



SINGAPORE
ACTUARIAL
SOCIETY

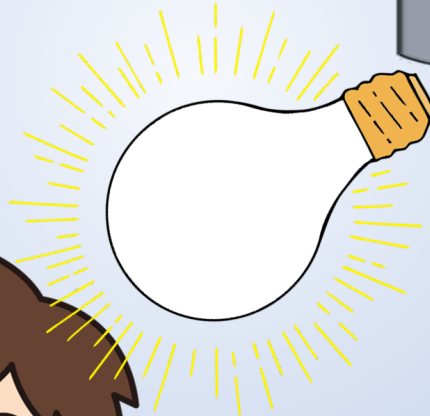
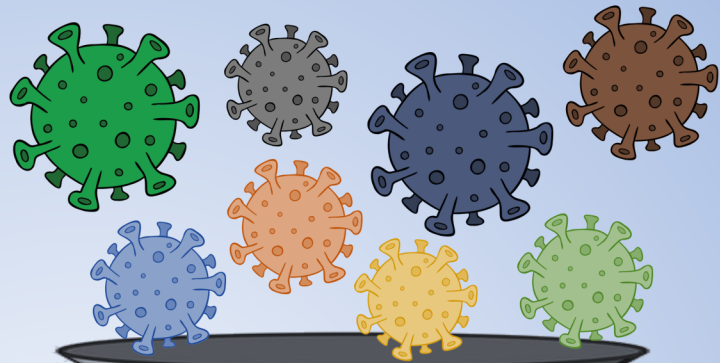
presents the

Singapore Actuarial Conference

22-26 November 2021

This program has been approved for the IBF-Financial Training Scheme (FTS) and is eligible for FTS claims subject to criteria being met by attendees.

The Training Allowance Grant (TAG) is not applicable.



Actuaries thriving with
Courage
Objectivity
Versatility
Intelligence
Determination

OUR SPONSORS | 2021 - 2022

AVIVA

Singlife

Manulife

PLATINUM

PRUDENTIAL

RGA

HSBC

GOLD

Gen Re 100 years 175

CHINA RE

PartnerRe

FWD insurance

SILVER

hannover re

Swiss Re

Munich RE

OFFICIAL MEDIA PARTNER

Life Insurance Association Singapore

Allianz

CAS Expertise. Insight. Solutions.

SOCIETY OF ACTUARIES

Milliman

Institute and Faculty of Actuaries

ASIA INSURANCE REVIEW

PROGRAM AT A GLANCE

A week-long event featuring world renowned speakers and combining different actuarial practice areas with an international focus in Life Insurance, General Insurance, Data Analytics, Enterprise Risk Management, Retirement and the Practising Certificate Seminar.



5-DAY
EVENT



100%
VIRTUAL



50+
PRESENTATIONS



50+
SPEAKERS

	MONDAY 22 NOV 2021	TUESDAY 23 NOV 2021	WEDNESDAY 24 NOV 2021	THURSDAY 25 NOV 2021	FRIDAY 26 NOV 2021
Morning	Life Insurance Day	General Insurance Day	Data Analytics Morning	International Day	Retirement Morning
Afternoon			Enterprise Risk Management Afternoon		Practising Certificate Seminar
HIGHLIGHTS	<ul style="list-style-type: none"> Opening address by Wai Yi Lee, Director at Monetary Authority of Singapore (MAS) Specially tailored address by Bruce Mackenzie, Member of the International Accounting Standards Board 	<ul style="list-style-type: none"> Specially tailored address by Cass Sunstein, Professor at Harvard Law School; Co-Author of best-selling book Nudge (with Nobel Laureate Richard Thaler) and Noise (with Nobel Laureate Daniel Kahneman) Topics ranging from telematics, climate risk, AI applications, data analytics in pricing, and many more. 	<ul style="list-style-type: none"> Specially tailored address by Sir John Kay, British Economist; Co-author of Radical Uncertainty (with Bank of England Governor Mervyn King) Covering topics such as predictive analytics, Kaggle competition, Climate Risk, Cyber Risk and more. 	<ul style="list-style-type: none"> Agenda includes overview of markets like Cambodia and Sri Lanka Specially tailored addresses by Dr Helen Wright, International Education Advisor, Executive Leadership Coach and Dr William Thomas from The Economist. 	<p>Retirement Morning</p> <ul style="list-style-type: none"> Specially tailored address by Gregory Chia, Group Director at CPF Board, Singapore <p>Practising Certificate Seminar</p> <ul style="list-style-type: none"> Professionalism Videos from Institute and Faculty of Actuaries Professionalism in an Unpredictable World

22 NOVEMBER

LIFE INSURANCE DAY

9.30am	Opening Address Akash Gupta, Chair, Singapore Actuarial Conference Frederic Weber, President, Singapore Actuarial Society
9.40am	Keynote Address Lee Wai Yi, Director and Head of Supervisory Analytics Division, Insurance Department, Monetary Authority of Singapore
10.20am	InsurTech - Trends and Opportunities for the Actuarial Community R. Dale Hall, Managing Director of Research, Society of Actuaries Research Institute
11.00am	BREAK
11.10am	Ever-changing World and What It Means for the Long-term Insurance Business Ivan Lee, Head Pricing SEA, Swiss Re
11.50am	Genetic Testing & Impact on Insurance Su Jin Park, Senior Manager Underwriting Office and Innovation Asia, Swiss Re
12.30pm	BREAK
2.00pm	How is Data and AI Transforming Life Insurance Business? Aswin Sreenivas, Advanced Analytics Sr Manager, NTUC Income
2.40pm	Potential Future Impacts of COVID-19 Dr. Andreas Armuss, Chief Medical Officer, Munich Re
3.20pm	BREAK
3.35pm	The Curious Case of Digital Insurance: Where is the Tipping Point? Joycelyn Bui, L&H Solutions Lead – SEA & India, Swiss Re
4.15pm	Climate – Modelling Challenges for the Next Big Financial Risk Dr Matthew Lightwood, Director, Global Product Manager GEMS ESG, Conning
4.55pm	BREAK
5.05pm	IFRS 17 Technical Issues Bruce Mackenzie, Board Member, International Accounting Standards Board (IASB) Laura Kennedy, IASB Technical Staff Charles Chiu, Assistant Vice President, Great Eastern Singapore
5.55pm	Closing Address Tan Shu Yuan, Chair, Life Committee, Singapore Actuarial Society
6.00pm	END

8.00am	Opening Address Velda Tan, Conference Chair, General Insurance Committee, Singapore Actuarial Society
8.05am	Special Address - Noise, Bias, and Decision Hygiene Cass Sunstein, Professor of Harvard Law School - NY Times Best Selling Author Gavin Maistry, Regional Chief Risk Officer and Chief Actuary, Munich Re (Facilitator)
9.00am	Parametric Insurance: Exploring the Possibilities, Examining the Realities Jonathan Charak, Emerging Solutions Director, Zurich North America Kate Stillwell, Founder, Jumpstart Insurance
9.40am	Climate Risk : Role of Actuaries and Risk Modeling Considerations Graham Hall, Director, PwC US Steve Bochanski, Partner, PwC US Elise Chee, Director, PwC Singapore
10.20am	Telematics: A Better Consumer Product Geoff Werner, Managing Member, Werner Advisory LLC
11.00am	BREAK
11.15am	Transforming Insurance Business Value Chain Rishabh Gupta, Manager, Deloitte SEA Aly Jamal - Deloitte Consulting
11.55pm	BREAK
1.25pm	Insurance-Linked Securities, a Solution for the Protection Gap Mehul Dave, APAC P&C Lead, Willis Towers Watsons
2.05pm	Hardening Reinsurance Market - How to Mitigate the Adverse Impact Saliya Jinadasa, Head of Analytics, Asia Reinsurance Brokers
2.45pm	Working Party on PI Claims Rishabh Gupta, Manager, Deloitte SEA
3.15pm	BREAK
3.45pm	COVID-19 in Singapore – A Review of the Public Ministry of Health's Data Matthew Maguire, Actuary, Pineapple Advisors
4.05pm	Lessons Learned from the Pricing Game Lukas Linder, Trainee, Munich Re Thibault Imbert, Insurance Solutions Manager, Munich Re Till Kischkat, Actuarial Consultant, Munich Re
4.35pm	The New Era of Actuarial Analytics in Non-life Insurance Wong Ling Yit & Balacoumarane Vetrivel, Munich Re Singapore
5.15pm	Closing Address Mehul Dave, Chair, General Insurance Committee, Singapore Actuarial Society
5.30pm	END

24 NOVEMBER

DATA ANALYTICS MORNING

8.15am	Opening Address Frederic Boulliung, Conference Chair, Data Analytics Committee, Singapore Actuarial Society
8.20am	Mining for Gold: Text Analytics in Insurance Liam McGrath, Data Scientist, Willis Towers Yelena Kropivnitskaya, Manager, Analytics, The Wawanesa Mutual Insurance Company
8.55am	BREAK
9.00am	How We Took a Leap Into Machine Learning as Actuaries Sara Sakimura, Assistant Vice President, Guy Carpenter Japan Suguru Fujita, Vice President, Guy Carpenter Japan
9.30am	Predictive Analytics in Motor Insurance Ling Kai Leong (David), Data Analyst, GIC Private Limited
10.00am	Alcrowd Competition: Insurance Pricing Game Michaël Bordeleau-Tassile, Actuary, Desjardins
10.30am	Alcrowd Panel Discussion and Q&A Sara Sakimura & Suguru Fujita, Guy Carpenter Japan Ling Kai Leong (David), GIC Michaël Bordeleau-Tassile, Desjardins
10.50am	BREAK
11.00am	Actuarial Loss Prediction Kaggle Competition (1) Yi Li, Senior Data Scientist, PRISM
11.30am	Actuarial Loss Prediction Kaggle Competition (2) Cheah Tee Hoong, Senior Health Policy Analyst, Ministry of Health (Singapore)
12.00pm	Kaggle Panel Discussion and Q&A Yi Li, Senior Data Scientist, PRISM Cheah Tee Hoong, Senior Health Policy Analyst, Ministry of Health (Singapore)
12.15pm	Closing Address Frederic Boulliung, Conference Chair, Data Analytics Committee, Singapore Actuarial Society
12.20pm	END

ENTERPRISE RISK MANAGEMENT AFTERNOON

1.35pm	Opening Address Paul Wee, Chair, Enterprise Risk Management Committee, Singapore Actuarial Society
1.40pm	Emerging Risks Greg Carter, Managing Director - Analytics, AM Best Yuan Tian, Senior Financial Analyst, AM Best
2.20pm	COVID-19, Black Swans and Enterprise Risk Management David Maneval, Head of Analytics, Lockton John Lian, Broker, Willis Re
3.00pm	BREAK
3.20pm	Climate Risk Markus Wimmer, Senior Manager, Portfolio Risk Management & Stress Testing (ERM), Standard Chartered Bank
4.00pm	Special Address Sir John Kay, British Economist and Co-author of Radical Uncertainty Kai Kaufhold, Managing Director, Ad Res Advanced Reinsurance Services (Facilitator)
4.40pm	Cyber Risk Matt Harrison, Director, Product Management, Cyber, RMS
5.20pm	Cyber Risk Jamie Pocock, Head of GC Cyber Analytics - International, Guy Carpenter
6.00pm	An Actuarial Approach to Climate Change Risk Prof Paul Sweeting, Chief Risk Officer for the Hassana Investment Company and Honorary Professor of Actuarial Science at the University of Kent
6.40pm	Closing Address Paul Wee, Chair, Enterprise Risk Management Committee, Singapore Actuarial Society
6.45pm	END

25 NOVEMBER

INTERNATIONAL DAY

9.30am	Opening Address Phillip Eng, Chair, International Committee, Singapore Actuarial Society
9.45am	Insurance Market Update on Japan and China: from Assessing New Risk-Based Capital to Insuring New Energy Vehicles Delvin Cai, Director, Actuarial Services, PwC China Marcus Yamashiro, Japan & APAC Treasury / Capital Management, AIG Japan Business Partners
10.25am	Trend in Chinese Health Insurance Market and Product Wang Mingyan, Senior Manager, Product Development Department, China Life Reinsurance Company Ltd
11.05am	BREAK
11.20am	Dealing with Operational Uncertainty Anil Mancham, CEO, IKBZ Insurance
12.00pm	Insights into Cambodia's Insurance Markets – General and Life Diep Leng, CEO, LC Insurance Brokers
12.40pm	BREAK
2.00pm	Lifelong Learning and a Growth Mindset – Why These are the 'Must-Haves' for Actuaries from 2021 onwards Dr Helen Wright, IFoA
3.00pm	Update of China's C-ROSS Phase II and Its Impact on the Industry Sherwin Li, Chief Actuary, China Re
3.40pm	BREAK
3.55pm	Spotlight on Sri Lanka Roshan Perera, Partner, NMG Consulting
4.35pm	OUTLOOK 2022: From Recovery to Reinvention Dr William Thomas, Director, Economist Intelligence Corporate Network
5.15pm	Innovation with Agriculture Insurance India Siddesh Ramasubramanian, Agriculture Insurance Company India
5.45pm	International Actuarial Association Jill Hoffman, Council Member (IAA Liaison) and Member of Professional Affairs Committee, Singapore Actuarial Society
6.15pm	END

25 NOVEMBER

PRACTISING CERTIFICATE SEMINAR (AFTERNOON 1)

1.30pm

REGISTRATION

1.45pm

Welcome and Introduction

Anuj Behl, Honorary Secretary and Member of Professional Affairs Committee, Singapore Actuarial Society

1.50pm

Regulatory Updates and Expectations on Appointed & Certifying Actuaries

Lee Wai Yi, Director and Head of Supervisory Analytics Division, Insurance Department, Monetary Authority of Singapore

2.50pm

BREAK

2.55pm

Legal Responsibility of Actuaries in Singapore

Ang Kim Lan, Managing Director, Goodwins Law Corporation

3.55pm

BREAK

4.15pm

Professionalism Matters For GI Actuaries – Case Studies

Ronald T. Kozlowski, CAS Asia Ambassador, Casualty Actuarial Society
Jimmy Molyneux, Corporate Actuary, Swiss Re

5.00pm

BREAK

5.05pm

Life Insurance Capital Regimes in Asia

Clement Bonnet, Principal & Consulting Actuary, Milliman Limited
Scott Chow, Consulting Actuary, Milliman Limited

5.50pm

END

26 NOVEMBER

RETIREMENT MORNING

9.30am	Opening Address Marcus Kok, Chair, Retirement Committee, Singapore Actuarial Society
9.35am	Retirement Financing – Global Challenges, Singapore's Experience Gregory Chia, Group Director (Policy, Statistics and Research), Central Provident Fund Board
10.20am	BREAK
10.30am	Minimum Income Standards for Households in Singapore Dr. Ng Kok Hoe, Senior Research Fellow, Head, Social Inclusion Project and Case Study Unit, Lee Kuan Yew School of Public Policy, National University of Singapore
11.15am	Retirement Income Policy Andrew Boal, Partner, Deloitte
12.05pm	BREAK
12.10pm	Sustainable Investing At HSBC Life Philip Pang, Chief Investment Officer, HSBC Life Singapore
12.55pm	Closing Address Marcus Kok, Conference Chair, Retirement Committee, Singapore Actuarial Society
1.00pm	END

PRACTISING CERTIFICATE SEMINAR (AFTERNOON 2)

1.30pm	REGISTRATION
1.45pm	Welcome and Introduction Jill Hoffman, Council Member (IAA Liaison) and Member of Professional Affairs Committee, Singapore Actuarial Society
1.50pm	IFoA Professional Skills Video
2.50pm	BREAK
2.55pm	IFoA Professional Skills Video
3.55pm	BREAK
4.15pm	Panel Discussion - Professionalism in an Unpredictable World Panel Moderator: Liem Phan, Head Life & Health Products South Asia, Swiss Re Panel Speakers: Daisy Ning, Head Life & Health Products Asia, Swiss Re Foo Chee Keong, Life & Health Business Management Asia Hub Head, Swiss Re Greta Mikelonis, Head of Health, Asia, Manulife Financial Asia Limited Liau Lee Jiat, Chief Actuary, Prudential Assurance Company Ltd Ng Sim Kheng, Chief Financial Officer, Prudential Assurance Malaysia Berhad
5.15pm	BREAK
5.20pm	SAS Standards of Actuarial Practice (SAP) L03 Frank Munro, Chair of SAP L03 Working Party, Singapore Actuarial Society
5.50pm	END

SPEAKERS & SYNOPSIS

LIFE INSURANCE DAY - 22 NOVEMBER 2021



Akash Gupta

Chair, Singapore Actuarial Conference



Frederic Weber

President, Singapore Actuarial Society

9.30am | Opening Address



Lee Wai Yi

Director and Head of Supervisory Analytics Division, Insurance Department, Monetary Authority of Singapore

9.40am | Keynote Address

An update will be shared on the key regulatory and industry developments for this year, and set out MAS' focus and initiatives for the insurance industry, relevant to the actuarial profession, in the coming year.



R. Dale Hall

Managing Director of Research, Society of Actuaries Research Institute

10.20am | InsurTech - Trends and Opportunities for the Actuarial Community

Technology and the innovation it enables are embedded in our everyday lives. As people have become increasingly comfortable making payment transactions and managing their lives on the internet and on mobile devices, consumers expect to have the same digital experience with regard to insurance. InsurTech is the use of emerging hardware, software and user interfaces to address inefficiencies or opportunities in the insurance value chain. It often involves technology, data and analytics.

With the ongoing emergence of InsurTech, many traditional insurance companies are looking to further invest in developing their own internal technology infrastructure and/or startup ventures. InsurTech offers many opportunities for interested actuaries. Beyond that, as InsurTech reshapes the insurance landscape, it is important for actuaries to be involved in the movement that will determine the future of the insurance industry.

Actuaries are already playing a variety of roles in insurance organizations – InsurTech brings new opportunities to further expand the actuarial footprint. They can not only join InsurTech startups and bring our actuarial background into innovation and entrepreneurship, but also participate in testing new innovations and partnering with InsurTech startups within the InsurTech ecosystem. Actuaries can and should position themselves as leaders and experts in the InsurTech space. This session will focus on recent SOA Research Institute projects on the future trends and opportunities in InsurTech.

SPEAKERS & SYNOPSIS

LIFE INSURANCE DAY - 22 NOVEMBER 2021



Ivan Lee

Head Pricing SEA, Swiss Re

11.10am | The Way Forward in the Ever-changing World – When Long-term Prediction Becomes Impossible

COVID-19 has not just changed our personal lives, but also the insurance industry. In actuarial education, we have been trained to project future probabilities based on historical data. However, is the contemporary world changing too rapidly for this skill to be relevant? In this presentation, I will be sharing the latest market trends, e.g. short-term and long-term mortality trends under COVID-19, recent cancer trends in China, etc. to illustrate the difficulties in projecting based on historical data.

I will also provide a few examples to illustrate how to make our work more future-proof, e.g. building early warning systems, understanding the causes of an incident and observing the underlying trends behind causes. Through this presentation, I hope to shed light on how we can find the way forward in the ever-changing world.



Su Jin Park

Senior Manager Underwriting Office and Innovation Asia, Swiss Re

11.50am | Genetic Testing & Impact on Insurance

Genetic testing is becoming more common and insurance customers now access to it more than ever. We, the industry, should track the landscape and the trend of the genetics testing technology, and be able to understand the impact to the insurance. The Speaker will share the status and the views on the genetic testing with the focus of how underwriting deals with the information, and how we see the impact of the emerging genetic testing to general and insurance population.



Aswin Sreenivas

Advanced Analytics Sr Manager, NTUC Income

2.00pm | How is Data and AI Transforming Life Insurance Business

Technology has changed the way we live our lives and, as a consequence, the way we do business. Within the span of barely a decade, the smartphone has become almost part of us, and the use of mobile apps and digital interactions have contributed to many industries transforming their operations. It has become increasingly apparent that artificial intelligence (AI) and machine learning have the power to transform the future of business and the way people work and live. At Income, we leverage data and machine learning to develop new measures, improve topline sales, enhance agent productivity and more.

SPEAKERS & SYNOPSIS

LIFE INSURANCE DAY - 22 NOVEMBER 2021



Dr. Andreas Armuss

Chief Medical Officer, Munich Re

2.40pm | Potential Future Impacts of COVID-19

Future course of the pandemic and implications for Life, Critical Illness and long-term disability.



Joycelyn Bui

L&H Solutions Lead – SEA & India, Swiss Re

3.35pm | The Curious Case of Digital Insurance: Where is the Tipping Point?

The hype on Digital Insurance has emerged since the early 2010s. Insurtechs have been one of the most invested players at the forefront, with regulators close behind mandating online offering of insurance products & services.

A decade on, the question remains – where is Digital Insurance on the hype cycle? Will the vision of distributing insurance digitally ever overtake the traditional channels? Is this a critical strategic step or a futile quest for the industry players?

Join us in this session as Joycelyn examines how Digital Insurance has thus far been viewed through the lens of industry players, whether now is the time to take the leap of faith and what it takes to cross over the hurdles.



Dr. Matthew Lightwood

Director, Global Product Manager GEMS ESG, Conning

4.15pm: Climate – Modelling Challenges for the Next Big Financial Risk

The global pandemic has highlighted once again the importance of considering emerging risks and risks originating from sources outside of the recent historical record. The move towards an increased understanding of climate risk in insurance asset management has been slowly gathering pace for the last decade. However, in the last twelve months the topic has gained in importance in the eyes of central banks, regulators, and industry bodies. In this talk we describe the latest developments in this area and how we can apply scenario analysis to existing regulatory capital models to give insights into climate risk on the asset side of the balance sheet.

SPEAKERS & SYNOPSIS

LIFE INSURANCE DAY - 22 NOVEMBER 2021



Bruce Mackenzie

Board Member,
International Accounting
Standards Board



Laura Kennedy

Technical Staff,
International Accounting
Standards Board



Charles Chiu

Assistant Vice
President, Great
Eastern Singapore

5.05pm | IFRS 17 Technical Issues

Coverage of widely discussed implementation issues from the SAS IFRS 17 Working Group.



Tan Shu Yuan

Chair, Life Committee, Singapore Actuarial Society

5.55pm | Closing Address

SPEAKERS & SYNOPSIS

GENERAL INSURANCE DAY - 23 NOVEMBER 2021



Velda Tan

Conference Chair, General Insurance Committee, Singapore Actuarial Society

8.00am | Opening Address



Cass Sunstein

Professor of Harvard Law School - NY Best Selling Author

8.05am | Special Address - Noise, Bias, and Decision Hygiene

Two sources of error are noise and bias. The two are very different, though both impair judgment. The best remedy consists of "decision hygiene," which can be adopted immediately. Some attention will also be devoted to the promise of "nudge" and the harms caused by "sludge."



Gavin Maistry (Facilitator)

Regional Chief Risk Officer and Chief Actuary,
Munich Re

SPEAKERS & SYNOPSIS

GENERAL INSURANCE DAY - 23 NOVEMBER 2021



Jonathan Charak

Emerging Solutions Director,
Zurich North America



Kate Stillwell

Founder,
Jumpstart Insurance

9.00am | Parametric Insurance: Exploring the Possibilities, Examining the Realities

Big data has driven parametric insurance's evolution as a viable means of protection for many risks, bringing this not-so-new concept into the spotlight. The growth in popularity ranges from government programs, ILS, all the way to insurtech innovations. This session will include an overview of parametric insurance as well as a discussion of multiple products in the market (by people who led the development of those products) with time for audience Q&A.



Steve Bochanski

Partner
PwC US



Elise Chee

Director
PwC Singapore



Graham Hall

Director
PwC US

9.40am | Climate Risk: Role of Actuaries and Risk Modeling Considerations

This session will introduce the key concepts actuaries need to know in relation to the impact of climate change and detail areas of practice where actuaries have a crucial role to play, both within insurers and at other businesses. Specifically the session will cover:

- The key climate change risks that insurers need to consider including physical and transition risks
- Climate change insurance regulatory considerations (including local environmental risks regulatory requirements from the MAS) and stakeholder overview (e.g. investor preferences)
- Relevant climate change reporting standards, including TCFD
- Climate change risk assessments and integration into risk management frameworks
- Climate change scenario testing - data and methodologies
- Impact of recent extreme weather events on historical claims experience and reserving strategies for future climate uncertainties.
- What does this mean for actuaries and what is our role?

SPEAKERS & SYNOPSIS

GENERAL INSURANCE DAY - 23 NOVEMBER 2021



Geoff Werner

Managing Member, Werner Advisory LLC

10.20am | Telematics: A Better Consumer Product

Telematics offers opportunities for insurance companies to deliver a better product for consumers. This session will explore how companies are using telematics to:

- Tailor insurance products to meet consumer needs
- Charge a more accurate and fairer premium
- Improve claims handling
- Change bad driving behaviors (e.g., distracted driving)



Rishabh Gupta

Manager,
Deloitte SEA



Aly Jamal

Deloitte Consulting

11.15am | Transforming Insurance Business Value Chain



Mehul Dave

APAC P&C Lead, Willis Towers Watsons

1.25pm | Insurance-Linked Securities, a Solution for the Protection Gap

Climate driven natural catastrophe exposure in addition to greater insurance demand is resulting in the protection gap increasing. The balance of supply and demand for risk protection is not being met solely by the insurance markets and therefore increasing insurers and reinsurers are looking at capital markets as a way to bridge the gap. This session will talk about the various types of insurance-linked securities, the growing demand of them, relevance for the Singapore market, roles that actuaries can support in the growing industry as well as key considerations.

SPEAKERS & SYNOPSIS

GENERAL INSURANCE DAY - 23 NOVEMBER 2021



Saliya Jinadasa

Head of Analytics, Asia Reinsurance Brokers

2.05pm | Hardening Reinsurance Market - How to Mitigate the Adverse Impact

For several years, the insurance industry has been anticipating a hardening of the reinsurance market after the previous hardening in early to mid 2000s. But soft market conditions prevailed for nearly 15 years until 2020. The Covid-19 pandemic was the harbinger, compounded by other factors, for the recent hardening of reinsurance market. This presentation covers drivers behind the hardening reinsurance market and notable observations from recent reinsurance policy renewals, and importantly focuses on steps that can be taken to mitigate the adverse impact of hardening market from insurers' perspective.



Rishabh Gupta

Manager, Actuarial & Insurance, Deloitte Consulting Pte Ltd

2.45pm | Working Party on PI Claims

The PI claims working party was formed to look into the impact of the new PI and death claims multipliers released by the MAS and Singapore courts in April 2021. The multipliers will be used to assess the damages to be awarded to personal injury and death claims. The presentation will provide an update from the working party on their findings regarding the potential impact of these multipliers in insurance business.



Matthew McGuire

Actuary, Pineapple Advisors

3.45pm | COVID-19 in Singapore - A Review of the Public Ministry of Health's Data

Over the past 18 months, Matthew has actively tracked the data produced by MOH relating to Singapore's experience relating to the current COVID-19 pandemic. As the type of data available changes over time, and the analysis continues to evolve, the story told remains fascinating. This will be a summary of the key results found during the analysis over the past 18 months and some implications for insurance products and the way back to normalcy.

SPEAKERS & SYNOPSIS

GENERAL INSURANCE DAY - 23 NOVEMBER 2021



Lukas Linder

Trainee
Munich Re



Thibault Imbert

Insurance Solutions Manager
Munich Re



Till Kischkat

Actuarial Consultant
Munich Re

4.05pm | Lessons Learned from the Pricing Game

Competing for our Munich based Munich RE team, we would like to share some insights we gained through AI Crowd's pricing game. We plan on covering a brief introduction, followed by our team's approach and methodologies, finally focusing also on learnings and potential improvements for future competitions.

.....



Wong Ling Yit

Analytics Solutions Engineer
Munich Re



Balacoumarane Vetrivel

Associate Data Scientist
Munich Re

4.35pm | Fraud Detection in Insurance

The fraud rate is on the rise in recent years in the insurance industry, especially in motor claims. Given the limitations of traditional/manual ways to deal with fraudulent claims, insurance companies are looking for an efficient and automated process to signal out suspicious claims.

Understanding the pain point from our clients, we have developed a fraud detection engine and worked with clients deploying and integrating it into our client's system. We implemented a hybrid approach with the combination of predictive ML models and rule engines to help our clients quickly and accurately identify suspicious claims to further investigation.

.....



Mehul Dave

Chair, General Insurance Committee, Singapore Actuarial Society

5.15pm | Closing Address

SPEAKERS & SYNOPSIS

DATA ANALYTICS MORNING - 24 NOVEMBER 2021



Frederic Boulliung

Conference Chair, Data Analytics Committee, Singapore Actuarial Society

8.15am | Opening Address
12.15pm | Closing Address



Liam McGrath

Data Scientist,
Willis Towers



Yelena Kropivnitskaya

Manager, Analytics
The Wawanesa Mutual Insurance Company

8.20am | Mining for Gold: Text Analytics in Insurance

Insurers collect vast quantities of unstructured text data through normal business operations. Claim notes, loss control reports, and customer feedback are a few common examples. Language is messy and text data, in its unstructured form, is of limited use. Natural Language Processing is a quickly-growing subfield of Artificial Intelligence which aims to read, decipher, and understand language in order to gain valuable insights from text data.

Actuaries can look to this field for a range of techniques, from simple to highly complex, which unlock this previously underutilized data source. Features derived through text mining add value to predictive models and other analytical efforts. Claims and underwriting are two applications where actuaries and data scientists can support decision making with text analytics.

SPEAKERS & SYNOPSIS

DATA ANALYTICS MORNING - 24 NOVEMBER 2021



Sara Sakimura

Assistant Vice President,
Guy Carpenter Japan



Suguru Fujita

Vice President,
Guy Carpenter Japan

9.00am | How We Took a Leap Into Machine Learning as Actuaries

We participated in the “Insurance Pricing Game” competition, a data science competition on automobile insurance, hosted by Aicrowd in 2020. We will present:

- 1) the overview of this competition
- 2) our submitted model
- 3) the final leaderboard results

Then, based on this experience, we will remark our findings on the possibility of utilizing machine learning methods in actuarial practice.



Ling Kai Leong (David)

Data Analyst, GIC Private Limited

9.30am | Predictive Analytics in Motor Insurance

A presentation will be made on the winning approach in the AICrowd Insurance Pricing Game. The approach constitutes a combination of statistical methods and machine learning methods.

SPEAKERS & SYNOPSIS

DATA ANALYTICS MORNING - 24 NOVEMBER 2021



Michaël Bordeleau-Tassile

Actuary, Desjardins

10.00am | Alcrowd Competition: Insurance Pricing Game

Insurance companies are constantly fighting for market share. How can they satisfy their growth appetite while remaining profitable? During a condensed 10 weeks period, participants in an online competition were acting as insurance companies in multiple market simulations.

- Pricing quotes
- Paying out claims
- And improving their pricing models on a weekly basis

Winners would be the insurance companies ending with the highest profit. Find out more, from one of the finalists of the competition!



Sara Sakimura

Assistant Vice President,
Guy Carpenter Japan



Suguru Fujita

Vice President,
Guy Carpenter Japan



Ling Kai Leong (David)

Data Analyst,
GIC Private Limited



Michaël Bordeleau-Tassile

Actuary,
Desjardins

10.30am | Alcrowd Panel Discussion and Q&A

SPEAKERS & SYNOPSIS

DATA ANALYTICS MORNING - 24 NOVEMBER 2021



Yi Li

Senior Data Scientist, PRISM

11.00am | Actuarial Loss Prediction Kaggle Competition (1)

This session will present the winning solution of the Kaggle Actuarial loss prediction competition 2020/21, which was launched by the Actuaries Institute of Australia, Institute and Faculty of Actuaries and the Singapore Actuarial Society. The challenge is to predict the ultimate loss of Workers Compensation claims.

In this session, I will discuss the machine learning (ML) modeling process that led to the 1st place in this challenge, including data manipulation, feature engineering/selection, model training methodologies, and findings from the model.

At the end, I will share my thoughts on further exploration and how data science can help actuaries with data and methodology innovation.



Cheah Tee Hoong

Senior Health Policy Analyst, Ministry of Health (Singapore)

11.30am | Actuarial Loss Prediction Kaggle Competition (2)

A sharing of my experience on the competition and some reflections.



Yi Li

Senior Data Scientist,
PRISM



Cheah Tee Hoong

Senior Health Policy Analyst,
Ministry of Health (Singapore)

12.00pm | Kaggle Panel Discussion and Q&A

SPEAKERS & SYNOPSIS

ENTERPRISE RISK MANAGEMENT AFTERNOON - 24 NOVEMBER 2021



Paul Wee

Paul Wee, Chair, Enterprise Risk Management Committee, Singapore Actuarial Society

1.35pm | Opening Address

6.40pm | Closing Address



Greg Carter

Managing Director - Analytics
AM Best



Yuan Tian

Senior Financial Analyst
AM Best

1.40pm | Climate Change, Cyber, Pandemic - A Rating Agency's Consideration

The insurance industry is facing a number of rising challenges in this increasingly interconnected world. The COVID-19 pandemic, increased catastrophe and weather-related events, cyber losses as evidenced by more frequent system and ransomware attacks, have materialised into a substantial impact on claims, which highlight the importance of understanding and managing these emerging risks. This presentation provides a brief introduction of AM Best's interactive rating approach and how these emerging risks, particularly climate change, cyber and pandemic, are being considered in AM Best's rating assessment.

SPEAKERS & SYNOPSIS

ENTERPRISE RISK MANAGEMENT AFTERNOON - 24 NOVEMBER 2021



David Maneval

Head of Analytics
Lockton



John Lian Tze Fei

Broker
Willis Re

2.20pm | COVID-19, Black Swans and Enterprise Risk Management

Covid-19 highlights that supply chains and activities are interdependent which was largely unanticipated – even by risk managers!

In the meantime, most governments are still unprepared for low-probability extreme disasters and their risk management approach appears to be fragmented with gaps. In Singapore, the MAS came up with new stress test scenarios in 2021 and what are the takeaways & economic interdependencies assumed in these scenarios?

After playing catch up with the recent pandemics, will we wonder what extreme disasters our great grand-parents (and those no longer with us) encountered and learned from? In good times, we often prefer listening to comforting stories but will we become more resilient or forget again as each generation passes? However, in practice can risk managers truly prepare and promptly respond to a broad range of extreme events?



Markus Wimmer

Senior Manager, Portfolio Risk Management & Stress Testing (ERM),
Standard Chartered Bank

3.20pm | Climate Risk

SPEAKERS & SYNOPSIS

ENTERPRISE RISK MANAGEMENT AFTERNOON - 24 NOVEMBER 2021



Sir John Kay

British Economist and Co-Author of Radical Uncertainty

4.00pm | Specially Tailored Address



Kai Kaufhold (Facilitator)

Managing Director
Ad Res Advanced Reinsurance Services



Matt Harrison

Director, Product Management, Cyber, RMS

4.40pm | Cyber Risk



Jamie Pocock

Head of GC Cyber Analytics - International, Guy Carpenter

5.20pm | Cyber Risk



Prof Paul Sweeting

Chief Risk Officer for the Hassana Investment Company and
Honorary Professor of Actuarial Science at the University of Kent

6.00pm | An Actuarial Approach to Climate Change Risk

Prof Sweeting will be talking about how he thinks about modelling climate change risk, and what has influenced his approach to this and other risks.

SPEAKERS & SYNOPSIS

INTERNATIONAL DAY - 25 NOVEMBER 2021



Phillip Eng

Chair, International Committee, Singapore Actuarial Society

9.30am | Opening Address



Delvin Cai

Director, Actuarial Services
PwC China



Marcus Yamashiro

Japan & APAC Treasury / Capital Management
AIG Japan Business Partners

9.45am | Insurance Market Update on Japan and China: From Assessing New Risk-based Capital to Insuring New Energy Vehicles

The advent of electric vehicles is a present day challenge to the global insurance market. A study of developments in China and the APAC region will kickoff a broader discussion of the future of P&C insurance risk and how trends in capital management, including regulatory changes such as the transition to a Global Insurance Capital Standard dovetail with the changing (technological, climate, economic, demographic) risk landscape.



Wang Mingyan

Senior Manager, Product Development Department, China Life Reinsurance Company Ltd

10.25am | Trend in Chinese Health Insurance Market and Product

An introduction to the development trend of China's health insurance market and the reasons behind it, as well as the evolution direction of health insurance products, including Critical Illness Insurance, Medical insurance and LTC insurance.

SPEAKERS & SYNOPSIS

INTERNATIONAL DAY - 25 NOVEMBER 2021



Anil Mancham

CEO, IKBZ Insurance

11.20am | Dealing with Operational Uncertainty



Diep Leng

CEO, LC Insurance Brokers

12.00pm | Insights into Cambodia's Insurance Markets – General and Life

Prior to the Covid-19 era, Cambodia was one of the fastest growing economies in Southeast Asia with an average GDP growth rate of 7% from 2010 to 2019. With a very low insurance penetration rate, Cambodia's insurance industry has good growth prospects. The objective of this paper is to provide insights into both the General and Life insurance markets in Cambodia. The paper also highlights the impact of Covid-19.



Dr. Helen Wright

Institute and Faculty of Actuaries

2.00pm | Lifelong Learning and a Growth Mindset – Why these are the 'Must-Haves' for Actuaries From 2021 Onwards



Sherwin Li

Chief Actuary, China Re

3.00pm | Update of China's C-ROSS Phase II and Its Impact on the Industry

The insurance regulator, China Banking and Insurance Regulatory Commission (CBIRC) started to update China's solvency regulatory regime, C-ROSS, in 2017. The new regime, C-ROSS Phase II, is expected to be taking effect since the beginning of 2022. What are the main changes in C-ROSS Phase II and how will it have an impact on the industry? This session will explain those matters.

SPEAKERS & SYNOPSIS

INTERNATIONAL DAY - 25 NOVEMBER 2021



Roshan Perera

Partner, NMG Consulting

3.55pm | Spotlight on Sri Lanka

The presentation will provide a spotlight on the Sri Lankan insurance industry covering a brief history of the market and key developments in the competitive and regulatory space. This will include the implementation of RBC and impact on the market in terms of organizational and participation strategies, to new challenges such as the adoption of IFRS 17 and navigating the Covid-19 pandemic.



Dr William Thomas

Director, Economist Intelligence Corporate Network

4.35pm | OUTLOOK 2022: From Recovery to Reinvention



Siddesh Ramasubramanian

Agriculture Insurance Company India

5.15pm | Innovation with Agriculture Insurance India



Jill Hoffman

Council Member (IAA Liaison) and Member of Professional Affairs Committee, Singapore Actuarial Society

5.45pm | International Actuarial Association

SPEAKERS & SYNOPSIS

PRACTISING CERTIFICATE SEMINAR (AFTERNOON SESSION) - 25 NOVEMBER 2021



Anuj Behl

Honorary Secretary and Member of Professional Affairs Committee, Singapore Actuarial Society

1.45pm | Opening Address



Lee Wai Yi

Director and Head of Supervisory Analytics Division, Insurance Department, Monetary Authority of Singapore

1.50pm | Regulatory Updates and Expectations on Appointed & Certifying Actuaries



Ang Kim Lan

Managing Director, Goodwins Law Corporation

2.55pm | Legal Responsibilities of Actuaries in Singapore

A brief overview of the legal pitfalls for actuaries in Singapore.

SPEAKERS & SYNOPSIS

PRACTISING CERTIFICATE SEMINAR (AFTERNOON SESSION) - 25 NOVEMBER 2021



Ronald T. Kozlowski

CAS Asia Ambassador
Casualty Actuarial Society



Jimmy Molyneux

Corporate Actuary
Swiss Re

4.15pm | Professionalism Matters For GI Actuaries – Case Studies

.....



Clement Bonnet

Principal & Consulting Actuary
Milliman Limited



Scott Chow

Consulting Actuary
Milliman Limited

5.05pm | Life Insurance Capital Regimes in Asia

Alongside other regulatory developments, the capital regimes in Asia have been continuously revamped by regulators. Other social or economic factors such as interest rate trend and pandemic have often added twists to the long journey of capital regime refinements, which has made it difficult for actuaries to stay ahead of all the recent developments.

We have been performing in-depth researches into the life insurance capital regimes applicable in the APAC region, and in this symposium we would like to present:

- An overview to the latest technical specifications across Asia (as at mid-2021), with highlight on the recent developments and discussion of rationale including measures taken in light of the pandemic
- Key solvency results based on public data and discussion on trends and forward-looking view
- Hot-topics around implications / optimisations under the capital regimes.

SPEAKERS & SYNOPSIS

RETIREMENT MORNING - 26 NOVEMBER 2021



Marcus Kok

Chair, Retirement Committee, Singapore Actuarial Society

9.30am | Opening Address

12.55pm | Closing Address



Gregory Chia

Group Director (Policy, Statistics and Research), Central Provident Fund Board

9.35am | Retirement Financing – Global Challenges, Singapore's Experience

Pension systems across the world have come under increasing strain. Aging populations and economic pressures pose significant challenges to the sustainability and adequacy of retirement savings. The COVID-19 pandemic compounds the problems as immediate needs often prevail over long-term retirement goals. This session shares how Singapore's retirement income system is navigating these challenges, to enable current and future generations of Singaporeans to retire with peace of mind.



Dr Ng Kok Hoe

Senior Research Fellow, Head, Social Inclusion Project and Case Study Unit, Lee Kuan Yew School of Public Policy, National University of Singapore

10.30am | Minimum Income Standards for Households in Singapore

How much money do households need to achieve a basic standard of living in Singapore today? In 2019, Singapore's first study on minimum income standards was published to answer this question, focusing on older adults. This year, the study extends this work to the needs of single and partnered parents, with children up to the age of 25 years old. This session reviews the study's key findings and the implications for wages, housing, childcare, education and retirement income.

SPEAKERS & SYNOPSIS

RETIREMENT MORNING - 26 NOVEMBER 2021



Andrew Boal

Partner, Deloitte

11.15am | Retirement Income Policy

Australia is set to legislate a Retirement Income Covenant to be effective from 1 July 2022, to assist their members to achieve the following objectives:

- To maximise their retirement income;
- To manage risks to the sustainability and stability of their income; and
- To have some flexible access to savings during retirement.

How will superannuation funds balance these objectives and achieve the desired outcomes? What is the role of longevity protection products such as annuities, especially in a low interest rate environment? The needs of retirees can vary significantly, depending on a number of factors such as their family, home ownership, wealth and health status. How do we guide members through the complexity to arrive at a suitable outcome for them?



Philip Pang

Chief Investment Officer, HSBC Life Singapore

12.10pm | Sustainable Investing At HSBC Life

Sustainable investing has been a key focus for HSBC Life as part of HSBC Group's ambition to sustainability and net zero. This presentation is to provide an insight on how HSBC Life approaches sustainable investing.

SPEAKERS & SYNOPSIS

PRACTISING CERTIFICATE SEMINAR (AFTERNOON SESSION) - 26 NOVEMBER 2021



Jill Hoffman

Council Member (IAA Liaison) and Member of Professional Affairs Committee, Singapore Actuarial Society

1.45pm | Opening Address

PANEL MODERATOR



Liem Phan

Head Life & Health Products
South Asia
Swiss Re

PANEL SPEAKERS



Daisy Ning

Head Life & Health
Products Asia
Swiss Re



Foo Chee Keong

Life & Health Business
Management Asia Hub Head
Swiss Re

PANEL SPEAKERS



Greta Mikelonis

Head of Health, Asia
Manulife Financial
Asia Ltd



Liauw Lee Jiat

Chief Actuary
Prudential Assurance
Company Ltd



Ng Sim Kheng

Chief Financial Officer
Prudential Assurance
Malaysia Berhad

4.15 | Panel Session - Professionalism in an Unpredictable World

SPEAKERS & SYNOPSIS

PRACTISING CERTIFICATE SEMINAR (AFTERNOON SESSION) - 26 NOVEMBER 2021



Frank Munro

Chair of SAS Standards of Actuarial Practice L03 Working Party

5.20pm | SAS Standards of Actuarial Practice L03

Connect with Us

Singapore Actuarial Society
actuaries.org.sg

