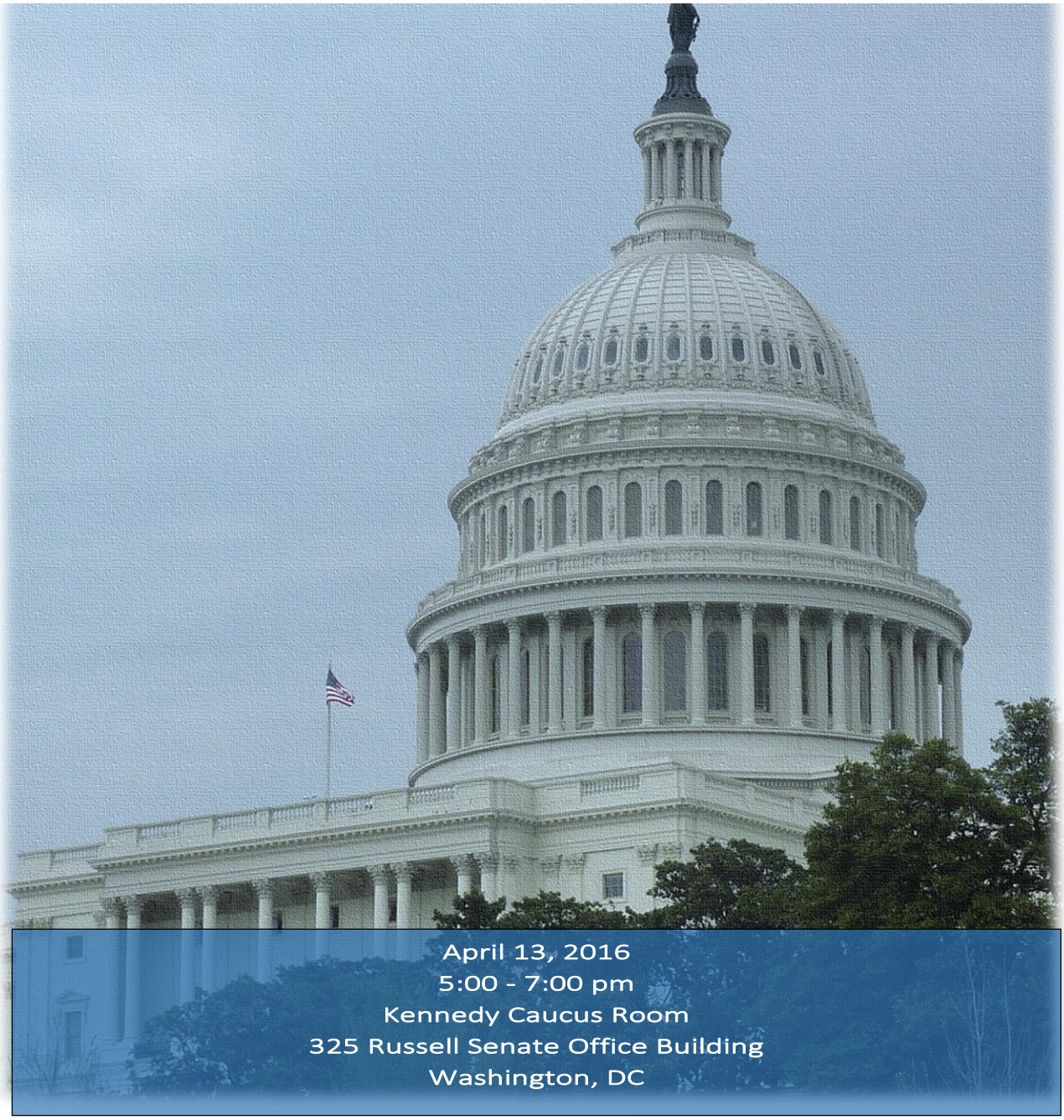
"Wasteful" Research?
Looking Beyond the Abstract

A Congressional Exhibition and Reception



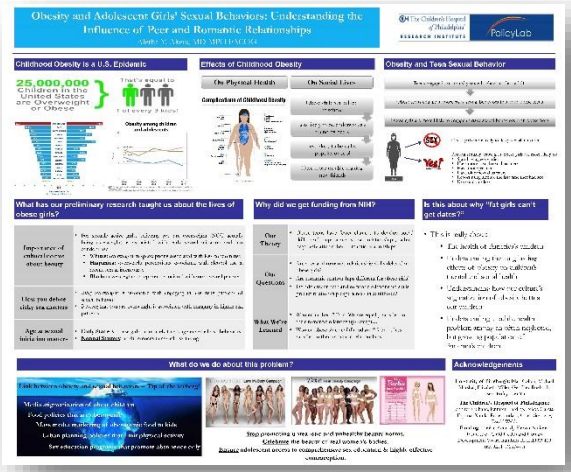
CPR
Coalition to Promote Research
Organizations Committed to Promoting Public Health, Innovation and Fundamental Knowledge Through Scientific Research

CNSF
COALITION FOR NATIONAL SCIENCE FUNDING

The **Coalition to Promote Research** and the **Coalition for National Science Funding** welcome you to this unique poster exhibition. Here you will find posters of NIH- and NSF-funded research that has been tagged "wasteful" either in reports published by members of Congress or in the media. These scientists are eager to tell the story of their research and share with you the importance of their work to societal goals and public health. We are also featuring posters about the NIH and NSF peer/merit review systems, since the projects exhibited here—and many more like them—beat long odds to be funded under very competitive circumstances.

EXHIBITORS

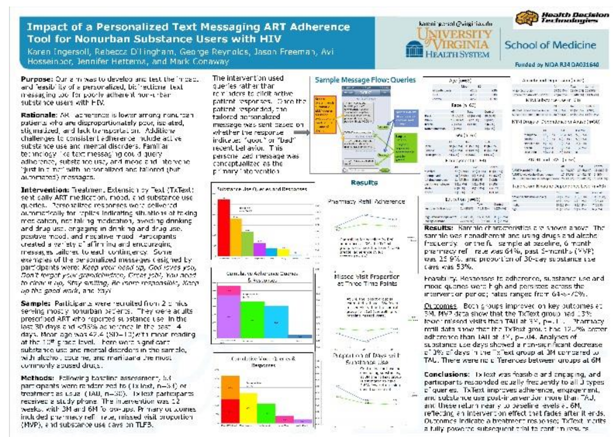
Aletha Akers, MD, MPH, FACOG – Children's Hospital of Philadelphia. Dr. Akers is medical director of Adolescent Gynecology Consultative Services in the Craig Dalsimer Division of Adolescent Medicine at The Children's Hospital of Philadelphia. Her research focuses on improving adolescent reproductive health outcomes and understanding the contextual and health system factors that influence adolescents' sexual and healthcare decisions. Her research is funded by the *Eunice Kennedy Shriver* National Institute for Child Health and Human Development.



Poster Summary: Studies have consistently shown that obese adolescent girls engage in more sexual risk-taking behaviors compared to non-obese girls. Few studies have examined the mechanisms underlying this association. Using secondary data analysis of data from two large, longitudinal cohorts of US adolescent girls, this research examines whether differences in the development of interpersonal social skills or differences in the intimate relationship experiences of obese and non-obese girls explains the higher rates of sexual risk taking among obese girls. Dr. Akers' research on the *Role of Romantic Relationships in the Sexual Behavior of Obese and Non-obese Girls* was targeted in the media with the headline, "Feds Wonder Why Fat Girls Can't Get Dates."

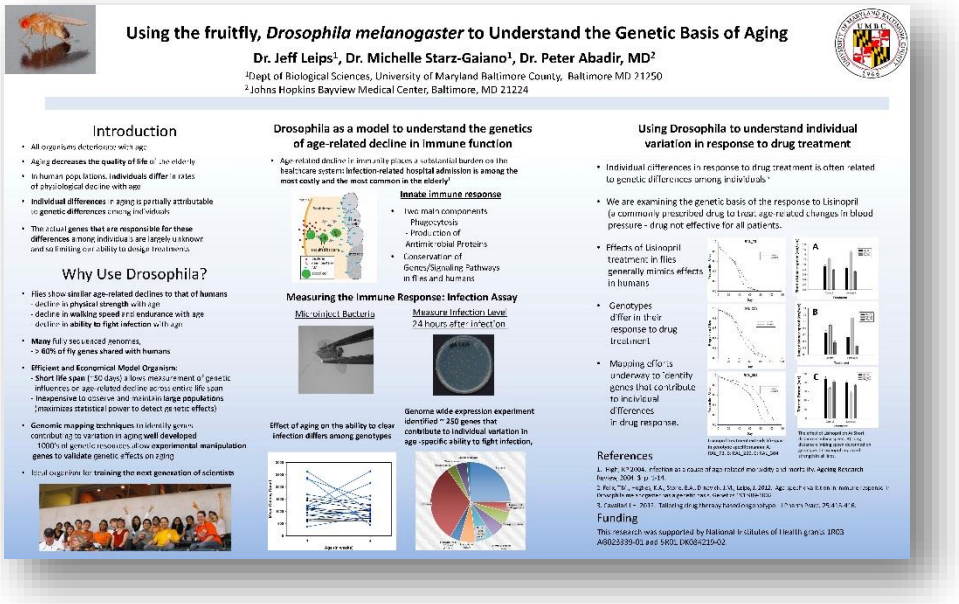
Karen Ingersoll, PhD – University of Virginia School of Medicine.

Dr. Ingersoll is a clinical health psychologist and Associate Professor of Psychiatry and Neurobehavioral Sciences. Her research focuses on the intersection of health and addictive behaviors and on developing methods to improve health and reduce the impact of addictive behaviors in populations living in rural areas. Her specific areas of interest are women's health and addiction and helping people with HIV live longer and healthier lives.



Poster Summary: Two current funded studies test technological approaches to improve health behaviors. The first is an innovative Internet intervention to reduce the risk of alcohol-exposed pregnancy (AEP) and offer new options for women at risk for AEP who do not have access to AEP prevention services. In the second project, her team is developing a novel Internet intervention to help people living with HIV in non-urban areas manage adherence and common life problems that reduce adherence, such as substance use, stigma, low social support, and depression. Dr. Ingersoll's research is funded by the National Institute of Alcohol Abuse and Alcoholism and the National Institute of Drug Abuse. In the project that was identified as "wasteful," Dr. Ingersoll and her team developed a bidirectional text messaging tool for people with HIV and recent substance abuse. The study found this messaging tool resulted in improvements in clinic appointment attendance and adherence to HIV medications. Despite this, her work was labeled wasteful in a media article entitled, "NIH Spent $480,500 to text message drunks."

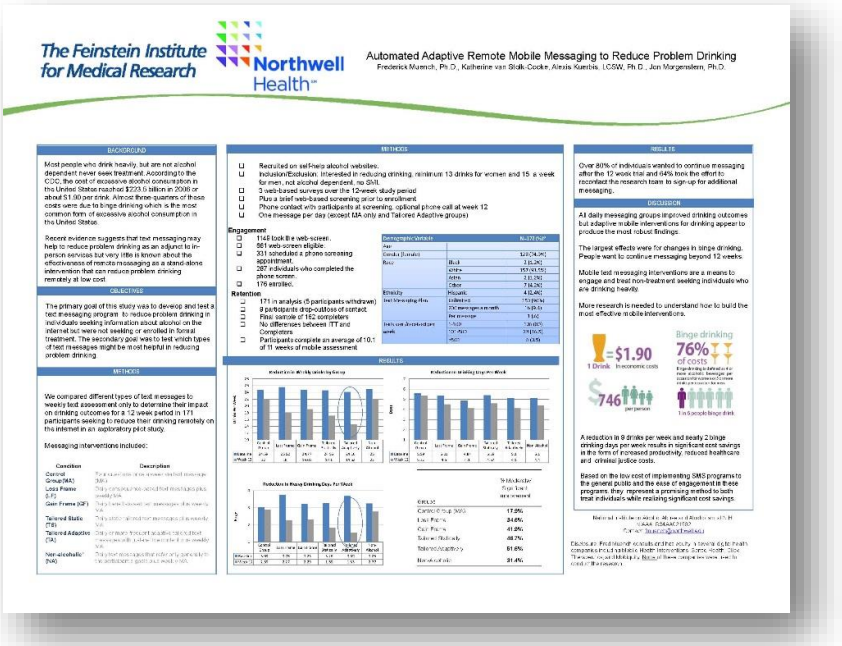
Jeff Leips, PhD — University of Maryland Baltimore County (UMBC). Dr. Leips' research is focused on understanding the genetic basis of natural variation in life history traits using the fruit fly, *Drosophila melanogaster*, as a model organism. He is particularly interested in identifying genes that control age-specific changes in traits that directly contribute to senescence and ultimately limit life span. These traits include age-specific reproduction, immune response and energy storage. He is also co-director of a new undergraduate training program in Biology and Mathematics at UMBC supported by the National Science Foundation.



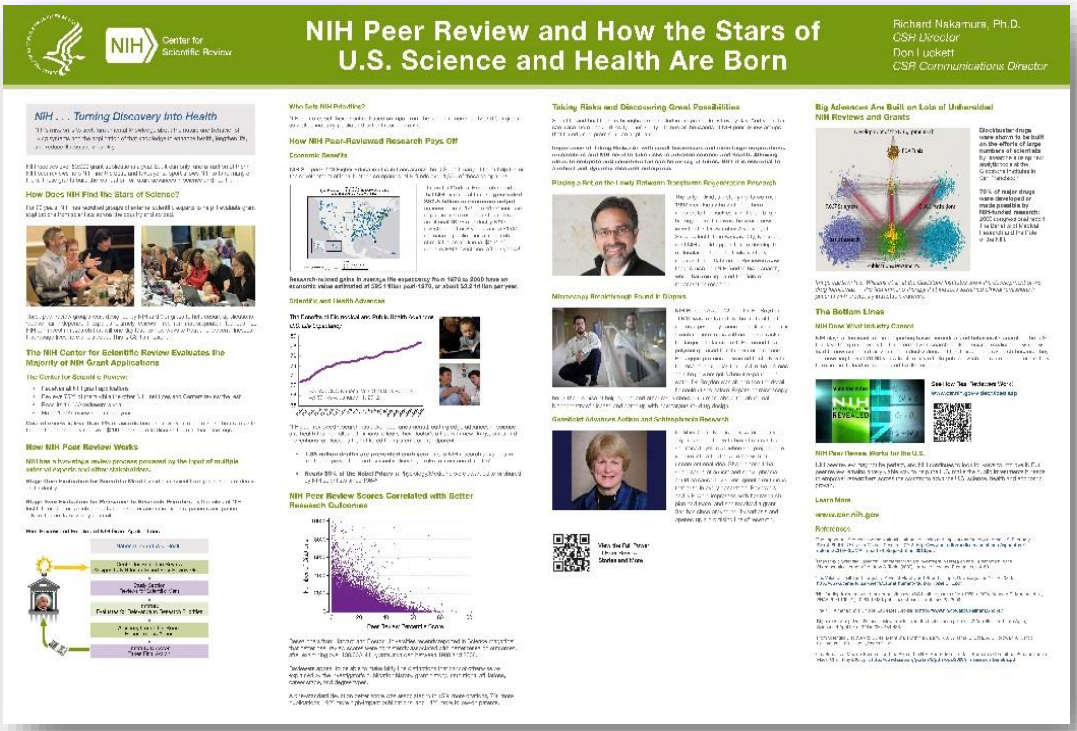
Poster Summary: *Drosophila melanogaster* (the fruit fly) is a scientifically significant model for research. This research has produced important knowledge about genes that cause declines as individuals age. Dr. Leips' research has not been directly targeted, but research with fruit flies was labeled wasteful in the 2008 presidential campaign and in a subsequent 2012 wastebook.

Frederick Muench, PhD – Northwell Health, New York. Dr. Muench, Director of Digital Health, a clinical psychologist, has been developing, studying, and disseminating interventions for physical and mental health problems with a special emphasis on addictive and eating behaviors using technology-based and mobile mediums for nearly 10 years.

Poster Summary: Excessive alcohol consumption has serious personal and public health consequences to the individual and society. Dr. Muench's team created an adaptive text messaging intervention to reduce alcohol consumption and related problems and tested whether tailored adaptive messaging works better than untailored messaging in a randomized controlled trial. Results indicate that these kinds of messages can reduce weekly alcohol consumption and heavy drinking days significantly compared to a control group. His research was labeled wasteful in a media article entitled, "NIH spent $480,500 to text message drunks."



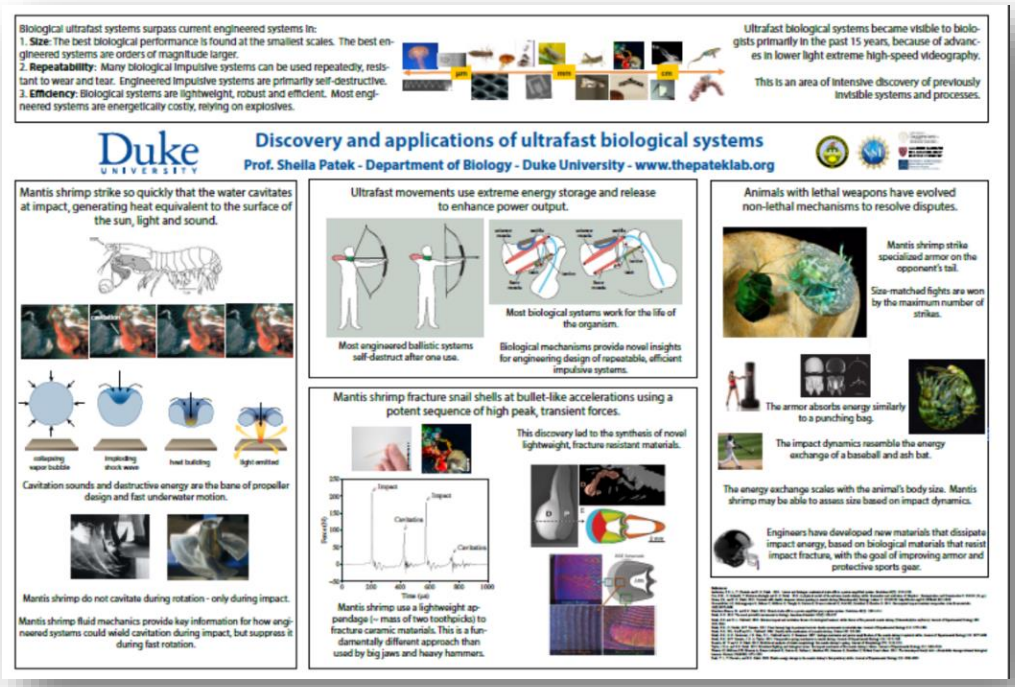
Richard Nakamura, PhD – National Institutes of Health. Dr. Nakamura directs NIH's Center for Scientific Review (CSR), the division of NIH that organizes peer review groups or study sections that evaluate the majority (75%) of the research grant applications sent to NIH. Before accepting the directorship of CSR, Dr. Nakamura had a 32-year career at the National Institute of Mental Health (NIMH), where he served as both its Scientific Director and Deputy Director. He also was Acting Director of the NIMH from 2001 to 2002.



Poster Summary: The Center for Scientific Review holds over 1,500 review meetings a year, involving about 17,000 outside reviewers from the scientific community. In efforts to fine-tune the peer review system in order to identify the best science, NIH recently adopted new guidelines to improve transparency, reproducibility and rigor in scientific applications.

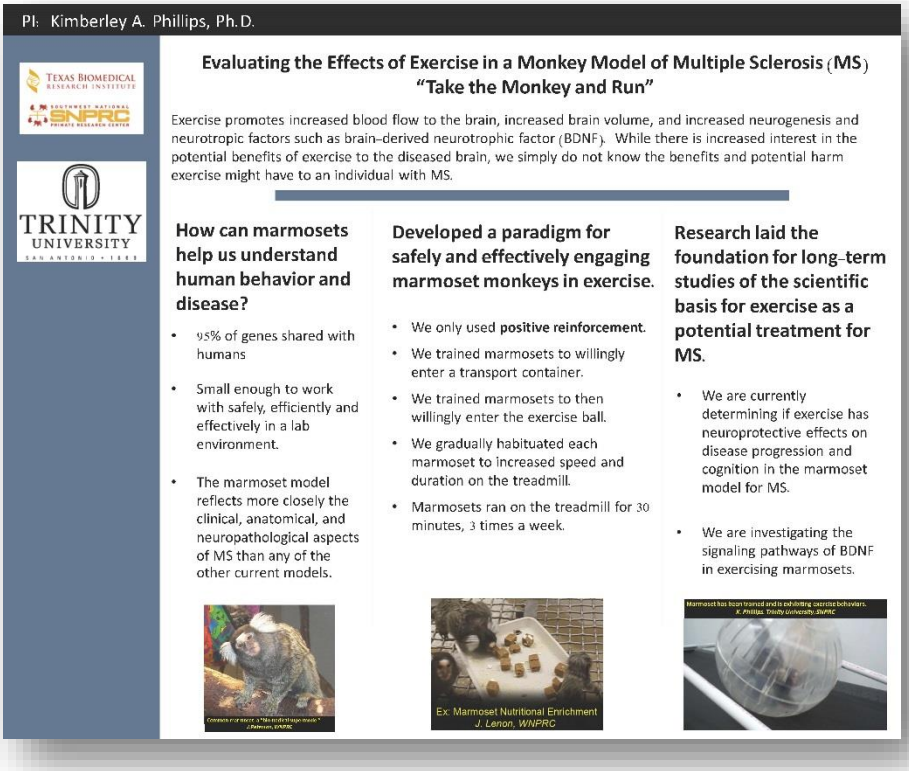
Sheila Patek, PhD – Duke University. A professor of biology, Dr. Patek leads a laboratory that studies the dynamic interplay between evolutionary processes and physics. Dr. Patek studies the evolution of the biomechanical properties of extremely fast motion and underwater bioacoustic systems. Her NSF-funded research is producing new knowledge about how mantis shrimp generate and store extreme force, uncovering basic biomechanical principles that apply across species. The lab also has a grant from the Army Multidisciplinary University Research Initiative.

Poster Summary: Understanding the systems that allow organisms to produce extremely fast motion enables researchers to apply that knowledge to human-engineered systems. In fact, the mantis shrimp has already inspired a new design structure for composite materials, one more impact resistant and tougher than the standard currently used on airplanes. Dr. Patek's research was labeled wasteful in the draft FY 2017 House budget resolution and in a recent wastebook that called it a "Shrimp Fight Club."



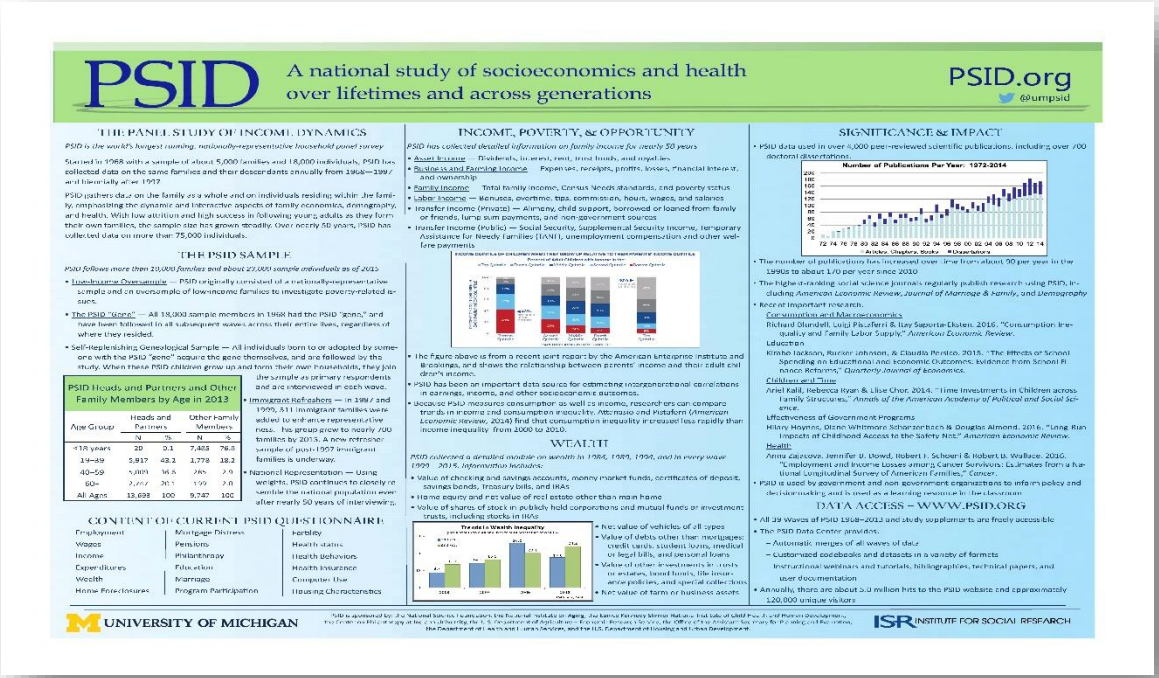
Kimberley Phillips, PhD – Trinity University. Co-chair of the Department of Neuroscience and Professor of Psychology, Dr. Phillips holds additional appointments at the Southwest National Primate Research Center, Texas Biomedical Research Institute and the Research Imaging Institute, University of Texas Health Sciences Center at San Antonio. She studies primate behavior in the field and laboratory, working primarily with capuchin monkeys and marmosets.

Poster Summary: The marmoset model reflects more closely the clinical, anatomical, and neuropathological aspects of multiple sclerosis (MS) than any of the other current model. Dr. Phillips' research training marmosets to safely exercise on a lab treadmill was labeled wasteful in a recent wastebook article titled, "Monkey on a Treadmill." The study was part of a larger funded project to investigate the potential benefits and harm of exercise in a primate model of MS, knowledge that one day may be applied to human populations.



Narayan Sastry, PhD – University of Michigan (UM). A research professor at UM's Survey Research Center and Population Studies Center and adjunct senior social scientist at the Rand Corporation, Dr. Sastry studies the social and spatial dimensions of health, development, and well-being of children and adolescents in the United States and in less developed countries. He is one of the principal investigators of the NSF-funded *Panel Study of Income Dynamics*.

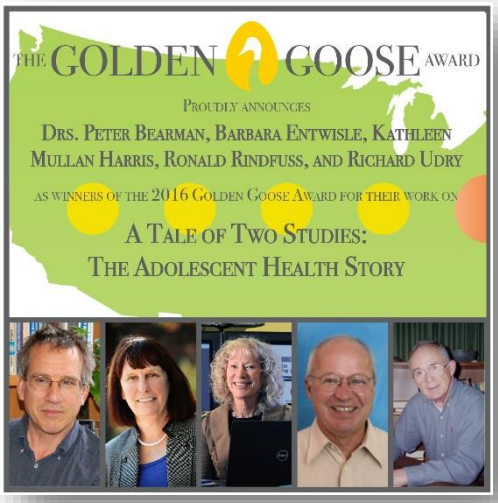
Poster Summary: Since 1968 NSF has supported *The Panel Study of Income Dynamics* (PSID), a longitudinal study of a representative sample of U.S. individuals and the family units in which they reside. The study's long-term span, innovative genealogical design, and comprehensive content have been critical to the fundamental understanding of a wide variety of key social science issues, including those involving life course effects. While Dr. Sastry's research has not been singled out, data from the PSID was featured in a 2011 wastebook article titled "Exactly How Much Housework Does a Husband Create?"



David Scholnick, PhD – Pacific University, Oregon. Dr. Scholnick is professor and chair of biology and teaches undergraduate courses in General Biology, Animal Physiology, and Marine Biology for both science and non-science majors. His research has focused on understanding the consequence of bacterial infections in marine organisms and the pathophysiology of malarial infections in lizards.

Poster Summary: Dr. Scholnick's research examines how recent changes in the oceans could potentially affect the ability of marine organisms to fight infections. Building a treadmill and teaching shrimp to run on it (without NSF funds) allowed him to study the shrimp's immune response during activity. This research was included in a 2011 wastebook article entitled, "How Long Can a Shrimp Run on a Treadmill?" The study was part of a larger project examining the physiological impacts of pollution and warming oceans on marine life. The project was significant because it showed that the health of important marine species is tightly linked to opportunistic bacteria that are responding to environmental changes in the oceans.

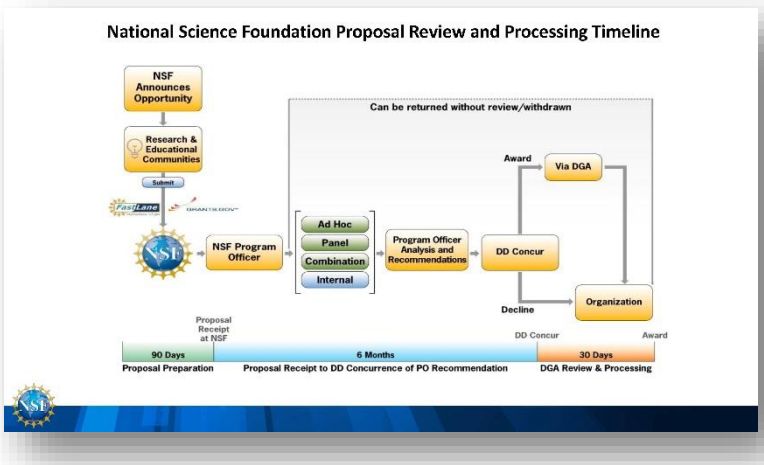
Joshua Shiode, PhD – American Association for the Advancement of Science (AAAS). Dr. Shiode is a Senior Government Relations Officer at AAAS. He is one of the leaders of the Golden Goose Award Steering Committee made up of individuals from the Founding Sponsors of the Award, Benefactors of the Award, and universities who helped launch the Award in 2012: AAAS, Association of American Universities, Association of Public and Land-grant Universities, Breakthrough Institute, Elsevier, Progressive Policy Institute, Richard Lounsbery Foundation, The Science Coalition, Task Force on American Innovation, United for Medical Research, University of Pennsylvania, and Vanderbilt University.



Poster Summary: The brainchild of U.S. Representative Jim Cooper (D-TN), the *Golden Goose Award* recognizes the enormous and often unanticipated impacts that obscure or odd-sounding federally funded research has had on society—from life-saving medical treatments to game-changing social and behavioral insights to major technological advances. Awardees are announced throughout the year and honored at an award ceremony each fall in Washington, DC. The *Golden Goose Award* is supported by generous donations from professional societies, colleges, universities, and corporations; it enjoys bipartisan support from Members of Congress in the House and Senate.

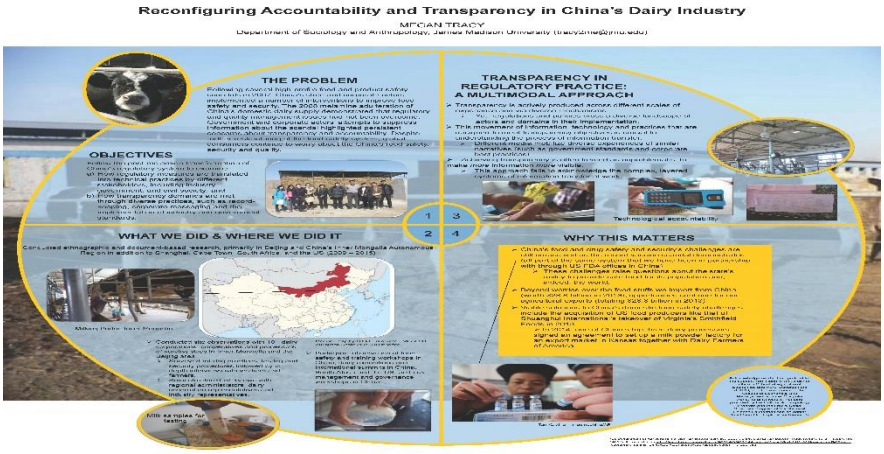
Alan Tomkins, PhD – National Science Foundation. Dr. Tomkins is the Acting Director of the NSF's Social and Economic Sciences Division in the Social, Behavioral and Economic Sciences Directorate (SBE). Before joining NSF, Dr. Tomkins was Founding Director of the University of Nebraska Public Policy Center and professor in the University of Nebraska—Lincoln Law/Psychology Program. Dr. Tomkins' research interests include trust and confidence in public institutions and public engagement to inform governmental policy and increase trust in government. He received his JD and PhD in Social Psychology from Washington University in St. Louis.

Poster Summary: NSF funds research and education in most fields of science and engineering via grants and cooperative agreements. Awards are made to approximately 2,000 colleges, universities, K-12 school systems, businesses, informal science organizations, and other research organizations throughout the US. The agency funds approximately 11,000 of the 50,000 proposals it receives each year for research, education, and training projects. NSF also receives more than 15,000 applications for graduate and postdoctoral fellowships annually. NSF recently adopted guidelines to ensure that the importance of the research it funds is conveyed in summaries for the public.



Megan Tracy, PhD – James Madison University. Dr. Tracy is an associate professor of anthropology where she teaches undergraduate courses in Cultural Anthropology, Peoples and Cultures of East Asia, The Anthropology of Food, and Anthropology in Business. Her research has focused on the transmission of food safety standards and the governance of food and health risks amidst increasingly globalized food production and distribution.

Poster Summary: In 2008, approximately 300,000 children in the People's Republic of China were suspected of having melamine-related illnesses; six children died. Tracy's research examines the meaning of transparency and the transformation of China's food safety system following the global dairy scandal sparked by the "distribution of milk adulterated with the industrial chemical melamine." China's food product and safety troubles directly affect American public health and food security when problematic Chinese products reach US supermarket shelves. Her research on the food safety regulation system in China was called into question during a 2013 House Science Committee hearing along with an additional request for extensive information from NSF.



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April 13, 2016
Kennedy Caucus Room
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