

Center on Aging and the Life Course Bill and Sally Hanley Hall 1202 W. State Street West Lafayette, IN 47907-2055

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**Comparative Longevity: From Cells to Societies** Friday, September 23, 2011 1:15 - 5:00 pm Dean's Auditorium, Pfendler Hall - Preregistration is required.

Aging and senescence occur at different rates between and within species. The quest for healthy aging involves many factors, including biological, psychosocial, environmental and demographic processes. This symposium features eminent scholars in the biology of aging and the demography of longevity to examine aging in different species and across cultures. The comparative lens for studying aging reveals new discoveries about biological risk and adaptation. An integrative discussion with Daniel K. Mroczek, PhD, Professor of Human Development and Family Studies, and David J. Waters, DVM, PhD, Professor of Veterinary Clinical Sciences and Associate Director, Center on Aging and the Life Course, Purdue University will follow the presentations. The symposium will close with a poster session and reception. Register online at Purdue Conferences.

upcoming national gerontology conferences...

International Reminiscence and Life Review Conference 2011 November 16-18, 2011

The 64<sup>th</sup> Annual Scientific Meeting of The Gerontological Society of America November 18-22, 2011 Boston, MA

Association for Gerontology in Higher Education 38th Annual Meeting and Educational Leadership Conference February 23-26, 2012 Arlington, VA

Save a Tree

Get Aging Exchange, the newsletter of the Center on Aging and the Life Course, via email. Just go to our website: www.purdue.edu/aging and click on Get an Email Newsletter. Enter your email address and we'll stop the paper version of your newsletter and send it to you electronically, instead. If for any reason you would like to stop receiving the newsletter altogether, just let us know. Thanks!



Longevity

Steven N. Austad, PhD, Professor in the Department of Cellular and Structural Biology and the Barshop Institute for Longevity & Aging Studies at the University of Texas Health Science Center, San Antonio

Trends in U.S. Longevity: A Global Perspective Eileen Crimmins, PhD, AARP Professor of Gerontology at the University of California, Director of the USC/UCLA Center on Biodemography and Population Health

## Upcoming CALC Colloquia -- 12:30 pm on Fridays

10/14 Hanley Hall 136 Ken Ferraro, PhD, Distinguished Professor of Sociology and Director, CALC Childhood Misfortune and Disease in Middle and Later Life: Early Origins of Comorbidity?

- 11/11 Matthews 111 Implications for Aging
- 12/2 Matthews 111

Reservations are required 36 hours in advance. Email Ann Howell at howelle@purdue.edu to reserve your spot.

### Methusaleh's Zoo: The Biology of Exceptional



Elizabeth A. Strickland, PhD, Associate Professor of Speech, Language, and Hearing Sciences Behavioral and Modeling Estimates of How the Auditory System Adjusts to Backgound Noise:

Juyeon Kim, PhD, Post-Doctoral Fellow, National Opinion Research Center, University of Chicago





## **CALC Welcomes you to Hanley Hall!**

The Center on Aging and the Life Course has moved into the beautiful brand new Hanley Hall on the west end of the West Lafayette campus. Our spacious, light-filled suite on the southwest corner of the third floor gives the Center a whole new look and a whole new outlook! We have gerontology graduate students from sociology, family studies, statistics, health & kinesiology, interdepartmental nutrition, and consumer sciences and retailing all working in the same proximity, sharing offices and ideas about aging research from the perspective of their home disciplines. Students writing their dissertations share a special office.

## You are invited

**CALC Open House** 310 Hanley Hall

Friday, October 14 1:30 pm - 2:30 pm (after Dr. Ferraro's colloquium)



### **Steering Committee 2011–2012**

Kenneth F. Ferraro, Director David J. Waters, Associate Director Peggy Favorite, Assistant Director Kathy Berlin Alexander Francis Jeffrey M. Haddad Kimberly S. Plake Laura P. Sands Nicholas Turiano Sharon R. Williams Karen S. Yehle

### Center on Aging and the Life Course Suite 310 Hanley Hall 1202 W. State Street West Lafayette, IN 47907-2055 765-494-9692

www.purdue.edu/aging See us on facebook, linking research and people.

Ann Howell, Secretary John Yamich, Website Support Laura P. Sands, Joseph Thomas, and Bruce A. Craig, nursing, pharmacy practice, statistics, from PHS-NIH National Institute on Aging, "Prognostic Significance of Insufficient ADL Help on Health Outcomes/Utilization." \$279,338.

Laura P. Sands, Joseph Thomas, and Bruce A. Craig, nursing, pharmacy practice, statistics, from PHS-NIH National Institute on Aging, "Prognostic Significance of Insufficient Activity of Daily Living (ADL) Help on Health Outcomes/Utilization." \$18,995.

Cleveland G. Shields, child development and family studies, from PHS-NIH National Cancer Institute. "Social and Behavioral Influences on Clinical Communication and Pain Management." \$592,096.

Anne Smith, Christine M. Weber-Fox, Lisa A. Goffman and Howard N. Zelaznik. speech, language and hearing sciences, consumer and family sciences, health and and kinesiology, from PHS-NIH National Institute on Deafness and other Communication Disorders. "Physiological Correlates of Stuttering." \$516,343.

Anne Smith, Christine M. Weber-Fox, Lisa A. Goffman, and Howard N. Zelaznik, speech, language and hearing sciences, consumer and family sciences, health and kinesiology, from PHS-NIH National Institute on Deafness and Other Communication Disorders." Physiological Correlates of Stuttering." \$39,636.

Joseph Thomas, III, pharmacy practice, from Rehabilitation Hospital of Indiana. "Outcomes and Perceived Needs among Individuals with TBI and SCI (Traumatic Brain Injury and Spinal Cord Injury) in Indiana." \$19,555.

Connie M. Weaver, George S. Jackson, Elsa M. Janle, and McCabe, George P; nutrition science, physics, statistics, from National Institutes of Health, "Bridge Funding for Purdue/UAB Botanicals Center for Age Related Diseases." \$292,859.

Connie M. Weaver and Cindy H. Nakatsu, nutrition science, agronomy, from Tate & Lyle Ingredients Americas, Inc., "SCF and Calcium Utilization in Adolescents." \$344,932.

Connie M. Weaver, nutrition science, from Mount Sinai School of Medicine, "Protective Roles of Grape Derived Polyphenols in Alzheimer's Disease." \$387,255.

Connie M. Weaver, nutrition science, from Mount Sinai School of Medicine, "Protective Roles of Grape Derived Polyphenols I Alzheimer's Disease." \$46,546.

Connie M. Weaver, nutrition science, from Mount Sinai School of Medicine, "Protective Roles of Grape Derived Polyphenols in Alzheimer's Disease; Amendment 1." \$9,877.

Connie M. Weaver, Mario Ferruzzi, Elsa M. Janle, and M. D. Rafferty, nutrition science, food science, chemistry, from Mount Sinai School of Medicine." Protective Roles of Grape-Derived Polyphenols in Alzheimer's Disease; Amendment 1." \$111,350.

Betty A. Bugusu, Maria I. Marshall, Bruce R. Hamaker, John H. Lumkes, Vahid Motevalli, S. S. Nielsen and Sharon R. Williams; food science, agricultural economics, agricultural and biological engineering, mechanical engineering technology, anthropology, from Purdue University, "Development of Markets for Local Food Crop to Enhance Incomes and Improve Food Security for Smallholder Farmers in East Africa." \$24,479.

Sharon R. Williams, anthropology, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), "Are Villages the Future for Aging Communities: A Comparative Analysis of Health Aging and Social Support among Intentional Communities of Older Adults in the US." \$17,059.

Sharon R. Williams, anthropology, from World Health Organization, "Dried Blood Spot Development and Validation for Whos Study of Global Aging and Adult Health." \$188,704.

Wei Zheng and Yulia N. Phshkar, health sciences, physics, from PHS-NIH National Institute of Environmental Health Sciences, "Choroid Plexus as a Target in Metal-Induced Neurotoxicity." \$311,985.

Yulia N. Pushkar and Wei Zeng, physics, health sciences, from Showalter Trust, "Analysis of Molecular Mechanisms of Adult Neurogenesis and Brain Repair by Synchrotron Based Biomedical Imaging and Spectroscopy." \$66,000.

Wei Zheng, health sciences from Columbia University, " Environmental Epidemiology of Essential Tremor; Amendment 3." \$66,190.

Wei Zheng and Yulia N. Pushkar, health sciences, physics, from PHS-NIH National Institute of Environment Health Science, "Choroid Plexus as a Target in Metal-Induced Neurotoxicity." \$31.198.



## Lynn Fellowships 2011-2012

The Graduate School has allocated funding for two Lynn Fellowships for interdisciplinary studies in the Gerontology Program. Used as a recruitment tool for promising students in the dual-title PhD program, CALC has awarded two fellowships for the upcoming school year to:

### **Brittney Muir** Health & Kinesiology Dr. Shirley Rietdyk, advisor

### Ranjini Mohan

Speech, Language, and Hearing Sciences Dr. Christine Weber-Fox, advisor

We look forward to working with these new gerontology students and welcome them to the Center on Aging and the Life Course.

Chang H. Kim, Ourania M. Andrisani, and Harm HogenEsch, comparative pathobiology, basic medical science, veterinary medicine-administration, from PHS-NIH National Institute of Allergy and Infectious Diseases, "FoxP3+ Regulatory T Cells of Mucosal Tissues." \$298,319.

Chang H. Kim and Harm HogenEsch, comparative pathobiology, from PHS-NIH National Institute of Diabetes and Digestive and Kidney Diseases, "Therapeutic Delivery of Foxp3+T Cells to the Intestine." \$264,313.

Harm HogenEsch, School of Veterinary Medicine-Administration, from Faxform, LLC, "Testing for Streptococcus Pyongenes Vaccine Candidates." \$9,422.

Chang H. Kim, Auriana M. Andrisani, and Harm HogenEsch, comparative pathobiology, basic medical science, veterinary medicine administration, from PHS-NIH National Institute of Allergy and Infectious Diseases, "FoxP3+ Regulatory T Cells of Muscola Tissues." \$29,833.

Jessica E. Huber, speech, language, and hearing science, from PHS-NIH National Institute on Deafness and Other Communication Disorders, "Use of External Cueing to Treat Hypophonia in Parkinson's Disease." \$330,500.

Jessica E. Huber, speech, language and hearing sciences, from PHS-NIH National Institute on Deafness and Other Communication Disorders, "Use of External Cueing to Treat Hypophonia in Parkinson's Disease." \$24,972.

Jessica E. Huber, speech, language and hearing sciences, from Purdue Research Foundation, Office of the Vice President for Research (OVPR), "Enhancing Speech Naturalness Using Respiratory Treatment in Parkinson's Disease." \$17,059.

Richard D. Mattes, Mario Ferruzzi, and George P. McCabe. nutrition science, food science, statistics, from PHS-NIH National Institute of Diabetes and Digestive and Kidney Diseases, "Pre-ingestive Influences on Solid and Fluid Food Intake in Lean and Obese Adults." \$403,506.

Richard D. Mattes, Mario Ferruzzi, and George P. McCabe, foods 7 nutrition, food science, statistics, from PHS-NIH National Institute of Diabetes and Digestive and Kidney Diseases, "Pre-ingestive Influences on Solid and Fluid Food Intake in Lean and Obese Adults." \$27,421.

Michael D. Murray, pharmacy practice, from University of Illinois at Champaign-Urbana, "Health Literacy and Aging: A Process Knowledge Approach." \$65,660.

Robert E. Novak, speech, language, and hearing sciences, from Indiana Lions Speech and Hearing, Inc., "Clinical Support for Speech-Language-Audiology Services from the Indiana Lions Club." \$2.000.

Terry L. Powley and Robert J. Phillips, psychological science, from PHS-NIH National Institute of Diabetes and Digestive and Kidney Diseases. "Gastrointestinal Tract Innervation: Patterns of Aging." \$288,740.

Terry L. Powley and Robert J. Phillips, psychological sciences, from PHS-NIH National Institute of Diabetes and Digestive and Kidney Diseases, "Gastrointestinal Tract Innervation: Patterns of Aging." \$28,873.

Amber L.Pond and Gregory H. Hockerman, basic medical science, medicinal chemistry and molecular pharmacology, from PHS-IH National Institute of Arthritis and Musculoskeletal and Skin Diseases, "Role of Mergl 1 a K+ Channel in the Onset of Skeletal Muscle Atrophy." \$73,200.

Fred E. Regnier, chemistry, from Indiana University, "Amendment #2 to MMRF (Multiple Myeloma Research Foundation), Year 3 Incremental Funding." \$40,845.

On March 23, 2010, the Research Team on Healthy Aging, Yonsei University, and the Center on Aging and the Life Course, Purdue University, signed a memorandum of understanding and agreement, to encourage exchanges of research activities between the two parties and to enhance collectively research on health and aging in both the United States and South Korea.

The International Symposium on Successful Aging was the first conference since the memorandum, and both parties will take turns hosting an annual research workshop on health and aging. Graduate students are encouraged to pursue short-term internships at the partner university.

In April 2011, Lindsay Rinaldo, Patricia Morton, and Seoyoun Kim-students in the dual-title PhD program-traveled to Seoul, Korea to present at the International Conference on Successful Aging. The conference was a two-day seminar held at Yonsei University featuring presentations on a wide range of topics related to *successful aging*. Notable speakers included Ken Ferraro (Purdue University), Linda Waite (University of Chicago), and Craig Wilcox (Okinawa International University), in addition to academics and professionals who represented universities in the United States, Korea, Japan, China, and Taiwan.

Speaking from the perspective of the graduate students, this was a remarkable opportunity for us all. We can remember being asked by Ken Ferraro to accompany him to the conference and feeling a tremendous sense of honor. This would be our first international conference and, moreover, an incredible opportunity to represent not only Purdue University, but also the Center on Aging and the Life Course. On the plane to Seoul, the 13-hour flight was made easier by our anticipation of the conference and the city of Seoul. Of course, upon arriving in Seoul, neither disappointed. We were quickly immersed in the culture – from the cuisine to the history and architecture - and the conference provided the opportunity to share our research with an international audience, as well as hear others present on aging-related topics from multiple perspectives and diverse fields of study. We gained insight into how to think about successful or optimal aging from a multi-dimensional perspective, as our knowledge was broadened by research on health over the life course, biomarkers of successful aging, and the importance of the cultural context, as demonstrated by the cross-cultural differences in aging older adults' social relationships within the family and the heterogeneity in mortality rates. In addition to contributing to our own understanding of successful aging, the conference enabled us to meet others in the field of gerontology. Most memorably, at the end of each day, all conference participants shared in an evening meal outside the conference venue. This time was used to reflect on the events of the day, network, and simply learn more about each other. As faculty and students sat together at the table passing dishes to one another, we used this time to establish meaningful relationships that today reach far beyond Seoul. Reflecting on this experience, we remember the learning, the meeting of international scholars in gerontology, and the feeling of being in a country more than 6,000 miles away and sharing in a global understanding of *successful aging*. We are grateful for this experience, and the ways we have benefitted both personally and professionally.

Memorandum of Understanding between Yonsei University and CALC at Purdue





# Ann Howell - for example

The Center on Aging and the Life Course wants to highlight examples of optimal aging, and the obvious first candidate sits at the front desk of the Center. No, she's not retiring (again) from Purdue anytime soon, rather Mrs. Ann Howell is a vital part of CALC, supporting and enabling our mission in myriad ways. When asked to describe Ann, various students, faculty, and staff gave her high praise.



"I first met Ann Howell, when she was a temporary secretary to the Head of Sociology. I marveled at her work ethic, how she got things done, and her cheery

disposition. Thinking ahead to growing the Center on Aging and the Life Course, I thought Ann would be the ideal secretary for our center. When her temporary assignment in Sociology ended, I informed her of our plans to grow CALC and asked if I could contact her if I could secure the funding for a position. We obtained the necessary support and Ann sailed to the top of the pool of candidates.

Ann never ceases to amaze me, both as a secretary and as a human being. She is as reliable as a fine Swiss watch religiously arriving at 7:50am—and ready to work. Her copy-editing skills are outstanding, and she is willing to take on new challenges. Each of us learns from Ann; and she is the perfect fit for CALC." Ken Ferraro, Director

"Ann Howell is a jewel. Her work ethic, moral values, and positive attitude shine as an example of professionalism. Ann has the courage to meet the challenges of change, and embraces opportunities to learn new things. Ann is also a fine person. Whether she is contributing to the alto section in the church choir, driving cross country to visit her children, or tending someone's pet, Ann's genuine care and concern for others shines in everything she does. Her sunny disposition and sense of humor add so much to CALC. Good deal!" Peggy Favorite

"Ann never fails to amaze me. She is one of the very best role models for aging I have ever had the pleasure to know. Few people have her zest for life, keen insight, determination, and wry sense of humor at any age. It is a joy to have a reason to call the CALC office just to have a few minutes to talk to her—I always start smiling the minute she picks up the phone." Jill Suitor

"Mrs. Howell is very helpful, pleasant and kind. Whenever I visit the CALC office, I look forward to seeing and talking with her." Lori M. Ward

"I have been really blessed to know Ann these past years at Purdue. She has always been so helpful, and her cheerful attitude and sense of humor have brightened my day every time I see her. Thank you, Ann, for being so special!" Aleda Chen

"Describing Ann Howell is really quite easy: competent, ethical, kind, considerate, witty, and dedicated. Ann is a role model for excellent aging and a meaningful life course." Gerry Hyner



## CALC faculty associates' research awards

Alan M. Beck, Charles T. Watkinson, Gretchen Stephe F. Yatcilla, and Mark P. Newton; school of veterinary r administration, university press, library administration Human Animal Bond Research Initiative Foundation ( "Human Animal Bond Research Initiative Digital Libra (HABRI) Central." \$831,535.

Wayne W. Campbell and Cheryl L. Armstrong, nutrition science, from National Pork Board, "The Effects of Protein Quantity and Source on Postprandial Appetite and Plasma Amino Acid Profile." \$16,864.

Wayne W. Campbell, nutrition science, from U.S. Department of Agriculture. "Interdepartmental Nutrition Program at Purdue Fellowship Application in the Discipline of Human Nutrition and the Area of Obesity and Diet." \$234,000.

Wayne W. Campbell, and Cheryl L. Armstrong, nutrition science, from National Cattlemen's Beef Association. "Increased Protein Intakes from Predominately Meat- vs. Soy Protein/Pulse-Based Foods: Effects on Daily and Postprandial Appetite During Energy Restriction-Induced Weight Loss (Addendum)." \$10,000.

Wayne W. Campbell, Ulrike Dydak, Arthur D. Rose, and Thomas M. Talvage, nutrition science, health sciences, biological sciences, electrical and computer engineering, from American Egg Board, "Effect of Increased, Egg-Based Protein Intake on Muscle Composition, Metabolic Health and Systemic Inflammation in Obese Older Adults." \$164,855.

Kee Hong Kim, Ji-Xin Cheng, and Wayne W. Campbell, food science, biomedical engineering, nutrition science, from Showalter Trust, "Role of Glycated Dietary Proteins in Lipid Dysfunction of Adipose Tissue and Muscle in Aging." \$75,000.

John A. Christian, comparative pathobiology, from Wyeth Averst Pharmaceuticals, "Cytology Resource Center." \$1,600.

John A. Christian, comparative pathobiology, from Wyeth Ayerst Pharmaceuticals, "Cytology Resource Center." \$500.

Nancy E. Edwards, nursing, from PHS-NIH National Center for Health resources and Services Administration, "Rural Advanced Practice Nursing: Post BSN to NS/DNP" \$273.

Nancy E. Edwards, nursing, from Health Resources and Services Administration, "2011-12 Advanced Education Nursing Traineeships." \$34,581.

January - June 2011

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Stephen J. Elliott, industrial technology, from National Institute of Standards and Technology. "Research on Biometric Image Quality, Standards, and Performance." \$149,335.

Stephen J. Elliott, Elisa Bertino and David Ebert, industrial technology, computer science, electrical and computer engineering, from U.S. Department of Homeland Security, "Biometric Uniqueness and Permanence Analysis." A Discovery Park Award – Cyber Center. \$100,000.

Stephen J. Elliott, Elisa Bertino, and David S. Ebert, industrial technology, computer science, electrical and computer engineering, from U.S. Department of Homeland Security, "Biometric Uniqueness and Permanence Analysis: Amendment 1." A Discovery Park Award – Cyber Center. \$458,307.

James C. Fleet, nutrition science, from PHS-NIH National Institute of Diabetes and Digestive and Kidney Diseases, "Intestinal Calcium Absorption: Molecular Mechanism." \$28,939.

Paul W. Snyder, and James C. Fleet, comparative pathobiology, nutrition science, from Abbott Laboratories, "Pathology Fellowship." \$75,000

Alan M. Friedman, biological sciences, from National Science Foundation, "REU Supplement Funding: III: Small: Collaborative Research: Analysis of Multi-Dimensional Protein Design Spaces with Pareto Optimization of Experimental Designs." Discovery Park Award - Bindley Bioscience Center. \$165,901.

Alan M. Friedman, biological sciences, from National Science Foundation, "REU Supplement Funding III: Small: Collaborative Research: Analysis of Multi-Dimensional Protein Design Spaces with Pareto Optimization of Experimental Designs." Discovery Park award – Bindley Bioscience Center. \$7,000.

Jeffrey M. Haddad, health and kinesiology, from Purdue Research Foundation: Office of the Vice President for Research (OVPR) "Relationship between Balance Cognition and Manual Control in Older Adults." \$17,059.

Richard F. Borch and Harm HogenEsch, medicinal chemistry and molecular pharmacology, comparative pathobiology, from Trast Trust Fund, "Immune Response Enhancement Using Linker-Modified Proteins." \$35,860.