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Institute and Faculty of Actuaries

Understanding tomorrow's challenges

Annual Review 2018/2019

The Institute and Faculty of Actuaries (IFoA) represents actuaries around the world. Our members come from a diverse range of backgrounds and experience but they are united by their commitment to actuarial science and its application in a fast-changing global environment.

Today our members offer leadership, advice and solutions to governments, businesses and organisations globally.

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Our members understand and mitigate tomorrow's challenges, today.

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With members in 116 countries, the IFoA is a growing, global organisation.

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by building a global community

We educate and develop the actuaries of tomorrow. We attract the brightest and the best from around the world to study with us and gain our qualifications.

Globally recognised professional qualifications

We offer a range of qualifications to individuals who wish to pursue an actuarial career. These are available wherever you are in the world.

- Associateship is the qualification that enables members to develop a flexible skill set and breadth of expertise applicable to both new and established areas of work.
- Fellowship enables members to continue their studies to an advanced level or to specialise in a particular actuarial field.
- Chartered Enterprise Risk Actuary (CERA) is a qualification awarded to actuaries who wish to work in the area of risk management, particularly Enterprise Risk Management (ERM).

Our Royal Charter

Our work is rooted in our Royal Charter, meaning that the public interest is at the heart of what we do.

The Actuaries Code

Our members operate under the Actuaries Code. This outlines a set of professional behaviours that members are expected to comply with. By adhering to the Code, our members agree to act with integrity, competence and impartiality at all times.



Being at the heart of the debate

Benefiting wide

Developing the actuaries of tomorrow

"The world renowned rigour and excellence associated with the IFoA's education is internationally recognised, and in executive search we continue to see leading financial organisations prioritise candidates with IFoA qualifications for their most demanding, innovative and technical leadership roles."

Emma Fowler Founder, Areté Ventures, and Lay Board Member, IFoA Markets Development Board

Building a global community



Across the globe

We are a global organisation with employees and offices in the UK, China, Hong Kong and Singapore. During 2018 we also introduced resources in India and a team dedicated to Europe, the Middle East and Africa.



Regional communities

We support 39 regional communities around the world. These enable our members to come together, either virtually or in person, and provide opportunities for professional and personal development, networking and CPD opportunities.



Our volunteers

Through participation in a wide range of global volunteering opportunities, our members are able to share their expertise, expand their knowledge and grow their networks.



Our practice areas

Our seven practice areas are committed to ensuring that our members' knowledge and skills remain up-to-date and relevant to an increasingly wide business community.



Continuing Professional Development (CPD)

Under the Actuaries Code all members of the IFoA are obliged to develop their knowledge and skills in a manner appropriate for their role and to comply with the IFoA's CPD requirements. The CPD Scheme sets out the framework which assists members in complying with this obligation.

Being at the heart of the debate

Developing the actuaries of tomorrow



Understanding tomorrow's challenges

by serving the public interest and supporting business

Our members work across a range of sectors and organisations but they are united by a commitment to professionalism and a desire to help businesses protect and safeguard their future.

Regulation and professionalism

The IFoA has the responsibility of regulating its members in the public interest, a responsibility which it seeks to discharge for the benefit of both the profession and society at large. We regard the effective execution of this regulatory role as central to the IFoA's work and purpose.

Our members are rightly known worldwide for their reputation and commitment to standards of competence and integrity, qualities which make them stand out in a competitive marketplace. We aim to uphold professional and technical standards in a way that is supportive but also, where necessary, with appropriate rigour. We do not believe that the answer to increased competition lies in lowering our standards, rather it is the standards of excellence and professionalism which differentiate our members from the crowd. We will not shy away from speaking up and taking appropriate action in order to uphold the standards of the actuarial profession and protect the public interest.

The new framework

During 2018 we spent a lot of time taking soundings from a wide range of employers, both in the UK and abroad. One message came through clearly and consistently – the world of employment is changing for actuaries and to meet this changing landscape the skills that will be needed must also evolve. To best equip the actuaries of tomorrow, we are placing a new emphasis on the IFoA Associateship in order that actuaries can demonstrate their globally benchmarked skill set more clearly to a wider range of potential employers.

At the beginning of this year we also launched our new curriculum, enabling the actuaries of tomorrow to develop an adaptable, flexible and wide range of skills.



Being at the heart of the debate

Benefiting wide societv Developing he actuaries of tomorrow

"I lead a global network of over 165 pension arrangements in 65 countries, representing £70bn of liabilities. To manage this financial exposure, Shell employs a number of actuaries who have created sophisticated risk management tools adaptable to multiple jurisdictions. While core actuarial skills provide the foundation, it is actuaries' ability to develop close relationships with the various trustee boards and to foster structured discussions about financial risk management that is the hallmark of their success."

> **Michael Clark, FFA** Vice President, Group Pensions, Shell International

Professionalism at our core

We support our members worldwide to maintain the high standards of conduct and competence associated with membership. We aim to do so in a way that is supportive rather than burdensome. In 2018 we refreshed and modernised our code of ethics, the Actuaries Code, producing new guidance to help members interpret its core principles.

Quality Assurance Scheme

The Quality Assurance Scheme (QAS) is our flagship accreditation for organisations employing our members and demonstrates commitment to professional standards. In 2018 we extended the Quality Assurance Scheme worldwide. At our Asia Conference in Bangkok in 2018 we were delighted to announce our first Asian QAS accreditations. The growing number of international organisations that have applied for QAS accreditation are testament to our collective commitment to our professional values worldwide.

Listening to our members

Placing member focus at the heart of IFoA strategy and ensuring we are responding to our members' changing needs is essential to us, so in 2018 we sent a survey out to all our members. By listening to them, understanding the challenges they face and what really matters to them, we can provide our members with the best possible support, whatever their career path, wherever they are in the world.

Disciplinary scheme

We are committed to robust but fair enforcement of the Actuaries Code, through the Disciplinary Scheme, but this must always be the last resort. In 2018 we considered our first case under our new Capacity for Membership Scheme, providing a more compassionate alternative process when the underlying issue relates to mental health.

CAA Global

We continue supporting the Certified Actuarial Analyst qualification. Run by CAA Global, a joint venture between the IFoA and the US Society of Actuaries (SoA), it offers an alternative route to gaining an internationally recognised qualification outside of the traditional actuarial qualification pathway.

global

CAA qualification adds value to the work

"The CAA qualification provides technical and analytical grounding for those working in financial services. Since starting my examinations I have gained the necessary skills which I have applied practically in my work in actuarial services. My employers also recognise the value of the CAA qualification."

Tope Olowoyo Actuarial Analyst, AXA Mansard



Being at the heart of the debate Benefiting wide

Jeveloping the actuaries of tomorrow

Data science

During the past 12 months data science has emerged as one of the most exciting new areas of activity for the profession. The IFoA has led the thinking in this area, with innovations ranging from our first Data Science Virtual Conference to our association with the Royal Statistical Society.





"Data scientists play an important role in helping insurers derive value from huge volumes of data and drive material impact. At Aviva, our data scientists work closely with actuaries to evaluate and price risk more effectively. This has enabled us to develop relevant and tailored products, and improve customer experience through personalisation. The collaboration is also helping us fight claim fraud in the health and general insurance space."

Nishit Majmudar, FIA CEO, Aviva Singapore



"Actuaries act with integrity and are experienced at using informed judgement and common sense in decision making. Boards are enriched by actuaries who become non-executive directors – by the quality of challenge, professionalism and diversity of thought they bring to the table."

Kalpana Shah, FIA Chair, Riverstone Managing Agency and Non-Executive Director

Continuous Mortality Investigation

Continuous Mortality Investigation Limited (CMI) is a wholly owned subsidiary of the IFoA and provides authoritative and independent mortality and morbidity tables for actuaries advising UK life insurers and pension funds. The aim of the CMI is to produce a world-class benchmark for mortality analysis that has practical application for insurers and pension schemes. The CMI's highest profile output is the CMI Mortality Projections Model; its annual update was covered widely in the UK national and trade media and is frequently quoted in the press.



Understanding tomorrow's challenges

by being at the heart of the debate

From longevity and pensions to social care and intergenerational fairness, the IFoA continues to make its voice heard on the leading issues of today.

At the forefront of research

The Actuarial Research Centre (ARC) works with some of the leading actuarial researchers in the world and is supported by a range of global partners. In 2018 we started to see the delivery of outputs. This research is relevant to the actuarial community around the world and has the potential to impact actuarial practice, industry and public policy. Going forward we will continue to address issues that are global and cutting-edge.

Seeking our opinion

The IFoA continues to inform pensions, insurance, health and social care, and climate change policymaking. Our input was sought pre-consultation, and explicitly recognised, by the UK Department for Work and Pensions, the Ministry of Justice, who shared our work with the Scottish Government, the Financial Conduct Authority and the Prudential Regulation Authority. Our parliamentary briefings on Periodical Payment Orders and the role of the financial sector in achieving the Sustainable Development Goals were mentioned during debates in both the House of Commons and the House of Lords.

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Being at the heart of the debate

"Actuaries working outside mainstream, typical fields bring a broader perspective to problem solving that is deeply rooted in fact and is well evidenced. The clarity of thinking and objective opinion forming that they bring engenders emotion-free debate that is always constructive."

Steven Mendel, FIA CEO & Co-founder, Bought By Many

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A voice at the table

Throughout 2018 the UK government continued to call upon the profession's expertise and ideas as it considered how best to reform the adult social care system. IFoA President, Jules Constantinou, was invited to give evidence to two separate parliamentary select committee inquiries on social care. As a result, we cemented our reputation as a heavyweight stakeholder in the debate, with meetings at 10 Downing Street and with the Secretary of State for Health and Social Care.

We had:

24 meetings with financial regulators

10 meetings with government officials

and

made two appearances at parliamentary select committees

Spring and Autumn Lectures

Our 2018 Spring and Autumn Lectures continued to attract prestigious, high-profile speakers from across the political spectrum who spoke on issues integral to the work of our members. Over 1,000 people either attended the lectures in person or watched via live streaming. Over 90% of people rated the events as either excellent or very good.

Who we met

Our policy and public affairs team is tasked with promoting the profession to senior stakeholders. This year we met with:





Journals

The IFoA produces two internationally renowned, authoritative journals. Over 7,000 institutions worldwide subscribe to Annals of Actuarial Science, which publishes theoretical and applied research. British Actuarial Journal articles, which focus on the IFoA's sessional research and are available free online, were downloaded over 14,000 times in 2018, a 43% increase on 2017.

14,000

British Actuarial Journal articles were downloaded over 14,000 times in 2018

Being at the heart of the debate

Benefiting wide

Sharing knowledge

In 2018 we continued to actively engage with the actuarial supranational bodies. In addition to the valuable contribution that the IFoA makes to the technical work of the International Actuarial Association and the Actuarial Association of Europe, there were excellent opportunities for the profession to pool its collective wisdom at the International Congress of Actuaries in Berlin, as well as at meetings and conferences throughout the year.





"The IFoA is an authoritative, trusted voice at the IAA and its contributions are always valued and appreciated by the other members. It plays a key role in setting the IAA direction at the top level, as well as in terms of technical work in the committees and task forces in order to fulfil the mission of the IAA: making an impact, assuring professionalism and advancing scientific activities."

Gabor Hanak, HonFIA President, IAA



We need to talk

"I used to be an MP and a government minister. Like most people who know about the work of actuaries, I associated them with expertise, professionalism and being highly qualified. But I wish I'd heard more. That's why parliamentarians and civil servants want to engage with the IFoA - because they know the IFoA has something to say and they want to hear it."

David Heath

Lay Chair, IFoA Policy and Public Affairs Board



Understanding tomorrow's challenges

by benefiting wider society

Our members' skills and knowledge are required in an increasing number of areas - from health and international development to climate change and microinsurance.

Our commitment to the United Nations Sustainable Development Goals

Throughout 2018 the IFoA's Sustainable Development Goals campaign identified, and continues to identify, the varied and innovative ways actuaries can contribute to the achievement of the goals. Achieving the goals would ensure the eradication of poverty, in all its forms, by 2030. Examples identified throughout our campaign included:

- Goal 1 No Poverty: Actuaries are exploring the use of micro-saving schemes to address old-age poverty in Africa.
- Goal 3 Good Health and Wellbeing: Actuaries are designing innovative road insurance to promote road safety in India.
- Goal 10 Reduced Inequalities: Actuaries have designed weatherindexed crop insurance to eliminate financial risk for smallholder plantbased food farmers in Africa.

SUSTAINABLE GOALS

Being at the heart of the debate

10.41

Developing the actuaries of tomorrow

"The ILO's Impact Insurance Facility's work underpins the financial risk management needed to support the attainment of the UN's SDGs.

The Facility's strategy is to stimulate innovation, unlock capacity, and accelerate the development of inclusive insurance. Actuaries working for the Facility apply their skills to problems beyond the remit of traditional actuarial work, with a keen focus on providing solutions for low-income populations."

Lisa Morgan, FIA Health Actuary, International Labour Organization (ILO)

Actuarial Mentoring Programme

Launched by the IFoA in partnership with Women Ahead, the pioneering Actuarial Mentoring Programme (AMP) continued to go from strength to strength in 2018, with over 80 talented female actuaries and 16 organisations now participating. The AMP was picked out for praise by Nicky Morgan MP, who said, "It is great to see so many senior champions advocating mentoring and diversity."

The value of actuaries

"Our business flourishes from the unique insights our people bring to bear on complex real-world problems. Actuaries bring a unique perspective which puts them at the heart of our wider enterprise, utilising their talents for analysis and grasp of complexity to make a real impact for our clients every day."

Dr Siobhan Martin

European HR Director, Aegon Asset Management, and Lay Board Member, IFoA Markets Development Board



"The Actuarial Mentoring Programme (AMP) has developed my confidence after returning from maternity leave and given me a willingness to take on opportunities I would previously have ruled out. I have been able to share my experience of being a woman and a new parent with those who have the ability to make a difference to progression of women in the profession today."

Catherine Thain, Student Actuarial Manager, Scottish Widows

Managing risk to deliver disaster relief

"As an actuary, I use my skills to support governments in Africa to develop financing strategies that can mobilise resources and enable rapid responses to climactic shocks. A key achievement was supporting the Ugandan government to set up a shock-responsive safety net; to date this has deployed over US\$8 million in emergency assistance to around 70,000 vulnerable households in the poorest region of the country."

Barry Maher, FIA Senior Risk Financing Specialis World Bank



"More and more actuaries are working with low and middle income countries to support them in managing the risks they face, and delivering earlier, more cost-effective help for the most vulnerable communities when disasters do occur."

Daniel Clarke, FIA Director, Centre for Disaster Protection





Being at the heart of the debate

Benefiting wider

Developing the actuaries of tomorrow

Climate change

Climate change is one of the greatest challenges facing our world today and could materially damage financial stability. Many clients of actuaries are exposed to this risk. The IFoA is committed to ensuring its members are aware of and understand the risks and are supported in considering these risks in their work and in the advice they provide.



"The IFoA is a strong advocate and supporter of the Task Force on Climaterelated Financial Disclosures (TCFD) and understands the critical importance of the investment chain, actively seeking and utilising climate risk information in its decision-making processes. The prompt publication of the Risk Alert was just one example of the leadership position which the IFoA has shown in this area."

Russell Picot Special Adviser, TCFD

Pensions

Pensions are a key practice area for actuaries, and also a crucial area of public policy in most countries, particularly those with ageing populations. In the UK, a raft of recent cultural and legislative changes have transformed the way that people save for retirement and use their savings in older age.

The IFoA's focus on longevity risk and adequacy has seen us ramp up our engagement with officials in the UK in the last year. Our members continue to play a key role in the development of UK pensions policy, including the development of a pensions dashboard, sweeping changes to scheme regulation, and the introduction of collective defined contribution schemes in the UK for the first time. "Pensions cannot function without actuaries – and this is more so in emerging markets like Africa. The actuarial skill set, training and professional rigour are invaluable in designing and implementing robust pension solutions, whether for a country, company or an individual – solutions that enable better futures and dignity in retirement for people."

Sundeep Raichura, FIA Chief Executive Officer, Zamara



Understanding tomorrow's challenges

by developing the actuaries of tomorrow

In a fast-moving global business environment, we aim to ensure that our members are equipped with the knowledge, tools and flexible mind-set to support businesses and their leaders.

Our global growth

The IFoA is proud of its growing diverse and global membership. In 2018 we continued building our member support across Africa, India, China and South East Asia, as well as our home base in the UK, by engaging more employers, increasing our delivery of non-UK events, and building a global team whose focus is on supporting our global membership.

Partner universities

Teaching and research in actuarial science is a growth area for many universities globally. In 2018 we continued to receive approaches from universities wishing to partner with us. We established new accreditation agreements with universities in the UK, Malaysia, China and Israel.



Being at the heart of the debate

Developing the actuaries of tomorrow







NANYANG TECHNOLOGICAL UNIVERSITY SINGAPORE

"Nanyang Technological University (NTU) is pleased to collaborate with the IFoA, a renowned actuarial association, in promoting the actuarial profession in Singapore. Much support has been provided over the years by the IFoA to make NTU's actuarial science programme a great success."

Dr Uditha Balasooriya Programme Director, Actuarial Science Programme, Nanyang Technological University

Our volunteers

Our profession benefits from the time, expertise and impact delivered by our volunteers who, working in partnership with the executive staff, use their skills and experience to support, run, regulate and enhance our membership body. Members who volunteer help to shape the future of our profession, influence policy, deliver content for our syllabus and events, and encourage the next generation of actuaries. Their dedication and skills ensure that we are able to deliver a wide-ranging portfolio for members around the globe.



Challenging conventions

"Trained to be analytical in our thinking and attuned to risk, actuaries' skills bring a challenging perspective to most business sectors. It is exciting to see actuaries pushing traditional boundaries and building roles in new areas, for example in banking and data analytics, and on company boards as non-executive directors."

Jenny Condron, FFA

Chief Actuarial Officer, Mercer, and Chair of the Association of Consulting Actuaries



Curriculum 2019

Following a comprehensive prequalification curriculum review, Curriculum 2019 launched in January this year, bringing together a cuttingedge, relevant and internationally compliant syllabus used by our partners and students globally. It incorporates elements of data science, enabling individuals to build and develop their knowledge and skills in order to be able to work in multi-disciplinary teams and across specialisations in both new and established areas.



"Actuarial training and syllabuses have changed because we realise that soft skills, communication and behavioural science are equally valuable. Actuaries no longer confine themselves to calculating the financial impact of a future event based on its probability. They are developing the imagination to foresee what might happen. Asking what if, not just what it will cost."

Pauline Armitage, FIA Guaranteed Minimum Pension Specialist "Regardless of which organisation you work for, I've found that being part of the IFoA means there is a sense of belonging to the wider actuarial profession. I volunteer as a Careers Ambassador, which involves talking to young professionals considering joining the actuarial profession. I get to share my passion for what I do, and hear the enthusiasm of individuals looking at a prospective career as an actuary."

Jason Eber, Student Product Analyst, Moodys



Being at the heart of the debate Benefiting wider society

Lifelong learning

In 2018 we created our Lifelong Learning portal to signpost and provide guidance in areas of data science, career support and business skills. We want our members, wherever they are, to have access to the information they need to maintain, expand and update their skill set. This will ensure our actuaries stay relevant and continue contributing to a variety of traditional and non-traditional work areas.



Girls count us in

In 2018 the IFoA hosted two flagship events in London and Edinburgh to attract more young women into the profession. Over 200 visitors attended to hear industry professionals share insight and advice on becoming an actuary. 100% of attendees surveyed said they would attend similar future events.

Regional communities

We currently engage with 39 active regional member community networks around the world, with almost a third of the IFoA membership actively involved. In 2018 these groups organised over 200 CPD events, supporting our members with their personal, professional and lifelong learning objectives.

"My actuarial training has been integral in enabling me to have a wide-ranging career, from risk and compliance to fund management and technology start-ups. I currently work in FinTech, providing microloans and peer-to-peer insurance in Asia. I am grateful that my actuarial skills have enabled me to solve real-life issues and to design innovative digital solutions to good purpose."

Raymond Cheung, AIA Consultant



"Being on the Global Student Consultative Forum has given me the opportunity to connect closely with other members of the IFoA. It has been an enriching experience because I can share my views, thoughts and suggestions with like-minded people and discuss and develop solutions. I feel proud to be able to support and help to improve the functioning of an institute I am a member of."

Ekta Mehta, Student Associate, Acies Consulting LLP, India

> ACIES CONSULTING

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President and CEO's statement

Making an impact

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Through our commitment to operational excellence – and our enduring values of community, integrity, and progress – we create lasting impact for the actuarial profession.



The world is saturated with information.

No matter where you are – on a train, in a restaurant, or even on a plane somewhere over the Atlantic – you'll find people staring at their phones, their tablets and their laptops, constantly consuming data.

As humanity tries to make sense of seemingly endless data, successful people – and organisations – are the ones that can cut through the noise, clearly articulate their value, and make an impact.



In this annual report, you've met actuarial professionals from across the globe who are making an impact in their organisations – and in the world. They are thoughtful and purposeful. They are leaders in their companies and in their fields. They are visible reminders that, as a member-driven, volunteer-led, public interest organisation, the IFoA simply could not achieve what it does without your engagement and support.

1,000 In 2018 we surpassed the 1,000 new qualifiers mark – more than we've ever had in a single year. As our most valuable asset, you – our members – make an indelible impact on the clients and communities you serve.

In turn, the IFoA strives to make a similar impact on our members – and on the profession more broadly. Over the past year, we sustained a high standard of volunteer engagement (82%) and student satisfaction (70%). Our events reached more members than ever before. We surpassed the 1,000 new qualifiers mark – more than we've ever had in a single year.

Through our commitment to strategic and operational excellence – and our enduring values of community, integrity and progress – we create lasting impact for the actuarial profession.

The future, whatever it may hold, will undoubtedly show us an increasingly complex world. We meet it with confidence, rooted in the firm belief that together, we will continue to make an impact on society and those we serve.

Jules Constantinou President

Derek Cribb Chief Executive

Our plans for 2019/20

Strengthen the member value proposition

2018's member survey provided us with rich insights as to what our members both value and want most from their engagement with the IFoA. During 2019/20, representatives from our Council and IFoA employees will work together to articulate our member value proposition and bring it to life, ensuring a meaningful and valuable member experience.



Data science

2018/19's highly successful Data Science Virtual Conference is the beginning of a broader effort to become a key player in this realm. Over the course of 2019/20, the IFoA will engage with members and data science professionals as we define what's possible – together.



Global collaboration

Pursuing our goal of 'an actuary in every business', we continue to forge – and strengthen – relationships with employers around the world. This is a key opportunity for the IFoA to promote actuarial careers and the broader profession, providing value for our members.

The IFoA in numbers

Our membership is constantly changing. Every year new students sign up to study, exam entrants qualify, actuaries move country or industry sector, or retire from practice.



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