findings from the NIA followed by a brief update on funding mechanisms. An opportunity is provided to meet and consult with NIA extramural staff.

OVERVIEW OF THE NATIONAL INSTITUTE ON AGING

Richard Hodes, *National Institutes of Health, Bethesda, Maryland, United States*

Dr. Hodes will provide an overview of National Institute on Aging research priorities and funding availability.

HOW TO GET A GRANT FROM THE NATIONAL INSTITUTE ON AGING

Kenneth Santora, *National Institute on Aging, Bethesda, Maryland, United States*

Dr. Santora will provide an overview of grant mechanisms available at the National Institute on Aging, with an emphasis on mechanisms of value to early career researchers.

SESSION 7590 (SYMPOSIUM)

INNOVATIVE APPROACHES TO UNDERSTANDING RESILIENCE

Chair: B. Gwen Windham
Co-Chair: Michael Griswold

Physical resilience, generally defined as the ability to recover or resist functional decline following a stressor, holds promise for clinicians to identify patients who are likely to benefit from a planned stressor (such as an elective procedure) or deteriorate after an unplanned stressor (such as heart failure). This symposium will present innovative research approaches that enhance understanding of the constructs of resilience from human and animal models. The symposium will include presentations from leading experts addressing issues in the study of resilience including choices of definitions, study design, comparator groups, and considerations of underlying latent factors. Data from population-based cohort studies and animal models will be presented to inform the discussions. This interdisciplinary symposium will address recommendations for advancing resilience knowledge through elucidating biologic, clinical and environmental influences and optimizing definitions, designs, and analyses. Epidemiology of Aging Interest Group Sponsored Symposium.

CONCEPTUALIZING RESILIENCE: IMPACTS OF ADVERSE STRESSOR SEVERITY, CHRONICITY, AND RELEVANCE

Michael Griswold,[1] B. Gwen Windham,[2] James Henegan,[2] Karen Bandeen-Roche,[3] Matthew Mcmullan,[2] Anna Kucharska-Newton,[4] Priya Palta,[5] and Thomas Mosley,[2] *1. The University of Mississippi Medical Center, Jackson, Mississippi, United States, 2. University of Mississippi Medical Center, Jackson, Mississippi, United States, 3. Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, United States, 4. Gillings School of Global Public Health, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, United States, 5. Columbia University Irving Medical Center, New York, New York, United States*

Guidance on frameworks for physical resilience, resistance and reserve are underdeveloped. We examined different "physical resilience" characterizations within n=6,538 Atherosclerosis Risk in Communities Study participants (median age: 75 years), followed for 5+ years. Fifteen illustrative clinical, lifestyle and social stressors, each having varying levels of severity, chronicity and relevance, were paired with six functional outcome measure trajectories. Contrasts were made against four fundamental comparator groups (including those without stressors). Particular pairings of stressors and functional measures substantially impacted resilience classifications and related determinants. For example, 5-year recurring robustness (0/5 frailty indicators) was only 12% for participants after Heart Failure (HF), versus 47% with no HF event; relative-risk: RR=0.26 (95%CI: 0.15,0.44). Conversely, recurring robustness was 43% after reporting low social support versus 51% with adequate support; RR=0.87(0.73,1.02). We highlight major components that impacted resilience determinations and outline a broad conceptual framework to help optimize physical resilience assessment and aid future research. Part of a symposium sponsored by Epidemiology of Aging Interest Group.

THE MEASUREMENT OF PHYSICAL RESILIENCIES: CONCEPTUALIZATION, STUDY DESIGN, AND EARLY DATA

Karen Bandeen-Roche,[1] Ravi Varadhan,[2] Brian Buta,[2] and Jeremy Walston,[2] *1. Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, United States, 2. Johns Hopkins University, Baltimore, Maryland, United States*

This talk presents the conceptual framework, study design, and pilot data for the Study of Physical Resilience and agING (SPRING). SPRING aims to develop signatures of physical resilience in older adults who will undergo clinical stressors; validate the signatures' ability to distinguish those who will respond resiliently; and characterize underlying physio-biological determinants. The underlying physiology is conceptualized as a dynamical system, and resilience, as a property thereof. The SPRING pilot has assessed n=77 older adults before, during and repeatedly after experiencing knee replacement surgery, incident hemodialysis, or bone marrow transplant; a confirmatory study evaluating n=100 older adults per each of these stressors is underway. Resilience signatures grounded in dynamical data from multiple stress-response assessments will be presented. So also will resilience phenotypes—longitudinal functional trajectories over the study visits: These show considerable heterogeneity within and across stressors. If successful, our study will open the way for interventions to bolster resiliency. Part of a symposium sponsored by Epidemiology of Aging Interest Group.

LATENT CLASS TRAJECTORY AND GROWTH MIXTURE MODELS IN THE STUDY OF PHYSICAL RESILIENCE

Carl Pieper,[1] Jane Pendergast,[2] and Megan Neely,[2] *1. Center on Aging and Human Development, DUMC, Durham, North Carolina, United States, 2. Duke University, Durham, North Carolina, United States*

After a stressor, individuals may experience different trajectories of function and recovery. One potential explanation