releasing new University Accreditation and Exemption Policies.

Key 2016 CPD activities included:

- Responding to Member feedback and expanding our digital offering by introducing the annual Practice Update Videos for each practice area.
- Providing a collation of Data Analytics CPD resources useful to Members via the data analytics microsite.

- Offering CPD in data analytics in the form of a MOOC with associated actuarial study group.
- Continuing to offer a broad range of conferences, insight sessions, webinars and networking sessions for Members.
- Significant 'behind the scenes work' in preparation for systems integration and content classification – which will continue in 2017 to enable the launch of personalised CPD Member dashboards in 2018.

Education/CPD Team Members:

Karenn Chhoeung

Head of Product and Professional Development

Eleanor Mazando

Education Manager and Team Leader

Carolina Vilches

Senior Officer, Professional Development

Ausa Chanthaphone

Education Coordinator

Sarah Tedesco

Chief Operating Officer, Member Services



Tim Gorst leading the ERM Workshop

Events

The 2016 Events Calendar has delivered an exceptional program with over 150 events held in the calendar year. Engaging with over 5000 delegates around the globe, the Institute offered in-person events in Sydney, Melbourne, Brisbane, Adelaide, Perth, Canberra, Hong Kong, Singapore, Kuala Lumpur, Beijing, Auckland, Wellington and London. Most Sydney events were also available via webinar allowing Members to stream events online.

The 2016 Financial Services Forum attracted 451 delegates and was held in May in Melbourne. The plenary program was handcrafted to have broad appeal to the audience, the Keynote Session kicked off the Forum with aerial gold medal winning Alissa Camplin presenting, this presentation captured all delegates in the room with every emotion possible at times ranging from tears of sadness through to shrills of laughter. This the perfect was to start the program, which was then followed by four plenary sessions and 56 concurrent sessions.

In November General Insurance members attended the biennial General Insurance Seminar, this Seminar attracting over 220 professionals. The Seminar program featured four plenary sessions and 36 concurrent sessions. The plenary program was ably chaired by Michael Pascoe.

2016 saw the return of a number of successful events including the GI Glimpse, Banking Seminar and ERM Seminar. For the first time we held the Data Analytics Seminar, Leadership Development Seminar, Future of Health Seminar and Managing Extreme Events Seminar.

All of these events delivered comprehensive and informative programs and featured some highly respected industry leaders as presenters

The 2017 events calendar will kick off with the return of the CPD Tour. Delegates will have the opportunity to hear from Australia of the Year David Morrison AO, an engaging and thought provoking session is guaranteed for all attendees. Other events quickly filling up the calendar include Insights, YAPs, RAGS, GRAMs, Presidential Dinners, Celebration and Networking Dinners and numerous other events already scheduled. The first half-day seminar will be a Leadership Seminar and is booked for 28 March in Sydney and will be closely followed by Actuaries Summit from 21 to 23 May in Melbourne, the Future of Health



Seminar on 8 June in Melbourne, and the Injury Schemes Seminar from 12-14 November in Brisbane.

With the assistance of our volunteer organising committees, the team is excited to deliver the 2017 calendar of events, engaging more Members across all practice areas, with enhanced programs and high calibre speakers.

Sarah Gibson

Events Manager and Team Leader



Gala Dinner, General Insurance Seminar



Financial Services Forum



Andrew Matthews, Future of Health Seminar

Governance

Professional Practice

Council initiated a review of the Code of Professional Conduct which was last considered in 2009. The review is scheduled to be completed by the second half of 2017. A working group has been established to undertake the review and it has developed an issues brief to help guide discussion. Consultation with Practice Committees and the broader membership has commenced and will be completed by mid 2017.

Release of Practice Documents

- Release of Professional Standard 405 (*Cost of Death and Disability Benefits in Superannuation Funds*).
- Release of Information Note: *Framework for setting life insurance risk margins for regulatory capital*.
- Completed the congruence's assessment of ISAP 1 and issued an Exposure Draft to members regarding PG1, (the Australian adaptation of International Standards of Actuarial Practice 1 (ISAP 1) issued by the International Actuarial Association).
- Release of Exposure Draft of proposed changes to PS 600 (*Financial Condition Reports for Private Health Insurers*) and PS 406 – *Unsegregated Superannuation Liabilities*.



Governance

Following the recommendations of the Governance Review Taskforce, proposed Constitutional amendments were approved at the 2016 Annual General Meeting:

- arranging and conducting the Annual General Meeting;
- supporting Council, the Audit and Risk Council Committee, the Professional Standards Committee and the Disciplinary Scheme; and
- an 'acknowledgment of country' before Institute meetings and events was adopted by Council.

Volunteers

The very existence of many of key programs and services depend on the vital contributions of our volunteers. The Institute would simply not be able to deliver these without the commitment, time and expertise of so many committee members and volunteers.

2016 was a great year and this is because our volunteers – who make up 12% of our membership – chose to give their service and time to the Institute. The effort of so many actuaries who volunteered this year has made a significant difference to the Institute's operations and its services to the wider actuarial profession. Whether by being part of committees; mentoring young actuaries; providing professional guidance; being involved in education-related activities; providing content for *Actuaries Digital* and the weekly bulletin; or being involved in many other key activities, volunteers have helped the Institute to keep the actuarial profession strong and thriving.

In 2016, I was appointed to the newly created role of Committee and Volunteer Engagement Manager. Plans are already in place to improve the support to our committees and volunteer programs in 2017 to ensure the vital work of our volunteers is better recognised and celebrated.

Council has endorsed a new plan to implement changes to the Institute's engagement with its volunteers and committees. The new plan aims to:

- Maximise the positive volunteer experience or both our committee members and general volunteers.
- Recognise the contribution of committees and volunteers' skills, knowledge, experience and time.
- Help deliver an effective and good quality program that will impact positively on the overall strategic plan of the Institute.
- Promote diversity and inclusion in our volunteer engagement programs.



Vice President John Evans, John Shepherd, Senior Vice President Jenny Lyon

We would like to thank over 500 volunteers and 85 committees, subcommittees, taskforces and working groups for their service, commitment and passion for the actuarial profession and the Institute. We look forward to working with you in 2017.

Lily Meszaros

Committee and Volunteer Engagement Manager



Lesley Traverso, Ruth Lisha, Bill Konstantinidis, Sharanjit Paddam



Nick Stolk, Chris Scheuber, Ben Ooi



Elaine Collins, Tim Gorst, Kirsten Armstrong

Education Volunteers

Amanda Aitken
 Ryan Anderson
 Susan Antcliff
 Maiyuran Arumugam
 Frank Ashe
 Mathew Ayoub
 Danny Bechara
 Luv Bhatnagar
 Stuart Bingham
 Greg Bird
 Nathan Bonarius
 Sydney Bone
 Julian Braganza
 Andrew Brown
 Bridget Browne
 Aaron Bruhn
 Hoa Bui
 Tony Bulmer
 Adam Butt
 Mike Callan
 Louise Campbell
 Matthew Chae
 Andy Chan
 Marlon Chan
 Zhe Chen (Alex)
 William Cheong
 Clement Cheung
 Weihao Choo
 Raymond Chow
 Brian Chu
 Samuel Chu
 Timothy Clark
 Esther Conway
 Julie Cook
 Michael Cornwell
 Josh Corrigan
 Kim Cossart
 Stuart Crockett
 Vivian Dang
 John De Ravin
 Danielle Di Sano
 Nguyen Diep (Steven)
 Jie Ding (Jack)
 Rohan Dixit
 Andy Dong
 Deborah Driussi
 Ryan Druitt
 Sophie Dyson
 Bruce Edwards

Naomi Edwards
 Stephen Edwards
 Saul Field
 James Fitzpatrick
 Edward Freilikh
 Martin Fry
 Andrew Gale
 Peter George
 Andrew Goddard
 Tim Gorst
 Andrew Gower
 Simon Guthrie
 Bronwyn Hardy
 Gillian Harrex
 Georgina Hemmings
 Robert Herlinger
 Mari-Lize Hill
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 Andrew Huszczo
 Tyson Johnston
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 Adam Jupp
 Kar Kan Lo
 Ying Kang
 Lai Keong Chuah
 Garry Khemka
 Leigh Kobus
 Shweta Krishna
 Margaret Kwan
 Richard Land
 Daniel Lavender
 Ilan Leas
 Kelly Lee
 Willie Leong
 Julia Lessing
 Andrew Leung
 Barry Leung
 Alex Leung
 Susan Ley
 Ignatius Li
 Li Lian Chong
 Aloysius Lim
 Sammy Liu
 Ignazio Lo Castro (Ezio)
 Anthony Locke
 Anthony Lowe
 Tony Ly
 Stephen Lynch
 Jenny Lyon

James Makin
 Catherine Marquis
 Peter Martin
 Andrew Matthews
 Mark McClenahan
 Kristopher McCullough
 Sean McGing
 Trevor McMahon
 Stephen Miles
 Kelvin Mo
 Jo-Anne Morgan
 Martin Mulcare
 Stuart Mules
 Gary Musgrave
 Trent Neagle
 Ai Nee Seow
 Jonathan Ng
 Andrew Ngai
 John Oakley
 Colin O'Hare
 Michael O'Neill
 Soon Ong
 Andrew Patterson
 Phillip Patterson
 James Pettifer
 David Pitt
 Ian Pollard
 Brendan Pon
 Yongjie Qi
 Chao Qiao
 Ben Qin
 Barry Rafe
 Matthew Ralph
 Wei Raun Wong
 Jacqueline Reid
 Jamie Reid
 Dimitrios Repanis (Jim)
 Brett Riley
 Gae Robinson
 Stuart Rodger
 Daniel Rose
 Christopher Seddon
 David Service
 David Shade
 Jacob Sharff
 Minjie Shen
 John Shepherd
 David Shuvalov
 Justin Si
 Gurpreet Singh
 Andy Siu

David Smith
 Tony Snoyman
 Diane Somerville
 Jun Song
 Hitoshi Sonobe
 Nick Stolk
 Phil Stott
 Rebecca Stowe
 Nicole Stransky
 Zeger Sun
 Gautham Suresh
 Jan Swinhoe
 Natalie Tan
 Quanyie Tan
 Andrew Teh
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 Catherine Watson
 Jenita Wijaya
 Ashley Wilson
 Jason Wong
 Bernard Wong
 Matthew Wood
 Steven Wood
 Stephen Woods
 Christopher Woolfrey
 Qian Xiao
 Weimin Xie
 Garry Xue
 Ziyang Yang (Zoe)
 Peter Yeates
 Jia Yi Tan
 Gloria Yu
 Jason YU
 Yinghua Yu
 Vivian Yu
 Fei Zhang
 Han Zhang
 Hui Zhang (Henry)
 William Zheng

In Memoriam

The Institute sadly lost the following Members in 2016. As strong supporters and valued contributors to the profession, their passing was felt by all who knew them.

Kenneth Boag

Ronald Fred McDonald

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Issued March 2017

