

Detailed Agenda

General Session #1 (9:00-10:00)

Professionalism in Action

Bob Beuerlein President, American Academy of Actuaries

Session Description: Actuarial professionalism—the commitment to a high level of personal integrity and ethical conduct, as well as compliance with the profession’s standards of conduct, qualification, and practice—can help the actuary to navigate ethical and other challenges that arise in the workplace. Each actuary’s dedication to professionalism will help him or her to respond to such challenges, while reinforcing the public’s trust in the profession as a whole. Public trust is the linchpin of the self-regulation that our profession enjoys. This session will explore the foundational importance of modeling good professionalism behavior in the workplace, actuary-to-actuary communications and cooperation, the role of professionalism in new and emerging practice areas, and professionalism and the resolution of ethical dilemmas in the workplace.

Bob Beuerlein, a consulting actuary based in The Villages, Fla., has more than 35 years of experience as an actuary, and has served as the Academy’s president since Nov. 3, 2016. He has a long record of Academy service, including prior service on the Board of Directors, the Strategic Planning Committee, the Joint Committee on IAA Coordination, the Council on Professionalism, with the Life & Health Qualifications Seminar, and on the Committee on Life Insurance Financial Reporting. He has also served on the Actuarial Standards Board’s Life Committee and is a past president of the Society of Actuaries.

Breakout Sessions AM (10:45-11:45)

A: Are Healthcare Fee-for-Value Programs Working?

Urie Kim Informatics/Analytics Director, Cigna

Session Description: This session will focus on what research and reports have been done related to outcomes of Fee for Value (FFV) programs. We will discuss factors, caveats, and evaluation methodologies that need to be accounted for in constructive assessment of current and future Accountable Care Organizations and other Advanced Payment Model programs.

Urie Kim and her team provide analytical support for development, implementation, and evaluation of Fee for Value programs at Cigna. Urie has her BBA from University of Wisconsin-Madison and has worked in various functions at Cigna including Pricing.

B: Effective Decision-Making and Creating a Culture of Innovation

Joe DiFilippo Principal & Managing Director, BTS

Session Description: Over the last 15 years, there have been significant empirical studies from around the globe aimed specifically at the topic of strategic decision-making. Although much of this research is fascinating, many executives and senior leaders from nearly every industry continue to struggle with the effectiveness of their own decisions and often fail to routinely apply the lessons learned from this wealth of research, especially when trying to create an environment that allows growth, collaboration, and innovation to thrive.

Dr. Joe DiFilippo, a Principal and Managing Director at BTS (a leading global consulting firm that focuses on strategy execution and leadership development), takes a deep dive into the realm of decision-making effectiveness, focusing on the inner architecture of an effective strategic decision. Dr. DiFilippo explores the levers that a leader can pull to improve the quality and effectiveness of his or her decisions at the individual, team, and organizational levels. From this perspective, Dr. DiFilippo also explores the concepts of “outside-in thinking” and “leader mindset”

and demonstrates how effective decision-making can create a culture where innovation activity can flourish.

This session will enhance participants' ability to recognize the components of well-thought-out individual, group, and organizational decisions as they relate to innovation and growth.

Dr. Joe DiFilippo is a Principal at BTS and is the Managing Director of BTS New York. Dr. Joe DiFilippo partners with clients to develop and deliver customized solutions that build capabilities in people to accelerate strategy implementation. Joe's experience involves senior team alignment, strategy implementation, cultural transformations, sales force transformations, leader assessments, innovation, and leadership development. Joe also has significant experience with executive development, and has worked with this level of leadership for many of BTS's largest clients. Joe is also a core leader in the BTS Innovation Practice. Dr. Joe DiFilippo's primary research involves executive leadership behaviors and their relationship to successful (or failed) strategy implementation for large organizations.

C: ESG Interest-Rate Modeling: Challenges, Negative Rates and Normalization

Hal Pedersen Managing Director, Conning

Session Description: The global experience of chronic ultra-low and negative interest rates has placed enormous stress on classical ESG models. A decade on from the first tremors of the financial crisis, there is now increased optimism that market conditions may be returning to normal. We will examine some of the striking features of the recent data and discuss its implications for the modeling of interest rates. Specific commentary on the modeling of negative interest rates and protracted periods of low rates will be provided. Some alternative interest rate modeling approaches will be discussed. We will examine approaches for incorporating the normalization of interest rates into ESG scenarios and discuss some of the challenges in deciding what approach to take.

Hal W. Pedersen is Managing Director, Risk Solutions with Conning. Dr. Pedersen is one of the principal architects of GEMS, Conning's award winning economic scenario generator. He is an Associate of the Society of Actuaries and has more than 20 years academic and industry experience in the application of financial economics to insurance. He was L.A.H. Warren professor of actuarial science at the University of Manitoba from 2003 through 2011 and served on the actuarial faculty at Georgia State University from 1996 through 2001.

D: Fifty Shades of Funding – Municipal Pension Stats & Strategies

Steve Lemanski Consulting Actuary, Hooker & Holcombe, Inc.

Tim Ryor Senior Vice President, Consulting Actuary, Hooker & Holcombe, Inc.

Session Description: This is a forward-thinking session that compares data from CT municipal pension plans and proposes effective strategies to address the challenges those plans face. We've combined an analysis of the CT Office of Policy and Management (OPM) data for FYE 2014 with our own research on more recent data with regard to asset performance and actuarial assumptions & methods to produce insightful metrics.

The session starts with an overview of our research and then moves to trends regarding assumptions and funding policies/methods. We conclude with strategies for dealing with the various issues. A brief outline of the session is below:

- Review of CT OPM fiscal indicator data & trends
- H&H survey of CAFRs: actual & assumed returns
- Auditors/rating agencies public sector pension radar
- Strategies to evaluate & reduce pension risk

Steve Lemanski has 28 years of experience providing actuarial consulting services to diverse clients, including municipalities, multiemployer pension funds, and Fortune 500 companies.

Steve is an Enrolled Actuary and holds a number of professional designations including, Fellow of the Society of Actuaries, Fellow of the Conference of Consulting Actuaries and Member of the American Academy of Actuaries. Steve is a Board member for the Connecticut Public Pension Forum and is chairperson of the EA-1 Actuarial Examination Committee.

Tim Ryor is a pension actuary with 28 years of consulting experience with municipal and corporate clients. For the past 11 years, he has been with Hooker & Holcombe, where he is currently the practice leader of their Actuarial Services Unit.

Tim is a former member of the Pension Committee of the Actuarial Standards Board. He is a Fellow of the Conference of Consulting Actuaries, a Fellow of the American Society of Pension Professionals & Actuaries, an Enrolled Actuary, and a Member of the American Academy of Actuaries.

E: Understanding and Managing Healthy Life Expectancy

Jay Vadiveloo Professor & Director, Goldenson Center, University of Connecticut

Session Description:

Life expectancy (LE) is a well understood and studied concept in actuarial science and the medical/nutrition literature. We have decided to focus on Healthy Life Expectancy (HLE) and how to manage HLE. By default, the difference between LE and HLE would represent the period of time an individual is living and in an “unhealthy” state. The Unhealthy Life Expectancy (ULE) is simply LE minus HLE. Managing HLE (and ULE) has significant implications for retirement financial planning, LTC and life annuities product design, and individual wellness measurement.

Our research intends to accomplish the following:

1. Provide a formal definition of “unhealthy” (and “healthy”) states of living
2. Develop a model to calculate HLE, LE and ULE based on actuarial assumptions of annual healthy survivorship rates, incidence rates of disability and “unhealthy” survivorship rates
3. Use established research findings in Nutrition Science to develop a predictive model and a web-based application to study the impact of the following on healthy LE:
 - a. Changes in diet and nutritional habits
 - b. Impact of exercise
 - c. Impact of lifestyle changes (e.g. greater socialization, marriage, divorce, death of a spouse, etc.)
4. Apply the healthy life expectancy concept to determine:
 - a. Retirement financial planning spending patterns
 - b. The optimal deferral period for purchasing a deferred long term care policy
 - c. The optimal benefit period for LTC coverage
 - d. A health score for evaluating individual wellness

Jay Vadiveloo is a Professor of Actuarial Science at the University of Connecticut where he is also Director of the Goldenson Center for Actuarial Research. The Goldenson Center works with teams of students at UConn to provide creative and implementable solutions to real problems facing the industry. Some representative research projects include complex GLM models to predict variable annuity policyholder behavior, claims tracking and monitoring, call center staffing optimization, and most recently, analysis of healthy life expectancy. Jay has a PhD in Statistics from the University of California, Berkeley, is a Fellow of the Society of Actuaries and a Chartered Financial Analyst.

General Session #2 (12:45-1:45)

US Economic Outlook

Andrew Haughwout SVP and Function Head, Federal Reserve Bank of New York

Session Description: Dr. Haughwout will provide an overview of the current national economic situation, and will additionally discuss the housing market and household debt and credit conditions in detail.

Andrew Haughwout is a Senior Vice President and Head of the Microeconomic Studies Department in the Research and Statistics Group. He is a co-editor of the Liberty Street Economics blog and a co-editor of the Bank's Economic Policy Review. In addition to his duties at the Bank, he is a Penn Institute for Urban Research Scholar and serves on the Advisory Board of the Journal of Regional Science. He is a past Chair of the North American Regional Science Council and the Federal Reserve System Committee on Regional Analysis. Prior to joining the New York Fed, Mr. Haughwout served as Assistant Professor and Director of the Urban and Regional Planning program at Princeton University. He holds a BA from Swarthmore College and a PhD from the University of Pennsylvania.

Breakout Sessions PM (2:00-3:00)

A: Emerging Pharmaceutical Landscape, Impact, and Solutions

Jamie Reuter Vice President, Pharmacy Solutions, ConnectiCare, Inc.

Session Description: The growing impact of pharmaceuticals as a component of overall medical costs has been gaining a lot of attention in recent years, including at the state and federal level as the country grapples with escalating health care costs. In conjunction with the growth in specialty drugs and the emergence of new generations of drugs, there are impacts to health consumers in treatment complexity, adherence, and quality of care. Technology is changing the way pharmacies interact with consumers, and the relationship between pharmacies, physicians and insurers is emerging as pharmacies become mini-health clinics and care providers. Insurers are working within this shifting landscape to implement outcomes based payment structures, to manage pharmacy benefits across medical and pharmacy designs, and to leverage pharmacy data to personalize health solutions.

Jamie Reuter completed a Bachelor in Pharmacy degree from Ferris State University in 1996. He practiced retail pharmacy for 4 years while completing a Doctor of Pharmacy degree from the University of Toledo in 2000. Jamie completed Pharmacy Practice and Critical Care Specialty residencies at the University of Cincinnati Medical Center in 2001 and 2002. After residency Jamie practiced as a Clinical Specialist in Critical Care for 8 years and served as Residency Program Director for the hospital Pharmacy Practice Residency. During that time, Jamie was an Adjunct Clinical Instructor for 3 Colleges of Pharmacy where he lectured and published over 40 papers and posters. In 2009 Jamie developed a clinical pharmacist call center providing services for rural underserved chronic special needs patients. The 59 Clinical Pharmacists and 9 Clinical Dietitians touched nearly 300,000 patients, providing over 440,000 clinical recommendations to providers. The service worked as part of a multi-disciplinary team, working collaboratively with Nurse Care Managers, in-home Nurse Practitioners, and Medical Directors providing appropriate care for chronic special needs patients. Jamie completed a Masters in Business Administration from the Johns Hopkins University Carey Business School in 2013. In 2014 Jamie joined CareFirst BlueCross/BlueShield as the Director of Pharmacy Policy, helping shape legislative and formulary policy for members in one of largest insurers in Maryland, Virginia, and Washington D.C. Jamie is currently the Vice President of Pharmacy Solutions for ConnectiCare.

B: Increasing Longevity: The Good, The Bad, and The Future

Dale Hall Managing Director of Research, Society of Actuaries

Session Description: Recent SOA research has included the impact of changing mortality improvement across a variety of practice areas. This presentation will highlight historical trends & observations, update current factors driving population and insured mortality, and discuss the implications of longevity. Updates will be provided on current SOA research projects and prompt discussion for future ideas that can be studied.

R. Dale Hall, FSA, CERA, CFA, MAAA, is Managing Director of Research for the Society of Actuaries (SOA), a position he has held since December 2013. In his role, Hall coordinates the SOA's strategic research partnerships, oversees SOA experience studies, coordinates research across the SOA's wide variety of actuarial practice areas, and directs the SOA's data-driven in-house research initiatives. Prior to joining the SOA, Hall spent more than 20 years in the U.S. insurance industry, primarily as chief actuary for the Life/Health companies of COUNTRY Financial. While at COUNTRY, he was active in the industry as a member of the American Council of Life Insurers' Actuarial Committee, and was an adjunct professor in the actuarial science program at Illinois State University.

C: Key Considerations for Fee-Based Annuity Products

Ken Birk Vice President, Product, Global Atlantic Financial Group

Ryan Mellott Vice President, Product Development, Jackson National Life Insurance Company

Session Description: An overview of the major issues for consideration when developing, implementing, marketing, distributing and servicing fee-based annuities. The speakers will discuss the historical, current, and future context around the products' role in insurance and investment markets. Key considerations for product design and pricing will be discussed. The speakers will also present the contemporary challenges and opportunities for product implementation, marketing & distribution, and administration. A forward-looking assessment of the key factors to determine the ultimate success of fee-based annuities and major roadblocks that need to be addressed will be discussed.

Interactive discussion is welcome and time will be allotted for Q&A.

Kenneth (Ken) Birk is a Vice President for Global Atlantic Financial Group and currently oversees product development, pricing and product management for variable and payout annuity strategies. Previously, Ken held a variety of business development, product, and risk management roles focused on domestic and international wealth management strategies for both retail and institutional clients at Prudential, The Hartford and CIGNA. He is a Fellow of the Society of Actuaries, a Chartered Enterprise Risk Analyst and a member of the American Academy of Actuaries. Ken is also a past officer of the Actuaries' Club of Hartford & Springfield.

Ryan Mellott is vice president for Jackson National Life Insurance Company (Jackson®), the U.S. subsidiary of London-based Prudential plc. In this role, he oversees product design and pricing analysis of new products. He is also responsible for the management of non-guaranteed elements in in-force products.

Mr. Mellott started his career at Jackson as an intern in 2003. He gained responsibility for oversight of product development in 2009, assuming the role vice president in 2016. He is a Fellow of the Society of Actuaries and a member of the American Academy of Actuaries. Mr. Mellott earned a B.S. in Mathematics from Juniata College and an M.S. in Industrial Mathematics from Michigan State University.

D: Model Risk Management

Chad Runchey Principal, Ernst & Young

Session Description: Model governance is a popular topic in the industry – driven both by regulatory pressures as well as a growing recognition that models are a potential source of uncertainty for insurers. This session will provide an overview for model risk management

frameworks and some key considerations for validation. This session will help companies just examining the concept while also providing companies with a more mature model risk management framework with industry perspectives.

Chad Runchey is a Principal with EY based in the NY office (with an internship in Hartford). He leads EY's Insurance Risk Management practice and regularly presents on topics including model risk, stress testing and economic capital. Chad is a Fellow in the Society of Actuaries and has a BBA in Actuarial Science from the University of Wisconsin – Madison.

E: The Role of Predictive Analytics

Gary Gau Actuarial Predictive Modeling Lead, Florida Blue

Session Description: This section provides an overview of the use of predictive analytics in the insurance industry. The speaker will cover the tips for developing marketing and outreach strategies and identifying key drivers for profitable growth. What lifestyle and consumer data analysis can reveal about current and potential members will also be discussed.

Gary Gau, Ph.D., ASA, MAAA, joined Florida Blue (FB) as the predictive modeling lead in 2010. He is leading the risk identification research project at FB. He co-authored book chapters for Healthcare Risk Adjustment and Predictive Modeling. Dr. Gau previously was an Associate Professor of Statistics and Actuarial Science at the University of Central Florida (UCF) where he served for seven years. Dr. Gau received his doctorate in Mathematics and Statistics from Boston University (BU) in 2003. He taught a wide variety of actuarial science and statistics classes at both UCF and BU. He is also serving as an adjunct at the University of North Florida. His research expertise is actuarial modeling and risk assessment using various advanced analytics and data mining techniques.

General Session #3 (3:30-5:00)

Actuaries in the C-Suite Panel

Thomas Marra President & CEO, Symetra Financial Corporation

Martin Sheerin Senior Vice President & CFO, John Hancock Financial

Elizabeth Ward Executive Vice President, CFO & Chief Actuary, MassMutual Financial Group

Larry Zimpleman Former Chairman, President & CEO, Principal Financial Group

Moderated by Amanda Hug, FSA, MAAA Vice President, Actuaries' Club of Hartford and Springfield; Actuary, MassMutual Financial Group

Session Description:

The actuarial designation is an excellent platform from which to pursue a variety of interests and career aspirations. For our panelists today, their actuarial credentials, talents, and experiences have carried them to the C-suite of large-scale national insurance companies. Come join the following executives for a lively discussion where they will field moderated and audience questions about industry trends, their career paths, and what senior leadership looks like from the lens of an actuary. This will be a session you won't want to miss!

Thomas Marra is president and chief executive officer of Symetra Financial Corporation and its insurance subsidiaries, as well as a member of the company's Board of Directors. He joined Symetra in June 2010.

Marra has more than 30 years of experience in the insurance industry. He began his career at The Hartford Financial Services Group, Inc., in 1980 as an actuarial student. While at The Hartford, he held increasingly senior positions, most recently as president and chief operating officer of the parent company. He also served as president and chief operating officer of Hartford Life, Inc., where he drove innovation and expansion of products, distribution, service and operations. Throughout his career at The Hartford, Marra held various directorships,

including at the parent company and its subsidiaries. In 2009, he became a senior advisor at the Boston Consulting Group in the North America Financial Services division.

Marra is a past chairman of the Board of the American Council of Life Insurers and of the National Association of Variable Annuities, now known as the Insured Retirement Institute (IRI). In October 2011, Marra was inducted into the IRI Hall of Fame in recognition of his contributions and leadership in the insured retirement industry.

He earned his Bachelor of Science degree from St. Bonaventure University and is a Fellow of the Society of Actuaries (FSA) and a member of the American Academy of Actuaries (MAAA).

Martin Sheerin, reporting to Steve Roder, Senior Executive Vice President and CFO, is Chief Financial Officer for John Hancock Financial, the US Division of Toronto-based Manulife Financial Corporation.

Before taking on his current position in 2016, he was Vice President and Chief Financial Officer for John Hancock Annuities which includes fixed and variable annuities. Since joining John Hancock in 2007, Mr. Sheerin had held several roles including Chief Financial Officer, Long Term Care and Product Risk Management.

Prior to joining John Hancock, Mr. Sheerin held various actuarial and financial reporting roles at Aviva USA and Irish Life Assurance.

Mr. Sheerin graduated from Trinity College, Dublin with Bachelor and Master's degree in Mathematics. He is a Fellow of the Society of Actuaries and the Institute of Actuaries and is a Member of the American Academy of Actuaries.

Elizabeth Ward is Executive Vice President, Chief Financial Officer and Chief Actuary of MassMutual, a leading mutual life insurance company with \$642 billion in assets under management as of December, 2015. A member of MassMutual's Executive Leadership Team, Betsy currently leads MassMutual's financial organization including Treasury, Financial Planning & Analysis, Financial Reporting, Corporate Tax, and Procurement & Expense Management. In addition, she also has responsibility for MassMutual's Strategy and Corporate Development areas. Before assuming the role of Chief Financial Officer in June, 2016, she held the role of Chief Enterprise Risk Officer leading the enterprise risk management and actuarial division across all of the insurance and asset management companies. Prior to joining MassMutual affiliate Babson Capital Management in 2001, Betsy worked at American Skandia, Charter Oak Capital Management and Aeltus Investment Management in insurance company portfolio management, and at various areas of Aetna Life & Casualty.

She holds a B.A. from the University of Rochester in Economics and Spanish and is a Fellow of the Society of Actuaries, a Professional Risk Manager, and a Member of the American Academy of Actuaries.

Larry Zimpleman has over 40 years of experience in the financial services industry, including all aspects of financial and operations management and more than 15 years of global business development. Chairman, President and CEO of Principal Financial Group from 2009 – 2015, Mr. Zimpleman was responsible for overall management of the company, including company strategy, merger and acquisition activities, international development and human resources planning. This includes oversight of more than \$519 billion in assets under management and over 14,000 employees worldwide.

Mr. Zimpleman is involved in leading a number of industry, professional and civic organizations including:

- Member, Board of Directors & 2014 Chair – Financial Services Roundtable

- Member, Board of Directors and Executive Committee, Past President – Greater Des Moines Partnership
- Iowa Business Council – 2014 Chair
- Member, Iowa Partnership for Economic Progress (IPEP) board appointed by Gov. Terry Branstad
- Member – Business Roundtable
- Member and Chair, Board of Trustees – Drake University

Past activities include:

- Chair and Director – Principal Funds
- Member, Board of Directors - BrasilPrev Seguros & Previdência (joint venture partner in Brazil)
- Member, Board of Directors and Chair – Employee Benefits Research Institute (EBRI)
- Delegate, National SAVER Summit (2002, 2006)
- Board of Governors – Society of Actuaries
- Trustee, Actuarial Foundation
- American Academy of Actuaries – various leadership roles including Board of Directors, president and vice president positions

Originally from Iowa, he received his B.S. degree (graduating Summa Cum Laude) and his MBA from Drake University in Des Moines, Iowa. Mr. Zimpleman has been a Fellow of the Society of Actuaries since 1976 and is an Enrolled Actuary. He has also been a member of the American Academy of Actuaries since 1977. He is accomplished in quantitative thinking and research, financial analysis and management and capital strategies and management. Mr. Zimpleman's leisure activities include running and travel.

Amanda Hug is the Vice President of the Actuaries' Club of Hartford and Springfield and an Actuary at MassMutual Financial Group. In her current role on the Annuity Innovation team, she helps to shape company strategy for the annuity business amidst a shifting market landscape. Previously, Amanda held roles at MassMutual in Worksite Insurance, Retirement Services, and Corporate Finance, and from 2014 – 2016 she managed recruiting for all entry-level actuarial positions at the company. Amanda's industry involvement includes presentations at national conferences, publication in SOA section newsletters, and membership on university industry advisory boards. Outside of work, Amanda is active in her local church and loves to travel and explore. She is a Fellow of the Society of Actuaries, a member of the American Academy of Actuaries, and she graduated summa cum laude from Wheaton College (IL) with a B.S. in Mathematics.