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The Annenberg Center for Health Sciences at Eisenhower
The Gerontological Society of America

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AFAR, American Federation for Aging Research

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Sessions listed below have been organized by the GSA Biological Sciences section.

55  2:30 p.m.-4:00 p.m.  |  Southern Hemisphere III (D)  BS  
Symposium: Environmental Insults in Early Life and Their Impact Upon Aging  
Chair: George Taffet  
Co-Chair: Gregory Aune  
Presentations:  
• In Utero Diesel Exposure and Adult Heart Failure, Michael Chin  
• The Lifelong Health Burden of Successful Childhood Cancer Treatment, Gregory Aune  
• Cardiac and Arterial Aging: Lifelong Processes, George Taffet

145  4:30 p.m.-6:00 p.m.  |  Southern Hemisphere III (D)  BS  
Symposium: I Got Rhythm! Circadian Rhythm and Aging in Cells, Mice, and People  
Chair: Katie Stone  
Presentations:  
• Molecular Architecture of the Circadian Clock in Mammals, Joseph Takahashi  
• Disruption of the Muscle Clock; A Model of Aging?, Karyn Esser  
• Health Consequences of Deteriorating Activity Rhythms With Aging, Gregory Tranah

5:30 p.m.-6:00 p.m.  |  Australia 3 (D)  
GSA Business Meeting  
This session is the annual business meeting of the Society.

6:00 p.m.-8:00 p.m.  |  Atlantic Hall (D)  BS  
President’s Welcome Reception and Exhibit Hall Opening  
Help kick off the GSA 2015 Annual Scientific Meeting with a stroll through GSA’s Exhibit Hall and a visit to the first poster session of the meeting. Posters will be on display from 6:00 p.m. to 8:00 p.m. and presenters will be at their boards from 6:00 p.m. to 7:00 p.m. Enjoy the tunes of Jimmy Buffet and stop by one of the photo stations to capture memories of your time in Orlando. Hors d’oeuvres and a cash bar will be available.

Supported by McNeil Consumer Healthcare.
Ezekiel Emanuel has a long record of experience at the top levels of health policy and is one of the leading practitioners shaping the future of health care. He holds a joint position at the Wharton School and the Perelman School of Medicine at the University of Pennsylvania, where he chairs the Department of Medical Ethics & Health Policy. Dr. Emanuel is a founding chair at the Clinical Center of the National Institutes of Health and he serves as chair of the meta-council on the Future of Health Committee for the World Economic Forum.

Trained as both an oncologist and a political scientist, Dr. Emanuel offers a uniquely thoughtful perspective on the most difficult issues in medicine today. He was a special adviser for health policy to the White House Office of Management and Budget, and was a prominent voice advising on federal health care budgets and the Affordable Care Act. His latest book, Re-inventing American Health Care, is the definitive account of the ACA. His previous book, Brothers Emanuel: A Memoir of an American Family, is a narrative of his rise to professional achievements alongside his brother Rahm, the mayor of Chicago, and his brother Ari, a Hollywood talent agent. His other books include The Ends of Human Life and No Margin, No Mission: Healthcare Organizations and the Quest for Ethical Excellence.

Dr. Emanuel has received numerous awards including election to the Institute of Medicine of the National Academy of Sciences, the Association of American Physicians, and the Royal College of Medicine (UK). His articles have appeared in such medical journals as The New England Journal of Medicine, The Lancet, and JAMA. His popular writing has appeared in The New York Times, The Wall Street Journal, The Atlantic, The New Republic, and many other publications.
Thursday NOVEMBER 19

860 3:30 p.m.-5:00 p.m. | Oceanic 1 (D) BS
Symposium: Aging, Central Nervous System, and Mobility—Follow-Up From a 3-Year NIA-Funded GSA Pre-Conference
Chair: Caterina Rosano
Discussant: Michelle Carlson, Stephanie Studenski
Presentations:
- Anxiety in Action: A Conceptual Model of the Interaction Between Psychology, Central Nervous System, and Mobility in Late Life, Nimali Jayasinghe
- Association Between Cognitive Functioning, Vascular Conditions, Gait Speed, and Balance, Renee Smith-Ray
- Associations of Musculoskeletal Pain With Mobility in Older Adults: Potential Cerebral Mechanisms, Yenisel Cruz-Almeida, Andrea Rosso, Tamara Harris, Zachary Marcum, Kristine Yaffe, Anne Newman, Caterina Rosano
- Changes in Everyday Functional Mobility With Age and Parkinson's Disease, Martina Mancini, Heather Schlueter, Fay Horak
- Age-Related Changes in Grey Matter Volume and Changes in Gait Variability, Andrea Rosso, Dana Tudorascu, Howard Aizenstein, Anne Newman, Tamara Harris, Suzanne Satterfield, Kristine Yaffe, Caterina Rosano

855 3:30 p.m.-5:00 p.m. | Southern Hemisphere III (D) BS
Symposium: Effects of Maternal Health on Lifelong Offspring Health and Lifespan
Chair: Kevin Pearson
Co-Chair: Carmen Marsit
Presentations:
- Mechanisms Linking the Maternal Environment to Lifelong Health, Carmen Marsit
- Imaging Biomarkers of Aging in Baboons, in Utero and Beyond, Geoffrey Clarke, Anderson Kuo, Cun Li, Peter Nathanielsz
- Effects of Maternal Exercise During Pregnancy on Long-Term Health Outcomes in Mouse Offspring, Kevin Pearson
1065 8:00 a.m.-10:00 a.m. | Southern Hemisphere III (D)  BS
Symposium: Comparative Biology of Aging
Chair: Sarah Milton
Presentations:
• Insights Into Aging From Turtles, Animals That Show Extremely Slow Aging, Sarah Milton
• Aging, Frailty, and the Microbiome, Robert Beiko
• Using Multi-Species Comparisons to Identify Cellular and Molecular Mechanisms of Longevity, Jeffrey Alan Stuart, Melissa M. Page, Kurtis Salway, Casey Christoff, Ellen Robb
• Proteome Stability and the Evolution of Long Life, Steven N. Austad, Stephen B. Treaster, Asish Chaudhuri

11:00 a.m.-12:30 p.m. | Swan 10 (S)
BS Section Business Meeting and Award Presentation
Fee: $20 (lunch included), separate registration required
Join your colleagues at the section business meeting to celebrate award recipients and our newest fellows. This is also a great opportunity to discover how to get involved in your section’s activities. The fee includes lunch; however, limited general seating is available for those who want to listen and not purchase a meal.

1285 1:00 p.m.-2:30 p.m. | Southern Hemisphere III (D)  BS
Symposium: Endocrine
Chair: Roy Smith
Presentations:
• Sex Steroid Hormones Regulate Effects of Obesity on Alzheimer’s-Related Neuropathology, Christian Pike
• Hormonal Activity in Development and Healthy Aging, Michał Masternak
• Reversing the Negative Impact of Hormonal Changes During Aging, Roy Smith

1320 1:00 p.m.-2:30 p.m. | Southern Hemisphere II (D)  ID
Symposium: Aging as a Lifelong Process—NIH Funding Opportunities for Early-Career Scientists
Chair: Marie A. Bernard
Discussant: Richard Hodes
What types of research is the National Institute on Aging (NIA) funding? How can early-career investigators get funded by NIA? Who do I need to speak with at NIA? As a graduate of the NIA sponsored Butler-Williams Scholars Program (formerly the Summer Institute on Aging Research), what other opportunities are there with NIA? How does one become a Butler-Williams Scholar? This session will address these questions, and more. In addition, attendees will learn about the latest research findings from the NIA, get an update on funding mechanisms, and have the opportunity to interact with NIA representatives from the Office of the Director and from the different NIA extramural divisions.

1430 3:00 p.m.-4:30 p.m. | Southern Hemisphere III (D)  BS
Paper: Improved Aging via Manipulation of Diet, Hypoxia, and Gene Expression
Chair: Benjamin Eaton
Presentations:
• Resistance to Diet-Induced Metabolic Disturbances Is Associated With Maintenance of Memory in the Aging Lou Rat, Pierrette Gaudreau, Guylaine Ferland, Oriane Lié, Caroline Ménard
• SKN-1 and Nrff2 Couples Proline Catabolism With Lipid Metabolism During Nutrient Deprivation, Shanshan Pang, Dana Lynn, Sean Curran
• FMO-2 Increases Longevity and Improves Healthspan Downstream of Hypoxic Signaling, Scott Leiser, Matt Kaeberlein
• Peptides Regulate Gene Expression During Ageing, Vladimir Khavinson, Natalia Linkova
• Continuous Glucose Monitoring With Longevity Extending Interventions, Daniel Smith, Samir Rana, Victoria Gibbs, Nathan Miyasaki, Inga Kadish, Thomas van Groen, Rachel Brewer

1470 3:00 p.m.-4:30 p.m. | Southern Hemisphere II (D)  ID
Symposium: NIA Symposium for Senior Researchers—A Conversation With Senior Leadership
Chair: Marie A. Bernard
Discussant: Richard Hodes
The National Institute on Aging is targeting established researchers with an opportunity to meet and interact with the NIA’s senior staff. In this symposium, NIA’s senior staff will hold a question and answer session, discuss the current funding environment, and provide a forum for discussion among the research community. Symposium attendees will also learn about new updates on current funding priorities and future research foci of the NIA. NIA senior staff look forward to the opportunity for interaction.

5:00 p.m.-7:30 p.m. | Southern Hemisphere III (D)
Irving S. Wright and Vincent Cristofalo “Rising Star” Award Presentation, Lecture, and Reception
Vincent Cristofalo “Rising Star” Award in Aging Research Lecture: Amy Wagers, PhD, Harvard University and Harvard Stem Cell Institute, Professor of Stem Cell and Regenerative Biology, will present the award lecture, titled “Reversing Dysfunction in Aging Tissues.”
Irving S. Wright Award of Distinction Lecture: Leonard Guarente, PhD, MIT Cambridge MA, Novartis Professor of Biology, Director of the Glenn Center for Aging Research at MIT, and an affiliate of the Koch Institute for Integrative Cancer Research, will present the award lecture, titled “Sirtuins and NAD+ in Aging and Diseases.”
These awards are given by American Federation for Aging Research (AFAR) Inc.
1730  8:00 a.m.–9:30 a.m. | Southern Hemisphere III (D)  BS
Symposium: Metabolism, Microbes, and Immunity
Chair: Janko Nikolich Zugich
Presentations:
• Cells, Organs, and People Aging With HIV: Where Does It All Lead?, Kevin High
• Immunometabolic Control of Age-Related Inflammation, Vishwa Dixit
• Metabolic and Transcriptional Defects in Old T Cells and Approaches to Reverse Them, Janko Nikolich Zugich, Kristin Renkema, Jason Pugh, Lydia Lutes, Jennifer Uhrlaub, Dragana Nikolich-Zugich, Megan Smither, Emily Goldberg

10:00 a.m.–11:30 a.m. | Pacific Hall B (D)
Kent and Kleemeier Lectures
The Donald P. Kent Award Lecture will feature an address by the 2014 Kent Award recipient, Marie A. Bernard, MD, of the National Institute on Aging, National Institutes of Health titled “A Gerontologist’s View of Wonderland—The Impact of Scientific Imagination.” The Kent Award is given annually to a member of the Gerontological Society of America who best exemplifies the highest standards of professional leadership in gerontology through teaching, service, and interpretation of gerontology to the larger society.

The Robert W. Kleemeier Award Lecture will feature an address by the 2014 Kleemeier Award recipient, Laura L. Carstensen, PhD, of Stanford University, titled “Taking Time Seriously in Life-Span Development.” The Kleemeier Award is given annually to a member of the Gerontological Society of America in recognition for outstanding research in the field of gerontology.

1865  11:45 a.m.–2:45 p.m. | Atlantic Hall (D)  BS
Poster: Interventions to Prevent Age-Related Decline
Presentations:
229 Walnuts in the Diet Reduce the Levels of Soluble Oligomers of Amyloid Beta (Aβ) and Increase Aβ Clearance From the Brain in a Transgenic Mouse Model of Alzheimer’s Disease, Abha Chauhan, Sangita Mehta, Li Li Jia, Pankaj Mehta, Ved Chauhan
230 Reasons for Use of Complementary and Alternative Medicine for Arthritis by Older Women, Elizabeth Tait, April Tallant
231 Can a Workplace Intervention Change Employees’ Morning Cortisol?, David Almeida, Soomi Lee, Kimberly Walter, Katie Lawson, Orfeu Buxton
232 RTEF-1 Prevents H2O2-Induced Senescence in Human Umbilical Vein Endothelial Cells Through Klotho Activation, Ping He, Shan Sun, Benling Qi, Tongmeng Guo, Xiaohua Wu, Bei Cheng
233 Fish Oil Supplementation Is Associated With Improved Physical Function and Reduced Mobility Disability, David Guntermann, Don Hire, Walter Ambrosius, Stephen Kitchevsky, Marco Pahor, Robert Axtell, Anne Newman, Todd Manini

1995  1:00 p.m.–2:30 p.m. | Southern Hemisphere III (D)  BS
Symposium: Immune Aging
Chair: Bonnie Blomberg
Presentations:
• Regulation of an Antibody/Vaccine Response With Age, Bonnie Blomberg, Alain Diaz, Daniela Frasca, Maria Romero
• Inflamm-Aging and the Pulmonary Inflammatory Response, Elizabeth Kovacs, Luis Ramirez, Jill Shults, Joslyn Albright, Brenda Curtis
• The T Cell Receptor Repertoire in Healthy Aging, Jörg Goronzy, Qian Qi, Cornelia Weyand

3:00 p.m.–4:30 p.m. | Mockingbird 2 (S)
TAME: A Study Addressing Biology-Based Intervention for Delaying Clinical Outcomes in Older Adults
TAME (Targeting Aging with Metformin) is a novel double blind placebo control study designed to demonstrate that a drug targeting the biology of aging can prevent multi-morbidities of aging. The importance of this trial is also in working with the FDA to recognize aging and its morbidities as target; thus, encouraging pharmaceutical companies to enter the field and develop even better treatments. We are at the stage of identifying appropriate centers.

2155  3:00 p.m.–4:30 p.m. | Southern Hemisphere III (D)  BS
Fondation Ipsen Longevity Prize Award Lecture by Steven Austad: Broadening the Bestiary: What a Nontraditional Species Can Contribute to Understanding Aging
Chair: Yves Christen
Co-Chair: Thomas Kirkwood
Discussant: Caleb Finch
**2310 5:00 p.m.-6:30 p.m. | Southern Hemisphere III (D)**  
**Symposium: Geroscience**  
**Chair: Felipe Sierra**  
**Presentations:**  
- Examining the Interface Between Aging and Age-Related Diseases, Laura Niedernhofer, Tania Rozgaja, Aditi Gurkar, Xuesen Li, Jing Zhao, Janine Kruit, Yinsheng Wang, Paul Robbins  
- Genetics of Aging Phenotypes Over the Life Course: A Population Perspective, Joanne Murobito  
- Protein Indigestion in Aging Neurons and Neurodegenerative Disease: How Do You Spell Relief?, Ralph Nixon

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**2445 8:00 a.m.-10:00 a.m. | Southern Hemisphere III (D)**  
**Symposium: Transposable Elements and Epigenetic Regulation of the Genome During Aging**  
**Chair: Stephen Helfand**  
**Co-Chair: Gil Atzmon**  
**Presentations:**  
- Retrotransposons as Agents of Somatic Diversity, Disease, and Aging, Stephen Helfand  
- Early Life Programming of Drosophila Physiology and Lifespan, William Ja, Kimberley Bruce, Sany Hoxha  
- Recent Results on the Epigenetic Clock, Steve Horvath  
- What Role Does the Environment Play in Longevity? Epigenetic Approach, Gil Atzmon

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**2485 10:00 a.m.-11:30 a.m. | Southern Hemisphere III (D)**  
**Symposium: Molecular Signatures of Aging: From Bioinformatics to Translational Geroscience**  
**Chair: Daniel Belsky**  
**Co-Chair: Alan Cohen**  
**Discussant: Nir Barzilai**  
**Presentations:**  
- Predicting Aging Patterns With Profiles of Biomarkers in Long Life Family Study Participants, Paola Sebastiani, Jenny Sun, Mary Feitosa, Christina Wassel, Amy Matteini, Bharat Thyagarajan, Thomas Perls  
- Complex Interactions Between Inflammation and Metabolic Hormones During Aging, Vincent Morissette-Thomas, Alan Cohen, Éléonor Riesco, Luigi Ferrucci  
- Molecular Signatures of Aging in Young Adults: Functional and Subjective Correlates, Daniel Belsky, David Corcoran  
- Genetic Heterogeneity and Its Role in GWAS of Human Aging and Longevity, Anatoly Yashin, Deqing Wu, Liubov Arbeeva, Konstantin Arbeev, Mikhail Koltun, Alexander Kulminski, Svetlana Ukraintseva  
- Can Epigenetic Age Predict Future Onset of Lung Cancer?, Morgan Levine, Devin Absher, Themistocles Assimes, Steve Horvath

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**Minority Investigator Travel Awardees**

- Tyesha Burks  
  Johns Hopkins University School of Medicine
- Emmanuel Williams  
  University of Arkansas for Medical Sciences
- Michael Petr  
  National Institute on Aging, NIH