

# LIVING to 100

2020 Symposium  
Jan. 13-15  
Lake Buena Vista, FL

SOCIETY OF ACTUARIES  
INTERNATIONAL SYMPOSIUM

## Program



# LIVING to 100

## SOCIETY OF ACTUARIES INTERNATIONAL SYMPOSIUM

2020 Symposium  
Jan. 13–15  
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Let the knowledge sharing begin!

Welcome to the Living to 100 Symposium, the seventh in a series that brings together thought leaders from around the world to discuss the increasing longevity of humans and its impact on social, financial, health care and retirement systems.

Enjoy our prominent featured speakers, Steve Horvath, Ph.D., Jacquelyn B. James, Ph.D., and Ronald Klein, FSA, MAAA, who will provide diverse perspectives on future life expectancy and the implications to individuals, the insurance industry, and the actuarial profession. Other equally distinguished speakers will present information on more than 25 sessions on topics including:

- Disease and longevity
- Policy challenges and longevity
- Mortality trends and projections of older age
- Validating the age of elderly individuals
- Beyond age 85 retirement needs, risks, and experiences
- How developments in the biology of aging impact the actuarial profession

While you're here, don't forget to take time to do some networking. We hope you enjoy your stay in Lake Buena Vista and find the symposium to be informative and thought-provoking.

### Supporting Research Committees and Sections

Aging and Retirement Research  
Committee on Life Insurance Research  
Financial Reporting Section

Mortality and Longevity Research  
Product Development Section  
Reinsurance Section



## Event Information

### Free Wi-Fi

Wi-Fi is available for all attendees in the meeting room areas. Login information is available at the registration desk.

### Attendee List and Final Program

Complete program details, including session descriptions, presenter and attendee lists will be available at [SOA.org/Livingto100](http://SOA.org/Livingto100).

### Presentations

Presentations are available before, during and after the meeting at [SOA.org/Livingto100](http://SOA.org/Livingto100).

### Continuing Professional Development Credit

20.2 CREDITS SOA CPD (50-minute hour)  
16.8 CREDITS CIA CPD (60-minute hour)

### Evaluations

Your input is invaluable and will help us in providing feedback to presenters and future program committees.

Session evaluations will be sent electronically for each session you attended. Please take the time to provide your feedback. In addition to the individual evaluations, an overall evaluation form will be sent electronically to all attendees after the meeting. Your feedback is important as the results will assist us in planning future meetings.

### Special Meal Requests

Special meal requests, such as a fruit plate, kosher, gluten-free or vegetarian options, are available for the luncheons only and must be requested in advance. If you require a special meal but did not request one in advance, please do so at the registration desk before 10:00 a.m. Monday, Jan. 13.

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# Agenda

LIVING  
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SOCIETY OF ACTUARIES  
INTERNATIONAL SYMPOSIUM

## Sunday, Jan. 12

5:00–7:00 p.m.  
Registration

## Monday, Jan. 13

7:00 a.m.–5:00 p.m.  
Registration

7:00–8:00 a.m.  
Breakfast

8:00–9:15 a.m.

### GENERAL SESSION | PALM BALLROOM 3-4

#### Epigenetic Clock Studies of Centenarians

Moderator: Jean-Marc Fix, FSA, MAAA, Symposium Chairperson  
Presenter: Steve Horvath, Ph.D., Professor, Human Genetics and Biostatistics David Geffen School of Medicine, University of California, Los Angeles



Dr. Horvath's research lies at the intersection of aging research, epidemiology, chronic diseases, epigenetics, genetics, and systems biology. He works on all aspects of biomarker development with a particular focus on genomic biomarkers of aging. He developed a highly accurate multi-tissue biomarker of aging known as the epigenetic clock. Dr. Horvath developed systems biologic approaches such as weighted gene co-expression network analysis which lend themselves for integrating gene genomic data sets. These methods have been used for a broad spectrum of age-related diseases including neurodegenerative diseases, cancer, cardiovascular disease. Dr. Horvath received a Ph.D. in Mathematics from the University of North Carolina, Chapel Hill in 1995 and a Doctorate of Science in Biostatistics from the Harvard School of Public Health in 2000.

9:15 –9:45 a.m.  
Refreshment Break

9:45–11:00 a.m.

### SESSION 1A PALM BALLROOM 3

#### Management of Longevity Risk

Moderator: W. Ward Kingkade, Ph.D.  
Discussant: Joseph Lu, FIA

#### Papers:

- *Quantification and Management of Longevity Risk in China*– Johnny Li, FSA, ACIA, Ph.D., University of Melbourne; **Kenneth Q. Zhou, ASA, ACIA, Ph.D., Arizona State University**; Wai-Sum Chan, FSA, CERA, Ph.D., The Chinese University of Hong Kong
- *A Value-Based Longevity Index for Hedging Retirement Income Portfolios* – Kevin Krahe; **Jonathan Ziveyi, Ph.D.**; Michael Sherris, FSA, FIAA, FIA; Andrés M. Villegas, Ph.D., UNSW Australia

9:45–11:00 a.m.

### SESSION 1B PALM BALLROOM 4

#### Implications to Retirement Planning

Moderator: Mary H. Stone, FSA, MAAA, EA, FCA  
Discussant: Sam Gutterman, FSA, CERA, MAAA, FCAS, FCA, HONFIA

#### Papers:

- *When Danes Have Only 15 Years to Live: Implications of Linking Retirement Age with Life Expectancy*– **Jesús-Adrián Alvarez**; Malene Kallestrup-Lamb, Ph.D.; Søren Kjærgaard; James W. Vaupel, Ph.D., University of Southern Denmark
- *A Study into the Impact of Pre-Programmed Genetic Health Risks in Retirement Planning*–N.V. Subramanyan, Prudential Assurance Company Limited, Singapore

# Agenda

## Monday, Jan. 13

9:45–11:00 a.m.

### SESSION 1C PALM BALLROOM 5

#### Teaching Session: Death Is Certain, Survival Isn't

Presenters: Kai Kaufhold, Aktuar DAV;  
Stefan Johann Ramonat, FSA, FCIA

Process risk, estimation error, model uncertainty, trend risk and catastrophe risk are the five main components of longevity risk uncertainty. In the face of this daunting uncertainty, what should the actuarial practitioner do? This session focuses on assessing model uncertainty, process risk and estimation error in mortality modeling. Besides discussing the theory behind methods for performing the assessment, presenters provide attendees with practical examples using R to help them in applying the methodologies and concepts presented.

11:00–11:30 a.m.

Refreshment Break

11:30 a.m.–12:45 p.m.

### SESSION 2A PALM BALLROOM 3

#### Living to 100 Call for Essays

Moderator: Ronora E. Stryker, ASA, MAAA

In this session, the following essays from the Society of Actuaries Living to 100 Call for Essays are presented.

#### Essays:

- *Potential for Mortality Improvement from Cognitive and Psychological Factors* –Gordon Woo, Ph.D.
- *How Growing Inequality in the United States Makes Long-Term Care Financing Reform a Lot Harder*–**Karl Polzer, MPA**; John Cutler, Esq.
- *Alcohol and Mortality*–Sam Gutterman, FSA, CERA, FCA, HONFIA, MAAA

11:30 a.m.–12:45 p.m.

### SESSION 2B PALM BALLROOM 4

#### Retirement Strategies

Moderator: Mary H. Stone, FSA, MAAA, EA, FCA  
Discussant: Douglas W. Andrews, FSA, FCIA, Ph.D.

#### Papers:

- *Retirement Strategy Metrics*–Mark Shemtob, FSA, MAAA, EA, MSPA, FCA
- *A Review of the Demography of Retirement in the United States* –Jacob S. Siegel

11:30 a.m.–12:45 p.m.

### SESSION 2C PALM BALLROOM 5

#### Teaching Session: Data Validation

Moderator: Jean-Marc Fix, FSA, MAAA  
Presenters: Kirill Andreev, Ph.D.; Natalia Gavrilova, Ph.D.;  
Thomas Perls, M.D., MPH; Jean-Marie Robine, Ph.D.

Because data quality is critical in the measurement of an event as rare as the death of a supercentenarian, special care must be used. The presenters will discuss practical methods of validation used by researchers in the field, alternate methodologies and data cleaning procedures to ensure validity of mortality data as extreme old age. They will also explore some of the consequences of inadequate data preparations on the curve of mortality at the end of life.

12:45–2:00 p.m.

General Luncheon **ANDIAMO**

2:00–3:15 p.m.

### SESSION 3A PALM BALLROOM 3

#### Aging Measurement and Mortality Modeling 1

Moderator: Ronora E. Stryker, ASA, MAAA  
Discussant: Thomas P. Edwalds, FSA, ACAS, MAAA

#### Papers:

- *Multi-Population Longevity Models: A Spatial Random Field Approach*–**Nhan Huynh**; Mike Ludkovski, Ph.D., University of California at Santa Barbara; Howard Zail, Elucider, LLC.
- *The Application of Affine Processes in Cohort Mortality Risk Models* – **Zhiping Huang**; Michael Sherris, FSA, FIAA, FIA; Andres M. Villegas Ramirez, Ph.D.; Jonathan Ziveyi, Ph.D., UNSW Australia

## Monday, Jan. 13

2:00–3:15 p.m.

SESSION 3B PALM BALLROOM 4

### Mortality Improvement

Moderator: Larry N. Stern, FSA, MAAA

Discussant: Allen M. Klein, FSA, MAAA

#### Papers:

- *Does Migration Result in Mortality Improvement: A Case Study in Taiwan*—**Chih-Kai Chang, Ph.D.**, Feng Chia University; Jack C. Yue, ASA, Ph.D., National Chengchi University; Yen-Wen Chen, Feng Chia University; Ting-Chung Chang, Chihlee University of Technology
- *Mortality Trends: An International Perspective*—Adrian Gallop, FIA, Government Actuaries Department

2:00–3:15 p.m.

SESSION 3C PALM BALLROOM 5

### Panel: How Will Developments in the Biology of Aging Affect Actuaries and Actuarial Practice?

Panelists: Anna M. Rappaport, FSA, MAAA; Sam Gutterman, FSA, CERA, FCAS, FCA, HONFIA, MAAA; Joseph Lu, FIA

This session presents key developments in the biology of aging, which encourages attendees to think about and to prepare for possible futures. Industries affected by population aging and alternative futures include insurance companies offering life, annuity, health, and long-term care products, the health care industries, and retirement financing and support providers. This session will consist of an open discussion among attendees with diverse backgrounds addressing how the developments presented and changing aging patterns will affect the businesses we work with and the lives of individuals. The discussion will be facilitated by individuals with different actuarial and financial backgrounds.

3:15–3:45 p.m.

Refreshment Break

3:45–5:00 p.m.

GENERAL SESSION II PALM BALLROOM 3-4

### Beyond Age 85: Understanding Retirement Needs, Risks and Experiences

Panelists: Anna M. Rappaport, FSA, MAAA; Sally Hass



The age 85+ population will continue to grow as a percentage of the population and this is the age where people need the most help. The Society of Actuaries (SOA) has conducted a series of three studies to help understand the real situation of middle-class Americans and Canadians age 85 and over. The three studies are in-depth interviews with individuals and their children, a telephone survey of individuals and an online survey of children familiar with the situation of parents age 85 and over. In addition, the SOA has conducted an online discussion on cognitive decline, and two discussions among experts. A consolidated SOA report brings all of this work together. The presenters also have some personal experience. In this panel, the presenters will share insights into how people do at ages 85 and how things change over the period of retirement. Actual experiences do not always fit what experts predict. The findings include understanding the finances and needs of retirees, the kind of help needed and what the age over 85 population receive from family, professional caregivers, and advisors. It will also focus on needs for support, the challenges faced by those aging alone and decisions around housing. It will also include some discussion of intergenerational relationships and the impact of caregiving.

5:30–6:30 p.m.

Networking Reception **POOLSIDE**

# Agenda

## Tuesday, Jan. 14

**7:00 a.m.–5:00 p.m.**  
Registration

**7:00–8:00 a.m.**  
Breakfast

**8:00–9:15 a.m.**

### GENERAL SESSION III PALM BALLROOM 3-4

#### Retirement Security: It's Not Just About Money

Moderator: Jean-Marc Fix, FSA, MAAA  
Presenter: Jacquelyn B. James, Ph.D.



Jacquelyn B. James, Ph.D., is director of the Center on Aging & Work and the Sloan Research Network on Aging & Work at Boston College; she is also a fellow in the Behavioral and Social Science Division of the Gerontological Society of America.

Her research has focused on the meaning and experience of work, gender roles and stereotypes, adult development, perceptions of older workers and emerging retirement issues. Since 2014, with support from the Alfred P. Sloan Foundation, Dr. James has been building the Sloan Research Network on Aging & Work, a multi-disciplinary, international network. Dr. James, along with Dr. Marcie Pitt-Catsouphes, edited a special issue of the journal, *Work, Aging & Retirement—Change in the Meaning and Experience of Work in Life*. James is past president of the Society for the Study of Human Development and serves on the editorial board of *Work, Aging & Retirement*.

**9:15–9:45 a.m.**

Refreshment Break

**9:45–11:00 a.m.**

### SESSION 4A PALM BALLROOM 3

#### Mortality Patterns

Moderator: Roland Rau, Ph.D.  
Discussant: Erwin J. Tan, M.D.

#### Papers:

- *Demographic Perspectives on the Rise of Longevity* – James W. Vaupel, Ph.D., University of Southern Denmark, Francisco Villavicencio, Ph.D., John Hopkins University; **Marie-Pier Bergeron Boucher, Ph.D.**, University of Southern Denmark

**9:45–11:00 a.m.**

### SESSION 4B PALM BALLROOM 4

#### Housing, Health and Social Support of the Elderly

Moderator: Steven C. Siegel, ASA, MAAA  
Discussant: Anna M. Rappaport, FSA, MAAA

#### Papers:

- *Does Living in a Retirement Village Extend Life Expectancy? The Case of Whiteley Village in the UK.* – Les Mayhew, Ph.D.; Ben Rickayzen, Ph.D.; **David Smith, Ph.D.**, City University, London
- *Health and Social Care Analysis Regarding the State of Canadian Women Living in the Alone Stage of Retirement* – **Douglas W. Andrews, FSA, FCIA, Ph.D.**; Lori Curtis, Ph.D., University of Waterloo

**9:45–11:00 a.m.**

### SESSION 4C PALM BALLROOM 5

#### Teaching Session: Mortality Modeling - Relational Models

Presenters: W. Ward Kingkade, Ph.D.; Nadine Ouellette, Ph.D.

Demography affords some methodologies that may be of use to practicing actuaries. One of these is the use of relational models to smooth and graduate noisy mortality schedules, which can arise in many contexts, including small populations which enjoy mortality low enough to cause zero deaths in various age groups. Systems of model life tables are available, and there are methods to develop such systems from historical series of mortality schedules. Relational models associate a given empirical mortality schedule with a model schedule through a transformation, and are rather easy to apply. Time permitting, this session will also introduce a method to develop mortality schedules at late age in situations where population data are untrustworthy.



## Tuesday, Jan. 14

**11:00–11:30 a.m.**

Refreshment Break

**11:30 a.m.–12:45 p.m.**

### SESSION 5A PALM BALLROOM 3

#### Multi-Population Mortality Modeling

Moderator: Nadine Ouellette, Ph.D.

Discussant: Leonid Gavrilov, Ph.D.

#### Papers:

- *Calibrating Mortality Processes with Trend Changes to Multi-Population Data* – Matthias Börger, Ph.D.; Justin Schoenfeld; **Johannes Schupp**, Ulm University
- *The Mathematical Mechanism of Biological Aging* – Boquan Cheng; Bruce Leonard Jones, FSA, FCIA, Ph.D.; **Xiaoming Liu, Ph.D.**; Jiandong Ren, Ph.D., University of Western Ontario

**11:30 a.m.–12:45 p.m.**

### SESSION 5B PALM BALLROOM 4

#### Pensions and Longevity Risk

Moderator: Steven C. Siegel, ASA, MAAA

Discussant: Robert L. Brown, FSA, FCIA, ACAS, HONFIA

#### Papers:

- *Fully Funded Pensions for Centenarians* – Jonathan Barry Forman, J.D., University of Oklahoma
- *How Amending Old Age Security Would Improve the State of Canadian Women Living in the Alone Stage of Retirement* – **Lori J. Curtis, Ph.D.**; Douglas W. Andrews, FSA, FCIA, Ph.D., University of Waterloo

**11:30 a.m.–12:45 p.m.**

### SESSION 5C PALM BALLROOM 5

#### Teaching Session: Long-Term Care Modeling

Presenters: Kai Kaufhold, Aktuar DAV; Benoit G. Miclette, FSA, FCIA

In this session, morbidity and life expectancy trends are discussed. In addition, a case study in R on how to model the uncertainty associated with incidence of disability, disabled and active deaths and other terminations is presented.

**12:45–2:00 p.m.**

General Luncheon **ANDIAMO**

**2:00–3:15 p.m.**

### GENERAL SESSION IV PALM BALLROOM 3-4

#### Panel: Mortality Projection From a Social Security Panel

Moderator: Sam Gutterman, FSA, CERA, FCAS, FCA, HONFIA, MAAA

Panelists: Stephen C. Goss, ASA, MAAA; Adrian Gallop, FIA; Assia Billig, FSA, FCIA

Mortality is a fundamental element in the financial projections of the finances of social security programs around the world. Prominent actuaries from the U.S. Social Security Administration, Canada's Office of Superintendent of Financial Institutions and the U.K. Government Actuary's Department will discuss some of the key factors and issues associated with these projections. Improving mortality has and will have a significant effect on the affordability and importance of income through retirement to many population segments in these countries.

**3:15–3:45 p.m.**

Refreshment Break

**3:45–5:00 p.m.**

### GENERAL SESSION V PALM BALLROOM 3-4

#### Panel: Public Policy and Long Life: What Challenges Are Facing Policy Makers Around the World and How Are They Dealing with Them?

Panelists: John Cutler, Esq.; John Turner, Ph.D.; Jim Toole, FSA, CERA, MAAA; R. Dale Hall, FSA, CERA, MAAA

Populations are aging throughout the world. In all countries, there are many public policy and social issues related to long life from financing to health to social isolation and system supports. This panel will review recent research and will offer an interactive discussion on some of the most important issues facing policy makers everywhere. To focus the discussion, we will examine these attributes through the lens of social capital. This session will focus on issues facing both developed and developing countries alike and compare and contrast different approaches being taken to address issues and their relative success.

# Agenda

## Wednesday, Jan. 15

**7:00 a.m.–1:30 p.m.**  
Registration

**7:00–8:00 a.m.**  
Breakfast

**8:00–9:00 a.m.**

**GENERAL SESSION VI PALM BALLROOM 3-4**

### Featured Presentation – The Insurance Industry’s Response to the Worldwide Aging Crisis

Moderator: Jean-Marc Fix, FSA, MAAA

Presenter: Ronald L. Klein, FSA, MAAA, BILTIR



**Ronald L. Klein, FSA, MAAA**, has 40 years of insurance and reinsurance experience, having lived and worked in 3 countries. In his current role, Klein is the Executive Director of the Bermuda International Long Term Insurers and Reinsurers (BILTIR)

and a Collaborating Expert in Health and Aging for The Geneva Association. Before this, Klein worked as the Head of Life Reinsurance for Zurich Insurance Group, was the Head of Life Reinsurance for AIG in New York and was the Global Head of Pricing for Swiss Re in London. At Swiss Re, Klein was responsible for the development of and holds a patent for the Vita mortality bond. Klein’s first position was at Mutual of New York. He is a fellow of the Society of Actuaries and served on the Board of Directors.

**9:00 a.m.–9:20 a.m.**  
Refreshment Break

**9:20–10:35 a.m.**

**SESSION 6A PALM BALLROOM 3**

### Aging Measurement and Mortality Modeling 2

Moderator: Thomas P. Edwalds, FSA, ACAS, MAAA

Discussant: Kai Kaufhold, Aktuar DAV

#### Papers:

- *Rotation of the Age Pattern of Mortality Improvements in European Union Member States* – Peter Vekas, Corvinus University of Budapest
- *Short and Long Term Dynamics of Cause-Specific Mortality Rates Using the Cointegration Analysis* – Severine Arnold, Ph.D.; **Viktoriya Glushko**, University of Lausanne

**9:20–10:35 a.m.**

**SESSION 6B PALM BALLROOM 4**

### Disease and Longevity

Moderator: R. Dale Hall, FSA, CERA, MAAA

Discussant: Jean-Marc Fix, FSA, MAAA

#### Papers:

- *Chronic Diseases and Longevity Risk: An Application to Type II Diabetes Insurance Products* – **Hsin-Chung Wang, Ph.D.**, Aletheia University; Jack C. Yue, ASA, Ph.D., National Chengchi University
- *Understanding Multimorbidities* – Sam Gutterman, FSA, CERA, FCA, FCAS, HONFIA, MAAA

## Wednesday, Jan. 15

9:20–10:35 a.m.

SESSION 6C PALM BALLROOM 5

### Teaching Session: Mortality Modelling and Projection Using Free Software R

Moderator: Joseph Lu, FIA

Presenter: Andres M. Villegas, Ph.D.

In this session, attendees will learn to model historical mortality rates and to forecast their possible future scenarios, using a freely available and well-tested toolkit written in open source R. The core of the toolkit is implemented in the R package StMoMo (<https://CRAN.R-project.org/package=StMoMo>) and enables a practitioner to derive best estimate and measurements of uncertainty using academically robust demographic and actuarial mortality projection models.

Results of these models could be used to graduate historical death rates to form life tables of the population of interest; estimate historical annual rates of improvement in mortality by gender, age, and socioeconomic subpopulations; and many more uses.

This session will demonstrate how an individual could produce the useful outputs above, starting from basic data in the appropriate format. Some examples of outputs from previous work using U.S. and U.K. mortality data will be shown to demonstrate how R could be used to answer various academic or business questions. We expect attendees to need practice after the sessions to be proficient with the tool.

10:35–11:00 a.m.

Refreshment Break



# Agenda

## Wednesday, Jan. 15

11:00 a.m.–12:00 p.m.

### GENERAL SESSION VII | PALM BALLROOM 3-4

#### Panel: Demographic Perspectives on Longevity

Moderator: W. Ward Kingkade, Ph.D.

Presenters: Jean-Marie Robine, Ph.D.; Jacob S. Siegel; Kirill Andreev, Ph.D.; Péter Vékás, Ph.D.

Demographers have typically viewed mortality trends from historical and cross-national perspectives, looking at commonalities in the evolution of mortality. In this session, a panel of demographers will examine modern mortality patterns and longevity trends.

12:00 – 12:25 p.m.

Refreshment Break

12:25 – 1:30 p.m.

### GENERAL SESSION VIII | PALM BALLROOM 3-4

#### Panel: What's on the Horizon of Aging Research and What Does it Mean to Actuaries?

Moderator: Jean-Marc Fix, FSA, MAAA,

Panelists: S. Jay Olshansky, Ph.D.; Andres M. Villegas, Ph.D.;

Sofiya Milman, M.D., MSc.

In this session, panelists discuss the rationale behind aging research. They will explore recent demographic and biological insights. They will then explore when those breakthroughs could happen, what would their impact be on our understanding of mortality and mortality rates and the effect on different groups. Finally, it will be a chance to have your questions answered by this eminent set of panelists.





## Participating Organizations

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Actuaries Institute Australia

American Academy of Actuaries

American Geriatrics Society

Canadian Institute of Actuaries

Conference of Consulting Actuaries

Employee Benefit Research Institute

Government Actuary's Department (UK)

International Actuarial Association

The Institute and Faculty of Actuaries

Institute of Actuaries of Japan

International Longevity Centre - UK

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LIMRA

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Office of the Chief Actuary, Canada (within the Office of the Superintendent of Financial Institutions)

Pension Research Council and Boettner Center for Pensions and Retirement Research of the Wharton School

Women's Institute for a Secure Retirement (WISER)



## 2020 Living to 100 Symposium Program Committee

The following members were instrumental in arranging this program:

**Jean-Marc Fix, FSA, MAAA,  
Symposium Chairperson**

Thomas P. Edwalds, FSA, ACAS, MAAA

Tom Getzen, Ph.D.

Sam Gutterman, FSA, CERA, FCA, FCAS, HONFIA, MAAA

**Timothy F. Harris, FSA, MAAA,  
Emeritus Symposium Chairperson**

Kai Kaufhold, Aktuar DAV

W. Ward Kingkade, Ph.D.

Joseph Lu, FIA

Nadine Ouellette, Ph.D.

Anna M. Rappaport, FSA, MAAA

Billy Wong, FSA

The 2020 Living to 100 Symposium Program Committee would like to thank the following individuals who reviewed papers:

Errol Cramer, FSA, MAAA

Anji Li, FSA, CERA, MAAA

Leah Major, FSA

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Stefan Ramonat, FSA, FCIA

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Marian Travnicek, ASA, MAAA

Alex Tripp, FSA, CERA

Sarah Waked, ASA, ACIA

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*The United States antitrust laws aim to protect consumers by preserving the free economy and prohibiting anti-competitive business practices; they promote competition. There are both state and federal antitrust laws, although state antitrust laws closely follow federal law. The Sherman Act, is the primary U.S. antitrust law pertaining to association activities. The Sherman Act prohibits every contract, combination or conspiracy that places an unreasonable restraint on trade. There are, however, some activities that are illegal under all circumstances, such as price fixing, market allocation and collusive bidding.*

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*While participating in all SOA in person meetings, webinars, teleconferences or side discussions, you should avoid discussing competitively sensitive information with competitors and follow these guidelines:*

- Do not discuss prices for services or products or anything else that might affect prices.
- Do not discuss what you or other entities plan to do in a particular geographic or product markets or with particular customers.
- Do not speak on behalf of the SOA or any of its committees unless specifically authorized to do so.
- Do leave a meeting where any anticompetitive pricing or market allocation discussion occurs.
- Do alert SOA staff and/or legal counsel to any concerning discussions.
- Do consult with legal counsel before raising any matter or making a statement that may involve competitively sensitive information.

*Adherence to these guidelines involves not only avoidance of antitrust violations, but avoidance of behavior which might be so construed. These guidelines only provide an overview of prohibited activities. SOA legal counsel reviews meeting agenda and materials as deemed appropriate and any discussion that departs from the formal agenda should be scrutinized carefully. Antitrust compliance is everyone's responsibility; however, please seek legal counsel if you have any questions or concerns.*

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