

## to 100

SOCIETY OF ACTUARIES INTERNATIONAL SYMPOSIUM

Jan. 4–6, 2017 Orlando, FL





## Agenda-at-a-Glance

| TUESDAY, JAN. 3       |  |
|-----------------------|--|
| 5:00 – 7:00 p.m.      | Registration   |
| WEDNESDAY, JAN. 4     |  |
| 7:00 a.m. – 5:00 p.m. | Registration   |
| 7:00 a.m 5:10 p.m.    | Breakfast, Full Day of Concurrent Sessions and General Luncheon    |
| 5:30 – 7:00 p.m.      | Networking Reception   |
| THURSDAY, JAN. 5      |  |
| 7:00 a.m. – 5:00 p.m. | Registration   |
| 7:00 a.m 5:10 p.m.    | Breakfast, Full Day of Concurrent Sessions and Networking Luncheon |
| FRIDAY, JAN. 6        |  |
| 7:00 a.m 1:30 p.m.    | Registration   |
| 7:00 a.m. – 1:30 p.m. | Breakfast and Concurrent Sessions                                  |

# LIVING to 100 SOCIETY OF ACTUARIES INTERNATIONAL SYMPOSIUM

Thank you for joining us at this year's Living to 100 Symposium. This symposium brings together thought leaders from around the world to discuss increasing longevity and its impact on social, financial, health care and retirement systems. Featured speakers Nir Barzilai and Judith Campisi will provide insight into what the future may hold for life expectancy. Other equally distinguished speakers will present information from more than 20 sessions on topics such as policy challenges and longevity, innovative business solutions in response to the aging population, insights into successful aging and more. This symposium also allows time for networking and making important professional connections.

## Check out our featured speakers:



General Session I: How to Die Young at a Very Old Age

8:00 – 9:45 a.m., Wednesday, in the Crystal DE Ballroom

FEATURED SPEAKER: Nir Barzilai, M.D.,

Director, Institute for Aging Research at Albert Einstein College of Medicine



General Session III: Suppressing Aging and Extending Longevity: Will the Twain Meet?

8:00 – 9:45 a.m., Thursday, in the Crystal DE Ballroom

FEATURED SPEAKER: Judith Campisi, Ph.D.

Buck Institute for Research on Aging and Lawrence Berkeley National Laboratory

#### Registration

The SOA registration desk, located on level two, will be open as follows:



 Tuesday, Jan. 3
 5:00 – 7:00 p.m.

 Wednesday, Jan. 4
 7:00 a.m. – 5:00 p.m.

 Thursday, Jan. 5
 7:00 a.m. – 5:00 p.m.

 Friday, Jan. 6
 7:00 a.m. – 1:30 p.m.

Persons attending all or any portion of the symposium must be registered. Name badges are required for entrance into all sessions and activities.

#### Special Meal Requests



If you require a special meal but did not request one in advance, please do so at the SOA registration desk before 10:00 a.m. on Wednesday, Jan. 4.

#### SOA CPD Tracker



Track CPD credit against multiple standards and import and export with Excel. To download the app for your device please visit *AppsForActuaries.org*. In addition, the web interface for Windows, Mac and Android is available at *CPD.SOA.org*.

#### Meeting Resources



The complete program with session descriptions, the attendee list and presentations are available at *Livingto100.SOA.org.* 

#### Enrolled Actuary Credit



Sessions designated with core or noncore EA credit are recommended to help satisfy continuing education credits for enrolled actuaries. Instructions for obtaining credit will be provided at the meeting. While the SOA recommends these topics to help satisfy core and noncore continuing education credit for enrolled actuaries, the final decision as to meeting those requirements rests with the Joint Board for the Enrollment of Actuaries.

## Continuing Professional Development Credit

The SOA believes that sessions at this symposium may be suitable for fulfilling continuing professional development (CPD) requirements. Below is the *maximum* number of credits you could receive, based upon your session attendance, excluding section breakfasts.

22.20 CREDITS

SOA CPD (50 minute hour) **18.50** CREDITS

CIA CPD (60 minute hour)

Credits may be applied toward the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion and the SOA Continuing Professional Development Requirement.

Credits may be applied toward The Canadian Institute of Actuaries Qualification Standard—Continuing Professional Development.

Each standard has different rules about how you may recognize different types of credit. Review the rules of the standard you are fulfilling to determine the actual number of credits from this symposium that you will be able to apply toward the requirements. Ultimately, it is the member's responsibility to make a reasonable, good-faith determination as to whether a continuing education event meets the requirements.

For further information, visit **SOA.org/CE.** 



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Tuesday Jan. 3, 2017

Wednesday Jan. 4, 2017

## LIVING SOCIETY OF ACTUARIES INTERNATIONAL SYMPOSIUM

#### Tuesday, Jan. 3

5:00 - 7:00 p.m. Registration Open

#### Wednesday, Jan. 4

7:00 a.m. - 5:00 p.m. Registration Open

7:00 - 8:00 a.m., Crystal Ballroom AB Hot Breakfast Buffet

8:00 - 9:45 a.m., Crystal C GENERAL SESSION I

Featured Presentation: How to Die Young at a Very Old Age



Presenter: Nir Barzilai, M.D.

Moderator: Timothy F. Harris, FSA, MAAA, Actuarys, LLC Presidential Address: Jeremy J. Brown, FSA, MAAA, EA

Dr. Barzilai is a chaired professor of medicine and genetics and the director of the Institute for Aging Research at the Albert Einstein College of Medicine, which is currently the biggest center in the world to study the biology of aging. The Institute is the home of the Nathan Shock Center of Excellence in the Biology of Aging and the Glenn Center for the Biology of Human Aging. His interests focus on several basic mechanisms in the biology and genetics of aging. Barzilai is the recipient of an NIH Merit Award aiming to extend the healthy life span in rodents by biological interventions. He also studies families of Ashkenazi Jewish centenarians that have provided genetic/biological insights on the protection against aging.

10:05 - 11:50 a.m., Crystal D

SESSION 1A

#### **Data Sources and Analysis**

Moderator: Kai Kaufhold, Aktuar DAV, Ad Res Reinsurance Services Discussant: Thomas P. Edwalds, FSA, ACAS, MAAA, DePaul University

#### Presentation:

• Introduction to the Human Mortality Database, Magali Barbieri, Ph.D., UC-Berkeley

#### Papers:

- Compiling a Very Large Sample of Centenarian Pedigrees to Ascertain Patterns of Inheritance and a Familial Propensity for Longevity Score, Lisa Nussbaum; Giacomo Nebbia; Annie Helmkamp; Stacy Andersen; **Thomas Perls, M.D.**, MPH; Paola Sebastiani, Ph.D., Boston University
- Levels and Trends in Regional Mortality in the U.S. at ages 80 and over: Exploratory Data Analysis of Direct Mortality Estimates, Kirill Andreev, Ph.D., United Nations Department of Economic and Social Affairs, Population **Division**; Danan Gu, Ph.D., United Nations Department of Economic and Social Affairs, Population Division

\*Bold names indicate paper presenters

Credit: 2.10 CPD

10:05 - 11:50 a.m., Crystal C **SESSION 1B** 

#### Late Life Mortality Curves

Moderator: Jean-Marc Fix, FSA, MAAA, Optimum Re Discussant: Jean-Marie Robine, Ph.D., INSERM

#### Papers:

- Mortality Trajectories at Exceptionally High Ages: A Study of Supercentenarians, Natalia S. Gavrilova, Ph.D.; Leonid A. Gavrilov, Ph.D., University of Chicago
- Historical Evolution of Old-Age Mortality and New Approaches to Mortality Forecasting, Leonid A. Gavrilov, Ph.D.; Natalia S. Gavrilova, Ph.D., University of Chicago
- Where is the Level of the Mortality Plateau?, Roland Rau, Ph.D., University of Rostock; Marcus Ebeling; Frederik Peters, Ph.D.; Christina Bohk-Ewald, Ph.D.; Trifon I. Missov, Ph.D., Max Planck Institute for Demographic Research

\*Bold names indicate paper presenters

Credit: 2.10 CPD

#### Wednesday, Jan. 4

10:05 - 11:50 a.m., Crystal E

#### SESSION 1C

Panel: Impact of Aging: What are the Biggest Current Policy Challenges Emerging from the UK/US/Canada as a Result of Aging?

Moderator: Anna M. Rappaport, FSA, MAAA, Anna Rappaport Consulting

Panelists: Robert L. Brown, FSA, ACAS, FCIA, HONFIA, Ph.D.; John Cutler, Esq., National Academy of Social Insurance; David Sinclair, International Longevity Centre–UK

Population aging will have a major societal impact in the decades ahead. While there are many countries where people are living longer and there is a growing aging population, this session will focus on the U.K., U.S. and Canada. There are common threads in both the demographics and in some of the policy challenges facing these countries. This panel will take a societal focus and will examine major policy issues and responses to some of these issues from a big picture point of view. The panel will focus on common threads, similarities and differences.

#### \*Bold names indicate paper presenters

Credit: 2.10 CPD; 2.10 Noncore EA

#### Noon – 1:10 p.m., Crystal AB General Luncheon

This is your opportunity to network with your peers during lunch. Don't forget to make new professional connections and explore fresh opportunities!

The luncheon is included in your registration fee. Admission tickets are available to purchase at the meeting as space permits for a non-refundable fee of \$75 per person. If you are interested in having a guest attend, please stop by the registration desk to check availability.

1:20 - 3:05 p.m., Crystal D

SESSION 2A

Panel: Drivers of Future Mortality

Moderator: Allen M. Klein, FSA, MAAA, Milliman Panelists: Allen M. Klein, FSA, MAAA, Milliman; Phillip Smalley, M.D., FRCPC, RGA; Laurie M. Orlov, Aging in Place Technology Watch

Panelists will examine past and future drivers of mortality and their impact on longevity. The discussion on future drivers of mortality will be based on preliminary work completed by an international group of mortality/longevity experts. The impact of two specific drivers, medical advancement and technology, will be explored in more depth.

Credit: 2.10 CPD

1:20 – 3:05 p.m., Crystal C SESSION 2B

**Older Age Mortality Trends** 

Moderator: W. Ward Kingkade, Ph.D., U.S. Census Bureau Discussant: Jean-Marc Fix, FSA, MAAA, Optimum Re

#### Papers:

- Extreme Value Analysis of Mortality at the Oldest Ages: A Case Study Based on Individual Ages at Death, Samuel Gbari; Michel Poulain, Luc Dal, Michel Denuit, Universite Catholique de Lovain. Belgium
- Improvement in Late-Life Mortality and Its Impact on the Increase in the Number of Centenarians in Quebec (Canada), Robert Bourbeau, Ph.D.; Mélissa Beaudry-Godin, Ph.D.; Bertrand Desjardins, Ph.D., Universite de Montreal
- Population Mortality at the Oldest Ages in England and Wales,
   Angele Storey, UK Office for National Statistics

\*Bold names indicate paper presenters

Credit: 2.10 CPD

#### 1:20 - 3:05 p.m., Crystal E

#### SESSION 2C

## Panel: Impact of Aging: What Can Individuals and the Private Sector Do to Address the Challenges Resulting from Aging?

Moderator: Bob Powell, Retirement Weekly Panelists: Susana Harding, International Longevity Centre– Singapore; Cindy Hounsell, Women's Institute for a Secure Retirement (WISER); David Sinclair, International Longevity Centre–UK

As discussed in a previous session, aging will have a major societal impact in many countries over the decades ahead. Because there are common threads in these challenges, there may be common solutions. Or perhaps not. This panel will look at more specific issues and potential solutions for individuals and the private sector at a more granular level.

Credit: 2.10 CPD; 2.10 Noncore EA

3:05 – 3:25 p.m., Foyer Refreshment Break

3:25 – 5:10 p.m., Crystal C GENERAL SESSION II

#### Insights into Successful Aging

Moderator: Steven G. Vernon, FSA, MAAA, Stanford Center on Longevity

Panelists: Liz Davidson, Financial Finesse; Cynthia Hutchins, Merrill Lynch; Jim Toole, FSA, CERA, MAAA, FTI Consulting

The SOA recently sponsored the Stanford Center on Longevity's Sightlines project. This project assesses how well Americans are aging in light of increased longevity. A recent published paper from the study indicates that while progress has been made, concern remains about the way Americans are positioned for longer lives. This panel will discuss some of the concerns from the paper and what can be done about it. Three areas critical to well-being as people age were identified in the study: financial security, healthy living and social engagement. The panel will look at the various issues from these perspectives.

Credit: 2.10 CPD; 2.10 Noncore EA

#### 5:30 – 7:00 p.m., Pool Terrace & Lawn Networking Reception

Don't miss this networking opportunity. Relax, mingle and build professional connections as well as new friendships. Share your professional experiences with your peers and meet potential clients at this event. Meeting badges are required for attendees and registered guests.





Thursday Jan. 5, 2017

#### Thursday, Jan. 5

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

**7:00 – 8:00 a.m., Crystal Ballroom AB** Hot Breakfast Buffet

8:00 – 9:45 a.m., Crystal C GENERAL SESSION III

Featured Presentation: Suppressing Aging and Extending Longevity: Will the Twain Meet?



Presenter: Judith Campisi, Ph.D., Buck Institute for Research on Aging and Lawrence Berkeley National Laboratory

Moderator: Timothy F. Harris, FSA, MAAA, Actuarys, LLC.

The average life span of humans has increased remarkably in the last century, owing in large measure to advances in fighting infection. In the last few decades, average life spans have continued to rise, albeit more slowly and in developed nations, due to advances in medicine, which can now postpone, treat or prevent certain pathologies associated with aging. Despite these advances, many older people face years of disability, which impose enormous human and economic burdens. So, what are the prospects for extended health spans and further increases in longevity? Recent advances in aging research have identified a few basic mechanisms that appear to drive aging such as age-related decrements in physiological function in complex organisms, including humans. Expert presenter Judith Campisi will discuss one of these mechanisms, a multifaceted cellular stress response, and the prospects for new and repurposed pharmacological interventions that have the potential to extend the years of healthy life by manipulating this process. She will also discuss the much-debated prospect of extending human longevity, absolute years of life, in light of recent results using model organisms.

9:45 - 10:05 a.m., Foyer

Refreshment Break

10:05 - 11:50 a.m., Crystal D

SESSION 3A

#### Mortality Inequality: Impact of Socioeconomic Factors

Moderator: Timothy F. Harris, FSA, MAAA, Actuarys, LLC Discussant: S. Jay Olshansky, Ph.D., University of Illinois at Chicago

#### Papers:

- Trends in Variability of Age at Death Among the Elderly by Leading causes of Death in Canada, Viorela Diaconu, Universite de Montreal; Nadine Ouellette; Carlo. G. Camarda, Ph.D., Institut National d'Etudes Demographiques (INED), Paris; Robert Bourbeau, Ph.D., Universite de Montreal
- The Effect of Smoking and Obesity on U.S. Populations Mortality, Sam Gutterman, FSA, CERA, FCA, FCAS, HONFIA, MAAA
- Causal Mortality by Socioeconomic Circumstances: A Model to Assess the Impact of Policy Options on Inequalities in Life Expectancy, Daniel H. Alai, Ph.D., Centre for Actuarial Sciences, University of Kent, Severine Arnold, Ph.D., University of Lausanne; Madhavi Bajekal, BSc, Ph.D., FRSS, HONFIA, University College of London; Andres M. Villegas, ARC Centre of Excellence in Population Ageing Research (CEPAR) Australia

\*Bold names indicate paper presenters

Credit: 2.10 CPD; 2.10 Noncore EA

10:05 - 11:50 a.m., Crystal C

#### SESSION 3B

#### **Comparing Mortality of Different Groups**

Moderator: Joseph Lu, FIA Discussant: Kai Kaufhold, Aktuar DAV, Ad Res Advanced Reinsurance Services

#### Papers:

- Longevity Greeks: What Insurers and Capital Market Investors Should Know About?, Kenneth Q. Zhou, Ph.D.; Siu-Hang (Johnny) Li, FSA, ACIA, Ph.D., University of Waterloo
- Using Life Table Techniques to Model Mortality Rates for Small Populations, Ching-Syang (Jack) Yue, Ph.D., ASA, National Chengchi University; Hsin Chung Wang, Aletheia University
- A Comprehensive Analysis of the Patterns of Worldwide Mortality Evolution, Martin Genz, Institut für Finanzund Aktuarwissenschaften (ifa) & Institut für Versicherungswissenschaften, Universität Ulm

Credit: 2.10 CPD

<sup>\*</sup>Bold names indicate paper presenters

#### Thursday, Jan. 5

10:05 - 11:50 a.m., Crystal E

SESSION 3C

### Panel: Challenges and Strategies for Financing an Increasingly Long Life

Moderator: David G. Boettcher, FSA, FCIA, MAAA, RGA International Corporation

Panelists: Vickie Bajtelsmit, Ph.D.; David G. Boettcher, FSA, FCIA, MAAA; JD, Colorado State University; Liz Davidson, Financial Finesse; Benoit G. Miclette, FSA, FCIA, RGA International Corporation

This panel will discuss the analysis and conclusions of the similarly named report that was published in December 2015 and authored by Vickie Bajtelsmit, Anna Rappaport and Tianyang Wang. This report is a continuation of the investigation of modeled retirement outcomes under a variety of scenarios, incorporating many stochastic post-retirement risks, including mortality, investment, inflation risk, long-term care and health risk. This study seeks to better understand the link between life span and the wealth needed to successfully fund the retirement period. It builds on the prior studies with a specific focus on how longevity impacts household financial needs in retirement and which strategies can best address these financial strains. The moderator and panelists include one of the authors, a financial planner, an expert on long-term care product designs and a reinsurer providing global longevity risk solutions.

Credit: 2.10 CPD; 2.10 Noncore EA

#### Noon – 1:10 p.m., Crystal AB General Luncheon

This is your opportunity to network with your peers during lunch. Don't forget to make new professional connections and explore fresh opportunities!

The luncheon is included in your registration fee. Admission tickets are available to purchase at the meeting as space permits for a non-refundable fee of \$75 per person. If you are interested in having a guest attend, please stop by the registration desk to check availability.

1:20 - 3:05 p.m., Crystal D

SESSION 4A

#### Longevity in the Public Eye

Moderator: Andrew J. Peterson, FSA, EA, FCA, MAAA, Society of Actuaries

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

#### Presentation:

 International Longevity Centre-UK Global Savings Gap Research, David Sinclair, International Longevity Centre-UK

#### Papers:

- The Dynamic Implications of Longevity on Health Care Cost,
   Daniel W. Bailey, FSA, MAAA
- Financial Shocks, Unexpected Expenses of and Financial Experiences of Older Americans, Anna M. Rappaport, FSA, MAAA, Anna Rappaport Consulting

\*Bold names indicate paper presenters

Credit: 2.10 CPD

1:20 – 3:05 p.m., Crystal C

#### SESSION 4B

#### **Mortality Projections**

Moderator: Ronora E. Stryker, ASA, MAAA Discussant: W. Ward Kingkade, Ph.D., U.S. Bureau of the Census

#### Papers:

- Grouped Multivariate and Functional Time Series Forecasting:
   An Application to Annuity Pricing, Han Lin Shang, Ph.D.,

   Australian National University; Steven Haberman, FIA,
   Ph.D., DSc, City, University of London
- Mortality Improvement Rates: Modelling and Parameter Uncertainty, Andrew Hunt, Ph.D., FIA, Pacific Life Re, London; Andres M. Villegas, Ph.D., ARC Centre of Excellence in Population Ageing Research (CEPAR), University of New South Wales
- On the Heterogenity of Human Population as Reflected by the Mortality Dynamics, Severine Arnold, Ph. D., University of Lausanne

Credit: 2.10 CPD; 2.10 Noncore EA

<sup>\*</sup>Bold names indicate paper presenters

#### 1:20 - 3:05 p.m., Crystal E

#### SESSION 4C

### Panel: Innovative Business Solutions to Respond to an Aging Society

Moderator: Timothy F. Harris, FSA, MAAA, Actuarys, LLC. Panelists: Lisa D'Ambrosio, Ph.D., MIT AgeLab; Jodi Olshevski, Ph.D., The Hartford

The nature of the maturing population will alter the types of products and services consumers will need and that make sense from a business strategy perspective. This session will present some business opportunities created by population aging and possibly identify some approaches that businesses might take to create or enhance opportunities to meet the needs of the increasing number, character and condition of older individuals.

Credit: 2.10 CPD

3:05 – 3:25 p.m., Foyer Refreshment Break

3:25 – 5:10 p.m., Crystal C

#### **GENERAL SESSION IV**

## Panel: Featured Presentation: Mortality Projection from a Social Security Panel

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

Panelists: Stephen C. Goss, ASA, MAAA, U.S. Social Security Administration; Adrian Gallop, FIA, Government Actuary's Department, UK; Jean-Claude Menard, FSA, FCIA, Office of the Chief Actuary, Canada; Annie St-Jacques, FSA, FCIA, Office of the Chief Actuary, Canada

Mortality is a fundamental element in the financial projections for the finances of social security programs around the world. Prominent actuaries from the U.S. Social Security Administration, Canada's Office of the 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.

Credit: 2.10 CPD; 2.10 Noncore EA





Friday Jan. 6, 2017

#### Friday, Jan. 6

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

7:00 – 8:00 a.m., Crystal E Hot Breakfast Buffet

8:00 – 9:00 a.m., Crystal C GENERAL SESSION V

The Nitty Gritty of HMD

Moderator: R. Dale Hall, FSA, CERA, MAAA, Society of Actuaries Panelists: Magali Barbieri, UC-Berkeley

A unique open-access collection of detailed mortality and population data for 38 high-income countries, the Human Mortality Database (HMD) presents indicators that are instrumental for assessing the changing costs of life insurance, pensions and health care. The HMD rigorous methods protocol is considered the gold standard in constructing harmonized mortality and population series from official statistics. This session will describe the content of the database, the type of statistical sources from which HMD series are constructed, its main data quality challenges and the validation procedures implemented to provide the most reliable information possible.

Credit: 1.20 CPD; 1.20 Noncore EA

9:00 – 9:15 a.m., Foyer Refreshment Break

9:15 – 10:15 a.m., Crystal C SESSION 5A

#### **SOA Mortality and Longevity Research**

Moderator: R. Dale Hall, FSA, CERA, MAAA, Society of Actuaries Panelists: R. Dale Hall, FSA, CERA, MAAA, Society of Actuaries; Cynthia MacDonald, FSA, MAAA, Society of Actuaries; Andrew J. Peterson, FSA, EA, FCA, MAAA, Society of Actuaries

The Society of Actuaries produces mortality and longevity research each year. SOA staff will recap 2016 highlights and present the SOA's vision for its mortality and longevity research for the upcoming year. Included in the session will be a discussion of the Actuaries Longevity Illustrator and the SOA's learnings on national sources of population mortality data.

Credit: 1.20 CPD; 1.20 Noncore EA

9:15 - 10:15 a.m., Crystal D

SESSION 5B

What is Different Today for Post-Retirement Financial Planning?

Moderator: Jean-Marc Fix, FSA, MAAA, Optimum Re Presenters: Tamara Burden, FSA, MAAA, Milliman

The financial planning industry has been focused on how to accumulate assets for years. The process of turning those assets into income that will support a retirement has never been more complicated. Low savings rates, increased longevity and the need for greater liquidity coincide with a risky stock market and never-before-seen interest rate lows to create an almost insurmountable planning problem. A recent Wells Fargo study shows that nearly 50% of people are retiring earlier than they had planned due to unexpected shocks. Success in retirement today is going to be driven by the flexibility to withstand shocks, whether those are due to early job loss, a market crash, healthcare costs, a surge in inflation or the cost of caring for a parent or child. In this session, presenters will discuss how retirees significantly underestimate the degree of flexibility and depth of resources that they have and explore new ways to access human, social and financial capital in the sharing economy.

Credit: 1.20 CPD; 1.20 Noncore EA

10:15 – 10:45 a.m., Foyer Refreshment Break

10:45 - 11:45 a.m., Crystal C

SESSION 6A

**Mortality Improvement Approaches** 

Moderator: Jean-Marc Fix, FSA, MAAA, Optimum Re Presenters: Laurence Pinzur, FSA, Aon Hewitt

The techniques used to project mortality improvement have changed dramatically over the past two decades, evolving from simplistic "age-only" scales to today's complex multidimensional models. In addition to providing an overview of mortality improvement models currently used by actuaries in the U.S., U.K. and Canada, this session will include a discussion of some of the challenges faced by those trying to assess the effectiveness of the most widely-used models

Credit: 1.20 CPD; 1.20 Core EA

#### Friday, Jan. 6

10:45 - 11:45 a.m., Crystal D

SESSION 6B

The Changing Face of Eldercare

Moderator: Anna M. Rappaport, FSA, MAAA, Anna Rappaport

Consulting

Presenters: Phyllis Mitzen, ACSW

Most people would like to age without leaving their communities. Some have families to help, others do not. A variety of community organizations and support services are making it feasible for older people to have richer lives and stay in their homes longer. The Village movement has offered a means for seniors to connect in local communities, find mutual interests and activities and support each other when they need help. Additionally, the World Health Organization has undertaken an "Age Friendly Cities" initiative. Technology and a changing marketplace have opened the way to better communication and the delivery of services and more health care to people staying in their homes. This presentation will focus on how community efforts can support senior engagement and health and will include insight from experiences in several cities.

Credit: 1.20 CPD

**11:45 a.m. – Noon, Foyer** Refreshment Break

Noon – 1:30 p.m., Crystal C GENERAL SESSION VI

Senior Citizen in 2050

Moderator: Jean-Marc Fix, FSA, MAAA, Optimum Re Panelists: S. Jay Olshansky, Ph.D., University of Illinois at Chicago; Neil Charness, Ph.D., Florida State University; Thomas Getzen, Ph.D., Temple University; Robert Bourbeau, Ph.D., Universite de Montreal, Philip Smalley, M.D., FRCPC, RGA

The year is 2050 and you just celebrated your 75th birthday. Close your eyes and visualize the scene. What will the world you live in be like? What will you be doing? Our panelists will bring their multidisciplinary view of a possible yet credible future to life. Are their views consistent? What about your view? Seize this chance to hear, and possibly challenge, a unique panel of experts from the fields of demography, economics, gerontology and medicine.

Credit: 1.80 CPD



## PARTICIPATING ORGANIZATIONS

The SOA would like to thank the following organizations for participating in this research endeavor.

- Actuaries Institute Australia
- American Academy of Actuaries
- ASPPA College of Pension Actuaries
- Canadian Institute of Actuaries
- Conference of Consulting Actuaries
- Deutsche Aktuarvereinigung (DAV)
- Employee Benefit Research Institute
- International Actuarial Association
- Institute of Actuaries of Japan
- International Foundation of Employee
   Benefit Plan

- International Longevity Centre UK
- Munich American Reassurance Group
- National Academy of Social Insurance (NASI)
- Pension Research Council and Boettner Center for Pensions and Retirement Research of the Wharton School
- · Retirement Income Industry Association
- · Society of Actuaries in Ireland
- Swiss Association of Actuaries
- The Institute and Faculty of Actuaries





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Timothy F. Harris, FSA, MAAA Symposium Chairperson Jean-Marc Fix, FSA, MAAA Symposium Vice Chairperson

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- DON'T discuss your own, your firm's or others' prices or fees for service, or anything that might affect prices or fees, such as costs, discounts, terms of sale or profit margins.
- DON'T stay at a meeting where any such price talk occurs.
- DON'T make public announcements or statements about your own or your firm's prices or fees, or those of competitors, at any SOA meeting or activity.
- DON'T talk about what other entities or their members or employees plan to do in particular geographic or product markets or with particular customers.

- DON'T speak or act on behalf of the SOA or any of its committees unless specifically authorized to do so.
- DO alert SOA staff or legal counsel about any concerns regarding proposed statements to be made by the association on behalf of a committee or section.
- DO consult with your own legal counsel or the SOA before raising any matter or making any statement that you think may involve competitively sensitive information.
- DO be alert to improper activities, and don't participate if you think something is improper.

If you have specific questions, seek guidance from your own legal counsel or from the SOA's executive director or legal counsel.

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