



NOVEMBER NEWSLETTER 2021

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STAKEHOLDER ENGAGEMENT

Actuaries Continue to Support Commitments to Address Climate Risks

Climate change will likely seriously affect the entire world. The degree and timing of forecasted changes in our climate involve a great deal of uncertainty, creating widespread concern about its recent and potential impacts under various plausible scenarios. Even if the most severe climate-related risk scenarios do not materialize, it can be expected that our society will nevertheless be impacted. A range of effects is now being actively considered by governments, policymakers, regulators, businesses, scientists, and many others.

As key architects of insurance, pension and social security systems, both public and private, actuaries have long played pivotal roles in managing the uncertainties of financial risk. With the growing global recognition of the importance of climate-related risks, it is natural that actuaries are involved in addressing the rapidly evolving requirements and expectations of all stakeholders.

As global leaders gather for COP26, the International Actuarial Association (IAA) is committed to ongoing support for the goals set forth by the conference through our many partnerships, notably with the UN Environmental Programme, UN Principles for Sustainable Insurance and the UN-convened Sustainable Insurance Forum (SIF).

In 2020, the IAA established a Climate Risk Task Force (CRTF) to:

- Coordinate and facilitate the interchange and communication of information within the profession globally, thus adding value to the individual contributions of our Full Member Associations;
- Consolidate global actuarial contributions to support the work of supranational organizations engaged in the enhancement of risk management efforts on both a macro (global) level and on a micro level such as internal risk management, financial reporting, and prudential regulation in this area, as well as to provide forum(s) for discussion;
- Stimulate research on actuarial approaches and methodologies to implement disclosures and relevant analyses for the Task Force on Climate-related Financial Disclosures;
- Help optimize adaptation and financing strategies by quantifying and facilitating the comparison of costs and benefits over long time horizons; and
- Identify and quantify mitigation strategies that can help manage risks.

Since its creation, the CRTF has produced three papers on this subject: [Importance of Climate-Related Risks for Actuaries](#); [Introduction to Climate-](#)

Related Scenarios; and, Climate-Related Scenarios Applied to Insurers and Other Financial Institutions. The IAA is expecting to add several other papers to this list in the next year as it continues to explore topics such as the sustainable transition to a net zero global economy, and how actuaries can add value to these important discussions.

The IAA wishes to encourage all parties concerned with the challenges of climate risks, to actively involve local actuaries in their discussions and deliberations. Actuaries are not only risk management experts in the traditional financial services sectors, they are also a largely accessible and knowledgeable resource of expertise for emerging issues such as climate risks. Actuaries are part of a global profession working to ensure the public interest is served. To learn more about the work of the IAA on this topic, contact [Amali Seneviratne](#).

NEWS FROM MEMBER ASSOCIATIONS

Ecuadorian Actuarial Association

AEACT Welcomed as 74th Full Member Association

By Rodrigo Ibarra Jarrin



As President of the Ecuadorian Actuarial Association (AEACT) I am pleased to share with you this excellent news: the Council of the IAA, in a vote which closed on October 15, approved the admission of the AEACT as a Full Member. Without a doubt, for us this recognition constitutes a great achievement for the actuarial profession in Ecuador.



We congratulate the team that made it possible to meet this challenge, the President of the AEACT and its members.

In Ecuador, the actuarial profession is not fully developed, but there have been several changes that allow the AEACT to consolidate itself as a union of highly trained professionals. The challenges are big; however, I am sure that thanks to the commitment of our members we will achieve the objectives set.

Under the guidelines of the IAA, we seek to establish international criteria related to professionalism, discipline, education and certification with international standards to be put into practice by the AEACT.

Despite our short time in existence, we have achieved several goals that make us proud and encourage us to work together to accomplish our objectives:

- Through agreement No. 2017-241 dated November 9, 2017, the Ecuadorian Secretary of Higher Education, Science, Technology and Innovation recognized the legality of the AEAET and approved its Statutes.
- Additionally, in a meeting held in Mexico City in November 2018, the IAA approved the admission of the AEAET as an Associate Member and the 100th member association.
- Furthermore, the AEAET signed an agreement framework with the Instituto de Actuarios Españoles with the purpose of exchanging resources and technical knowledge and planning academic events to contribute to the development of the actuarial profession.
- In November 2019, the AEAET carried out, with great success, the first actuarial seminar for the region: Pensions, Solvency and Actuary 4.0, which took place in the city of Quito.
- The Universidad San Francisco de Quito – USFQ is the centre in Ecuador authorized by the Society of Actuaries (SOA) to hold the exams.

Canadian Institute of Actuaries – Canada

We're almost at year-end, with no signs of slowing down. Check out our most recent research and activity highlights as we wrap up a busy 2021:

Reimagining pension solvency funding

Authors Serge Charbonneau, FCIA, and Joseph Nunes, FCIA, explore the issue of underfunded pension plans in [Protecting Pensioners of Traditional Defined Benefit Plans: A New Approach to Solvency Funding and Benefit Reductions on Plan Wind-up](#), newly released as part of the CIA insight statement series. Read an [article](#) and listen to our podcast for more discussion with the authors in [English](#) or [French](#).

Educational attainment and longevity

Is there a link between education levels and life expectancy? The answer appears to be yes according to Rob Brown, FCIA. In [Driving Longevity through Educational Attainment – A Literature Review](#), he explores the surprisingly significant impact of education on longevity. Listen to Rob further discuss his findings in this [podcast episode](#).

The alone stage of retirement

In [Challenges Faced by Canadian Women in the Alone Stage of Retirement](#), authors Douglas Andrews, FCIA, and Lori J. Curtis present several recommendations towards alleviating the burden faced by those in the alone stage of retirement, calling for increases to the Guaranteed Income Supplement, more affordable approaches to aging in place, and improvements to Canada's long-term care system.

Head over to [Seeing Beyond Risk](#) for an overview of the report findings and recommendations.

Covid-19: Setting the stage for a basic minimum income plan

Actuaries have consistently played a key role in the development of Canada's system of social protection. [Covid-19 sets the stage for basic income, but can it work?](#) highlights the many areas for actuarial advice as we try to improve this system for Canadians in the post-COVID era.

2020 retirement risk

In the [2020 Retirement Risk Survey](#), conducted in partnership with Ipsos, the CIA asked Canadians a series of provocative questions about their retirement and long-term planning. The survey focused on how well Canadians understood longevity and life in retirement and how accurate their expectations are around being disabled in

retirement, needing long-term care, and more.

Read [Living well in retirement is a goal for all Canadians, but how prepared are we?](#) for highlights of the findings.

Seeing Beyond Risk highlights actuarial excellence

5 minutes with... is our new monthly video profile series featuring recipients of the [CIA Legacy Awards](#), our annual appreciation program that recognizes the valuable contributions of volunteers who move the CIA forward. This spotlight is recognition of those efforts, but most importantly, it is thanks.

Join [Dane Grand-Maison](#), FCIA, and [Luis Dizon](#), ACIA, as they reflect on their experience as CIA volunteers.

When music and math collide

After 45 years of teaching actuaries and being connected to the actuarial profession, University of Toronto Professor Sam Broverman will be retiring in 2022. Listen to our podcast, [A conversation with Sam Broverman](#), as Sam reflects on his years as an instructor and discusses his sideline hobby as a jazz performer.

Catch up on all our recent Seeing Beyond Risk podcasts, including [A conversation with Nancy Hudson](#), [The Actuarial Foundation of Canada](#), [Impacts of climate change on actuarial practice](#), and [more](#).

Deutsche Aktuarvereinigung (DAV) – Germany

Dr. Michaela Baumann wins Data Science Challenge of the DAV

The DAV has selected the winner of its Data Science Challenge 2021. For the competition, participants had to address exciting issues in insurance. The topic of this year's challenge was "Interpretability of Machine Learning Models and Tools", and the prize went to Dr. Michaela Baumann for her very well visualized and insightful explorative analysis of a dataset with automotive claims under the title "R-Notebook Interpretable Machine Learning".

Solvency II: Still a lot to do

A few weeks ago, the European Union (EU) Commission presented its long-awaited proposal for the revision of the Solvency II supervisory regime, which has been in force since 2016. "This already contains significant improvements to the original concept of the European insurance regulator EIOPA. Nevertheless, from an actuarial perspective, there is still considerable need for improvement." This underlined the German Association of Actuaries in a press release. The DAV will actively accompany the further parliamentary process of the Solvency II review in close coordination with the Actuarial Association of Europe (AAE).

Actuarial Media Center/actuvieiw

New content and a continuing partnership

Within the last few weeks, a lot of fresh and interesting content from many countries around the world, like Ireland, Germany and the United States, has been published on actuvieiw.

Two highlights were the [ASTIN 2021 Online Colloquium](#) hosted by the IAA's ASTIN Section and the [international program of the national congress](#) of the Italian actuarial associations Ordine Nazionale degli Attuari and Consiglio Nazionale degli Attuari.

Also, actuvieiw is very happy to announce that its strong partnership with the AAE will continue until 2024. The AAE has renewed its agreement with actuvieiw for four more years, allowing 27,000 actuaries in 35 countries to use the actuarial streaming platform without limits.

EAA – European Actuarial Academy GmbH

Save the date: 4th European Congress of Actuaries – Spain

Mark your calendar – the 4th European Congress of Actuaries (ECA) will be held in Madrid from June 2–3, 2022. More than 350 experts and executives from Europe and beyond are expected to join next year's congress.

ECA 2022 will feature a varied and inspiring congress program with four excellent keynote sessions by renowned guest speakers. Petra Hielkema, Chairperson of the European Insurance and Occupational Pensions Authority (EIOPA), has already confirmed her participation. The program will also include more than 20 parallel sessions discussing current professional challenges and opportunities arising from new areas of activity of the profession as well as from traditional work areas. The full program will be available in December on the [ECA 2022 website](#), and registration will start in January.

Next to the congress program, ECA 2022 will also feature an entertaining social program with a traditional Spanish event as well as several opportunities for networking and communication in the central exhibition area.

Watch this [invitation video](#) by Luis Sáez de Jáuregui, a member of the AAE Board, for a first impression of the congress. For further information, please visit the ECA 2022 website and subscribe to the event's newsletter.

The organizers thank their Gold Partner Ortec Finance, as well as Bronze partners CERA Global Association and Milliman, for sponsoring ECA 2022. If you are also interested in becoming a partner, please contact [Gesa Sevenich](#).

EAA e-Conference on Data Science & Data Ethics 2022

On May 12, 2022, the third EAA e-Conference on Data Science & Data Ethics will take place.

Participants from all over Europe and the rest of the world joined this year's online event and benefited from the harmonious mix of live keynotes and expert talks as well as a selection of recorded presentations.

Next year the EAA is again aiming to present well-chosen lectures on hot actuarial data science topics and to further establish the e-conference as the most important information forum for the actuarial profession in terms of data, data quality and data ethics in Europe.

Therefore, it cordially invites you to get involved and share your knowledge and experience, and contribute to the call for papers. Further information on the key conference topics and all submission details can be found on the new [conference website](#). The EAA is very much looking forward to receiving your presentation proposals in form of an abstract by January 7.

Further EAA events

As the European knowledge centre for actuaries, the EAA offers a broad variety of attractive actuarial training sessions within the next few months. Below is an overview of upcoming web events:

- **2nd Climate Day: Risks & Opportunities for the Insurance Industry, November 30**

It is becoming increasingly evident that the actuarial community's understanding of climate risk is not yet as developed as its expertise on traditional insurance risks such as mortality risk. This [web session](#) will begin by showing how to apply well-known laws of physics and chemistry to build a practical climate model. It will also examine various relevant national and European regulations, and include a lecture dedicated to non-life insurance risks.

- **Understanding IFRS 17, December 1–2**

A strong focus of this [web session](#) lies on the accounting framework in which actuaries operate. It will address the transition period and the specifics of all relevant insurance lines of business, and highlight key conceptual topics and options that International Financial Reporting Standard 17 (IFRS

17) offers for implementation. It will be useful for both finance and actuarial experts involved in IFRS 17 implementation or interested in the practical application of this new standard.

- **Structural Reforms for Public Pension Schemes, January 24–25**

The objective of this [web session](#) is to present various experiences of structural reforms of public pension schemes such as Notional Defined Contribution (NDC) or point systems and to analyze these techniques in terms of fair equilibrium between financial sustainability and social adequacy.

- **Introduction to Graph Theory for Actuaries, January 26–27**

Graph theory's applications are widespread and of interest in economics, chemistry, informatics, biology and engineering. In insurance contexts, graphs occur in operational risk, cyber risk and many other contexts. Understanding these kinds of networks is essential for valuation of risk, developing measures or calculating scenarios. Actuaries and risk managers are encouraged to [learn about these techniques](#) for better modelling of non-linear interrelated risks.

- **Actuarial Modeling for Cyber Risk, January 31 and February 7**

With the rise of the digital economy, cyber risk has become a major concern for all customer segments. Although the development of "physical" protection strategies against cyber attacks is fundamental, no protection is perfect, and insurers are intended to play a crucial role in providing financial protection. The emerging and evolving nature of cyber risk helps make it one of the most important social and economic risks. Learn more about it during this [web session](#).

- **Practical Application of Clustering in Insurance, February 16**

This [web session](#) provides an introduction into clustering with a focus on typical stumbling blocks arising when clustering techniques are applied in practice, such as interpretability, missing values and mixed data types. The theoretical explanations will be accompanied by a practical example in R on a public data set showcasing a typical insurance application.

Please visit actuarial-academy.com for further information on EAA events and trainings.

Institute and Faculty of Actuaries – United Kingdom

A changed world needs new thinking

The Institute and Faculty of Actuaries (IFoA) is excited to announce the launch of the Frank Redington Prizes. The prizes seek to encourage and recognize innovative thought leadership in fields of interest to actuarial science. The IFoA is issuing a call for new thinkers to step forward with bold new ideas on two of the biggest challenges of the 21st century, and it hopes that you will share this opportunity within your networks (you can also do this by liking and sharing the IFoA's posts on [LinkedIn](#) and [Twitter](#)).

This open essay competition, sponsored by Milliman and Punter Southall, welcomes applicants from across the globe, both within and outside of the actuarial profession. Calls for submissions are on two topics:

- What would be a sustainable economic and finance system for the public interest?
- What would be a sustainable and effective UK pension system for the people?

Essays should be between 5,000 and 10,000 words in length and include original thinking, practical solutions and an analysis of risks and opportunities. Each first prize will be awarded £12,500, second prize winners will receive £7,500 and those awarded third prize receive £5,000.

To apply, please follow these steps:

- Step 1: Visit the [IFoA website](#) for all the details and the full terms and conditions.
- Step 2: Register your interest by emailing FRPqueries@actuaries.org.uk
- Step 3: Send your submission along with your name, organization (optional) and correspondence address to FrankRedingtonPrize@actuaries.org.uk by midday (BST) on April 29.

Conference of Consulting Actuaries – United States

Do not miss these upcoming continuing education webinars:

- [Being Conscious About Unconscious Bias](#), December 1
- [Liability Driven Investment and De-Risking in a Post-Pandemic World](#), December 8
- [Financial Reporting in Healthcare](#), December 15

Society of Actuaries

New SOA Affiliate Membership

The Society of Actuaries (SOA) recently launched the [new free Affiliate Membership](#) for aspiring actuaries, professionals looking to change careers, counselors helping students, parents trying to point their children in the right direction and anyone with an interest in the actuarial profession. Find out all the new SOA Affiliate Membership has to offer and [join today](#).

SOA research and call for papers

The SOA Research Institute recently released the [Emerging Technologies and Their Impact on Actuarial Science](#) study. This research report highlights the leading emerging technologies that may significantly affect the actuarial profession over a three-year period, and serves as a guide and resource for actuaries and potential employers to identify the prospective tools to enhance or expand actuarial work. It is also an aid for people collaborating with actuaries who may be affected by these emerging technologies, and for leaders looking to enable teams employing actuaries through the introduction of these new tools.

In 2023, the SOA will present two [Living to 100 Symposia](#), hybrid events with in-person and virtual components. The organizing committee is now seeking papers exploring aging and longevity and their implications.

Read through the list of suggested topics and requirements on the website and find out how you can be part of these exciting events, which will take place on January 15, 2023, in Orlando, Florida, and in the first quarter of 2023 in the Asia-Pacific Region.

NAAJ seeks Editor

The SOA invites applications and nominations for the position of Editor of the North American Actuarial Journal. Please see the [full announcement](#) for the position description, pertinent information about the NAAJ, desired qualifications, responsibilities, and application and nomination procedures. The deadline for applications and nominations is March 31. The editor's term will begin on January 1, 2023, and the SOA will provide an honorarium.

UPCOMING EVENTS

2021 Caribbean Actuarial Association Annual Conference



From the thought-provoking debate “Are Actuaries Needed in the Caribbean? Are They Needed at All?” to light-hearted brainteasers like “Would Transformers Buy Life or Car Insurance? Or Even Social Security?”, this year the Caribbean Actuarial Association (CAA) is shaking things up at its annual conference under the theme of “Change: Embracing the Disruption”. With 30 sessions over five days, the event promises to deliver fiery debates, challenging presentations, specific student-focused content and interactive brainstorming.

For the second year running, the event will be completely virtual due to COVID-19 and the difficulties of foreign travel. (The CAA hopes that next year participants will be able to meet in person, with sessions streamed, at a hybrid conference.)

The Professionalism Workshop on December 8, facilitated this year by the Casualty Actuarial Society (CAS), will cover subjects common to all practice areas through personal stories, case studies, interactive polls and breakout rooms. Topics will include management pressure, qualifications, proprietary knowledge, captive challenges, thinking outside the box and working outside your area of expertise.

As usual, concurrent with the conference will be the Advisory Council Meeting, where the CAA, represented by members of the Steering Committee, meets twice yearly with the Insurance Association of the Caribbean, Institute of Chartered Accountants of the Caribbean and the region’s regulators – the Caribbean Regional Technical Assistance Centre, Caribbean Association of Pension Supervisors and Caribbean Association of Insurance Regulators – to provide an update on the association’s initiatives, including the development of actuarial practice standards.

The Advisory Council seeks to engage the region’s regulators on issues such as the recognition of CAA standards and key areas in which regulators and regional associations can work together for the betterment of the region.

Local stakeholders and all CAA members and conference attendees are invited to attend to hear the latest updates from the CAA, other regional professional bodies and the regulators, and keep up to date with what is happening in the region.

Registration is free for all students and US\$100 for everyone else; the Professionalism Course is an additional US\$150. Sessions qualify for CPD credits.

Joint International Actuarial Colloquium, hosted by the Actuarial Society of Hong Kong and the IAALS and PBSS Sections of the IAA.



Call for papers

The International Actuarial Colloquium is co-sponsored by the Actuarial Society of Hong Kong (ASHK) and the IAA’s

Life Section (IAALS) and Pensions, Benefits and Social Security (PBSS) Section. This flagship event will be held from April 26–28.

With the theme “Global Pandemic – Beyond the New Normal”, this event aims to address issues and changes needed with hindsight from the pandemic. With confirmed cases of COVID-19 continually growing across the globe, insurers and pension funds need to make tough decisions beyond this new normal and deal with all the different challenges facing the industry. The colloquium will provide insights on the transformation of regulation, social protection (including social insurance), capital, investments, risks, products, customers and distribution for 300-plus attendees, including insurance and pensions executives and senior actuaries from Asia and around the world.

The sessions are tentatively planned as follows:

- One keynote panel
- Two plenary sessions
- Fifteen parallel breakout sessions (each parallel session will consist of two or three presentations on the same theme)

The organizers invite professionals and practitioners in the life insurance and pensions fields to speak to the theme and share their knowledge and experience with their fellow actuaries and the wider audience at the colloquium. Possible topics for your presentations include (but are not limited to):

- Life insurance
- Health insurance
- Pension, employee benefits and social security
- Reinsurance
- Risk, capital and value
- Innovations (e.g., in terms of products, markets, customers and distribution)
- Data, analytics, model applications and technology
- Regulating the insurance/pensions industry (e.g., international accounting and solvency standards development, funding and sharing risks)
- The future of the actuary
- Environmental and climatic changes
- Professionalism, ethics and values

A typical presentation session will be of 30 to 45 minutes (including questions and answers), subject to the final decision by the Scientific Committee. If you are keen to participate in this colloquium as a presenter, the paper submission process is set out [here](#). **The deadline to submit an abstract is December 31, 2021.** Speakers whose presentations are accepted are invited to present during the event, but will be expected to cover their travel and accommodation expenses. Presenters are also expected to pay the conference fee if they intend to attend sessions other than the one they present. Both the IAALS and PBSS Sections will offer bursaries for speakers, mainly for those from actuarially developing countries and who are members of the Section. Please indicate your interest in applying for a bursary during the paper submission process.

All accepted full-length papers will be eligible for consideration for the Best Paper Awards, proudly sponsored by the IAALS and PBSS Sections. The winners will be selected using criteria that include the command of actuarial

concepts, the quality of the analysis instruments used, clarity and insightfulness in communication, and the potential practical application of the topic in the insurance/pensions world. The winner will be announced during the closing ceremony of the colloquium.

Joint AFIR-ERM & ASTIN Colloquium - Orlando, United States



The first post-COVID-19 physical colloquium is scheduled in Orlando, Florida, next year. As such, it is already a major meeting that you cannot miss. So please book it in your calendar.

The actuarial field related to non-life insurance and the financial industry continues to evolve in the post-coronavirus environment, making it vital for professionals from around the world to share ideas that lead to innovations and improvements. In the spirit of pushing ideas forward, the organizers present the 2022 Actuarial Colloquia, which comprises the AFIR-ERM (Finance, Investment & Enterprise Risk Management) and ASTIN (Non-Life Insurance) Sections of the IAA.

The CAS is delighted to host the event, taking place from May 17–20. This colloquia will bring together the best actuarial researchers and practitioners, along with their papers exhibiting the latest actuarial and scientific techniques.

ICA2023

Be heard around the world – Submit your abstract by 31 March 2022!

The Actuaries Institute Australia and the IAA are looking for abstracts with originality, a path to further research and real commercial and practical value.

As the world seeks to absorb the costs, lessons and recovery opportunities thrown up by COVID-19. Find out more: ica2023.org

Catch the moment – Become a sponsor of ICA2023

In addition to the 'traditional' sponsorship channels, ICA2023 will be broadcast to actuaries around the world via a state of the art digital platform that's 'live' one week before the Congress – and for 30 days afterwards. So you reach a vastly bigger audience – and for weeks rather than days.

You can build your own sponsorship packages to get maximum value from the hybrid structure, including – virtual booth facilities with 'real' sales interaction – lead generation and nurture – even 1:1 chats with delegates. Contact Jules Gribble, Chair Sponsorship Sub-Committee: jules.gribble@ica2023.org



BRIDGE TO TOMORROW
2023 INTERNATIONAL CONGRESS OF ACTUARIES
28 MAY – 3 JUNE 2023 - SYDNEY

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