

Living to 100 Symposium
January 12-14, 2005
The Hilton, Walt Disney World Lake Buena Vista, FL

* Indicates Paper Presenter

Wednesday, January 12, 2005

7:00 – 8:00 am **Continental Breakfast and Registration**

8:00 – 9:20 am

Symposium Opening Remarks

Robert J. Johansen, MA, FSA, MAAA - *Chairperson*
Consulting Actuary
Life Actuarial Services

Stephen G. Kellison, MS, FSA, EA, MAAA
President
Society of Actuaries

Keynote Presentation: The Different Paths to 100

Thomas Perls, MD, MPH
Director, New England Centenarian Study
Associate Professor of Medicine and Geriatrics
Boston Medical Center

Moderators for Symposium

Robert J. Johansen, MA, FSA, MAAA - *Chairperson*
Consulting Actuary
Life Actuarial Services

Timothy F. Harris, FSA, MAAA – *Vice Chairperson*
Principal
Milliman USA

Kenneth W. Faig Jr., FSA, MAAA
Manager, Actuarial Services
PolySystems Inc.

9:20 am – 10:45 pm

Session 1: Increased Longevity and the Challenge of Determining qx at Extreme Ages - Part 1

Discussant: *Allen M. Klein, FSA, MAAA*
Consultant
Towers Perrin, Chicago, Illinois

1a. Bending and Ending the Mortality Table

Edwin C. Hustead, FSA, EA, MAAA*
Senior Vice President & Director
Hay Group, Arlington, Virginia

1b. Analysis of Trends in the Age-Specific Shape of Mortality Curves for Populations in the U.S.A. and Japan

Christine Dugan, FSA*
Senior Actuarial Consultant
Watson Wyatt Insurance & Financial Services Inc., Berwyn, Pennsylvania

Hande Gulumser
Insurance Consultant
Watson Wyatt LLP, Reigate, England

Richard Humble, MSc, ASA, FIA
Partner
Watson Wyatt LLP, Reigate, England

Daniel Ryan, MA*
Healthcare Consultant
Watson Wyatt LLP, Reigate, England

10:45 – 11:00 am

Refreshment Break

11:00 am – 12:45 pm

Session 2: Impact of Aging Populations - Part 1

*Discussant: J. Bruce MacDonald, FSA, FCA, FCIA, MAAA
Consulting Actuary*

2a. The Effects of Advanced Age Mortality Improvements on the Valuation of Variable Annuities with Guaranteed Benefits

Lijia Guo, PhD, ASA*
Actuarial Program Director, Assistant Professor, Department of Statistics
University of Central Florida, Orlando, Florida

2b. The Impact of the Equity Risk Premium and Population Aging on the Canadian Retirement Savings System

Doug Andrews, MBA, FSA, FCIA, CFA*
Vice President
Aon Consulting Inc., Toronto, Ontario, Canada

2c. Mortality Improvement Cohorts and the Effect on the Annuities Market

Krzysztof Ostaszewski, PhD, FSA, MAAA, CFA*
Actuarial Program Director and Professor, Department of Mathematics
Illinois State University, Normal, Illinois

Richard MacMinn, PhD
Professor and Edmonson-Miller Chair in Insurance and Financial Services
Katie School of Insurance and Financial Services at Illinois State University, Normal, Illinois

Ranee Thiagarajah, PhD, ASA, MAAA
Associate Professor, Department of Mathematics
Illinois State University, Normal, Illinois

12:45 – 2:30 pm

Group Lunch

The Evolving Elderly Population of the United States

W. Ward Kingkade, PhD
Statistician/Demographer
US Bureau of the Census

2:45 – 5:00 pm

Session 3: Theories of Longevity

*Discussants: S. Jay Olshansky, PhD
Professor
School of Public Health, University of Illinois at Chicago*

*Robert K. Gleeson, MD, FACP
Vice President and Medical Director
Northwestern Mutual Life Insurance Company, Milwaukee, WI*

3a. The Great Debate on the Outlook for Human Longevity: Exposition and Critical Evaluation of Two Divergent Views

Jacob S. Siegel, MA*
Demographic Consultant
J. Stuart Siegel Demographic Services, North Bethesda, Maryland

3b. Search for Predictors of Exceptional Human Longevity: Using Computerized Genealogies and Internet Resources for Human Longevity Studies

Natalia S. Gavrilova, PhD*
Research Associate of the Center for Demographic Studies
Center on Aging, NORC, University of Chicago, Chicago, Illinois

Leonid A. Gavrilov, PhD
Research Associate of the Center for Demographic Studies
Center on Aging, NORC, University of Chicago, Chicago, Illinois

3c. Trajectories of Disability and Mortality Among the U.S. Elderly Population: Evidence From the 1984-1999 NLTCs

P.J. Eric Stallard, ASA, FCA, MAAA*
Research Professor and Associate Director of the Center for Demographic Studies
Duke University, Durham, North Carolina

2:45 – 5:00 pm

Session 3: Theories of Longevity..continued

3d. The Interdependency of Increasing Life Expectancy and Driving Life Expectancy of Elderly Populations

Chao-Chun (Vickie) Leng, PhD*
Researcher
Toronto, Ontario, Canada

Min-Ming Wen, PhD, ASA
Assistant Professor, Department of Finance
Shippensburg University, Shippensburg, PA

6:00 – 7:00 pm

Networking Reception

Thursday, January 13, 2005

7:00 – 8:00 am

Continental Breakfast

8:00 – 8:05 am

Opening Remarks

8:05 – 9:30 am

Session 4: Increased Longevity and the Challenge of Determining qx at Extreme Ages - Part 2

*Discussant: Thomas Buettner, PhD
Chief, Estimates and Projection Section
Population Division, United Nations*

4a. Mortality at Advanced Ages in the United Kingdom

Adrian Gallop, FIA*
Actuary, Pensions Policy, Demography and Statistics
Government Actuary's Department, London, England

Angus S. Macdonald, PhD, FFA
Professor, Department of Actuarial Mathematics and Statistics
Heriot-Watt University, Edinburgh, Scotland

4b. Coping with Longevity – The New German Annuity Valuation Table DAV 2004 R

Ulrich Pasdika, Dipl. Math., Actuary (DAV)*
Product Actuary
Gen Re, Cologne, Germany

Jürgen Wolff, Dipl. Math., Actuary (DAV)*
Senior Actuary
MARC Life, Atlanta, Georgia

9:30 – 9:40 am

Refreshment Break

9:40 am – 11:55 pm

(includes a refreshment
break from 10:40 – 10:50
am)

Session 5: Impact of Aging Populations - Part 2

*Discussant: John W. Paddon, MA, FSA, MAAA
Consulting Actuary*

5a. Implications of an Aging Population in India: Challenges and Opportunities

Prakash Bhattacharya, BE, CFA*
Faculty Associate
Institute of Chartered Financial Analysts of India

5b. Prospectives of Longevity in Mexico and Its Implications for Social Security and Health

Roberto Ham-Chande, PhD*
Professor and Director of the Department of Population Studies
El Colegio de la Frontera Norte, Tijuana, Mexico

José Luis Salas Lisaur, MBA, FCA
Mexican Appointee for ASINTA
Del. Miguel Hidalgo, Mexico DF, Mexico

9:40 am – 11:55 pm

Session 5: Impact of Aging Populations - Part 2...continued

5c. What if Mortality was to Diminish Much More than Forecasted?

Implications for Financing Social Security

Robert Bourbeau, PhD*
Professor and Chair, Department of Demography
Université de Montréal, Montreal, Quebec, Canada

Bertrand Desjardins, PhD
Researcher, Department of Demography
Université de Montréal, Montreal, Quebec, Canada

Jacques Légaré
Emeritus Professor, Department of Demography
Université de Montréal, Montreal, Quebec, Canada

5d. High Age Implications of Post-Retirement Risks

Anna M. Rappaport, MBA, FSA, EA, FCA, MAAA*
Principal
Mercer Human Resource Consulting, Chicago, Illinois

Monica Dragut, MS*
Actuarial Analyst
Mercer Human Resource Consulting, Chicago, Illinois

11:55 am – 1:00 pm

Panel Discussion: Implications of Increasing Life Spans for the Private Sector

Moderator: John W. Paddon, MA, FSA, MAAA
Consulting Actuary

Panel: Paul Hodge, JD, MBA, MPA
Chairperson, Global Generations Policy Institute and Director, Harvard Generations Policy
Program, Cambridge, MA

Robert K. Gleeson, MD, FACP
Vice President and Medical Director
Northwestern Mutual Life Insurance Company, Milwaukee, WI

Peter S. Heller, PhD
Fiscal Affairs Department
International Monetary Fund, Washington, DC

Anna M. Rappaport, MBA, FSA, EA, FCA, MAAA
Principal
Mercer Human Resource Consulting, Chicago, Illinois

1:00 pm

Afternoon Break

Friday, January 14, 2005

7:00 – 8:00 am Continental Breakfast

8:00 – 8:05 am Opening

8:05 – 10:30 am Session 6: Data Sources, Quality and Analyses

Discussants: *Thomas N. Herzog, PhD, ASA*

*Chief Actuary
Federal Housing Administration*

*Leonid A. Gavrilov, PhD
Research Associate of the Center for Demographic Studies
Center on Aging, NORC, University of Chicago, Chicago, Illinois*

6a. IDL, the International Database On Longevity

Jean-Marie Robine, PhD*
Senior Research Fellow, French National Institute of Health and Medical Research and
Head of the *Health and Demography* team, Department of Biostatistics
University of Montpellier 1, France

Amandine Cournil
French Institute of Health and Medical Research and *Health and Demography* team,
Department of Biostatistics, University of Montpellier 1, France

Jutta Gampe
Max Planck Institute for Demographic Research, Rostock, Germany

James W. Vaupel, PhD
Founding Director
Max Planck Institute for Demographic Research, Rostock, Germany

6b. Number of Centenarians in the United States 1/1/1990, 1/1/2000, and 1/1/2010 Based on Improved Medicare Data

Bertram M. Kestenbaum, MS, ASA*
Actuary and Demographer, Office of the Chief Actuary
Social Security Administration, Baltimore Maryland

B. Reneé Ferguson, MS
Actuary, Office of the Chief Actuary
Social Security Administration, Baltimore Maryland

6c. Seasons and Longevity: Mortality Trajectories Among the Oldest Old

Jean-Marie Robine, PhD*
Senior Research Fellow, French National Institute of Health and Medical Research and
Head of the *Health and Demography* team, Department of Biostatistics
University of Montpellier 1, France

Siu Lan K Cheung
French National Institute of Health and Medical Research and Health and Demography
team, Department of Biostatistics, University of Montpellier 1, France

Fred Paccaud, PhD
Director, Institute of Social and Preventative Medicine and
Professor of public health, Faculty of Biology and Medicine,
University of Lausanne, Switzerland

6d. Data Quality of Oldest-Old Population in Taiwan: 2003 Census for Ages 89 and Above

Ching –Syang Jack Yue (Jack C. Yue), PhD, ASA*
Chair, Department of Statistics
National Chengchi University, Taipei, Taiwan, R.O.C.

10:30 – 10:45 am Refreshment Break

10:45 am – 12:30 pm

Session 7: Mortality "Laws" and Models - Part 1

*Discussant: Thomas P. Edwalds, MS, FSA, ACAS, MAAA
Assistant Vice President
Munich American Reassurance Company*

7a. "Makeham-Type" Mortality Models

Marie Redina L. Mumpar-Victoria, PhD*
Assistant Professor, Department of Mathematics
University of the Philippines Diliman, Quezon City, Philippines

Augusto Y. Hermosilla, PhD
Associate Professor, Department of Mathematics
University of the Philippines Diliman, Quezon City, Philippines

Ronnie M. Mirandilla
Graduate Student, Department of Mathematics
University of the Philippines Diliman, Quezon City, Philippines

7b. Extreme Value Analysis of Advanced Age Mortality Data

Kathryn A. Robertson*
Graduate Student, Department of Statistical and Actuarial Sciences
University of Western Ontario, London, Ontario, Canada

Debbie J. Dupuis, PhD
Associate Professor, Department of Management Sciences
HEC Montreal, Montreal, Quebec, Canada

Bruce L. Jones, PhD, FSA, FCIA
Associate Professor and Chair, Department of Statistical and Actuarial Sciences
University of Western Ontario, London, Ontario, Canada

7c. Living to 100 and Beyond: An Extreme Value Study

Zhongxian (Jerry) Han, PhD*
Assistant Professor, Department of Statistics
University of Central, Orlando, Florida

12:30 – 2:25 pm

Group Lunch – Table Topic Discussions

2:25 – 4:10 pm

Session 8: Mortality "Laws" and Models - Part 2

*Discussant: Robert L. Brown, PhD, FSA, ACAS, FCIA, HONFIA
Professor of Actuarial Science and Director
Institute of Insurance and Pension Research, University of Waterloo*

8a. The Lee-Carter Model for Forecasting Mortality Revisited

Siu-hang Li*
Graduate Student, Department of Statistics and Actuarial Science
The University of Waterloo, Waterloo, Ontario, Canada

Wai-sum Chan, PhD, FSA, C.Stat.
Associate Professor, Department of Statistics and Actuarial Science
The University of Hong Kong, Hong Kong, PR China

8b. Application of Mortality Models to Japan

Masakazu Ozeki, MS, FSA, AIAJ*
Manager, Financial Actuarial Division, Profit Management and Actuarial
Department
Meiji Yasuda Life Insurance Company, Tokyo, Japan

4:10 – 4:30 pm

Symposium Wrap-Up

4:30 pm

Symposium Concludes