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Division of Behavioral and  
Social Research

National Institute on Aging

National Institute of Health

# Remarks from NIA



The NIA Biomarker Network Annual Meeting  
April 12, 2023

# Outline



About the NIA Division of Behavioral and Social Research

Selected Data Resources Population Research

Concepts and Funding Opportunities

Where to find more information

The Next Decade of Survey Biology

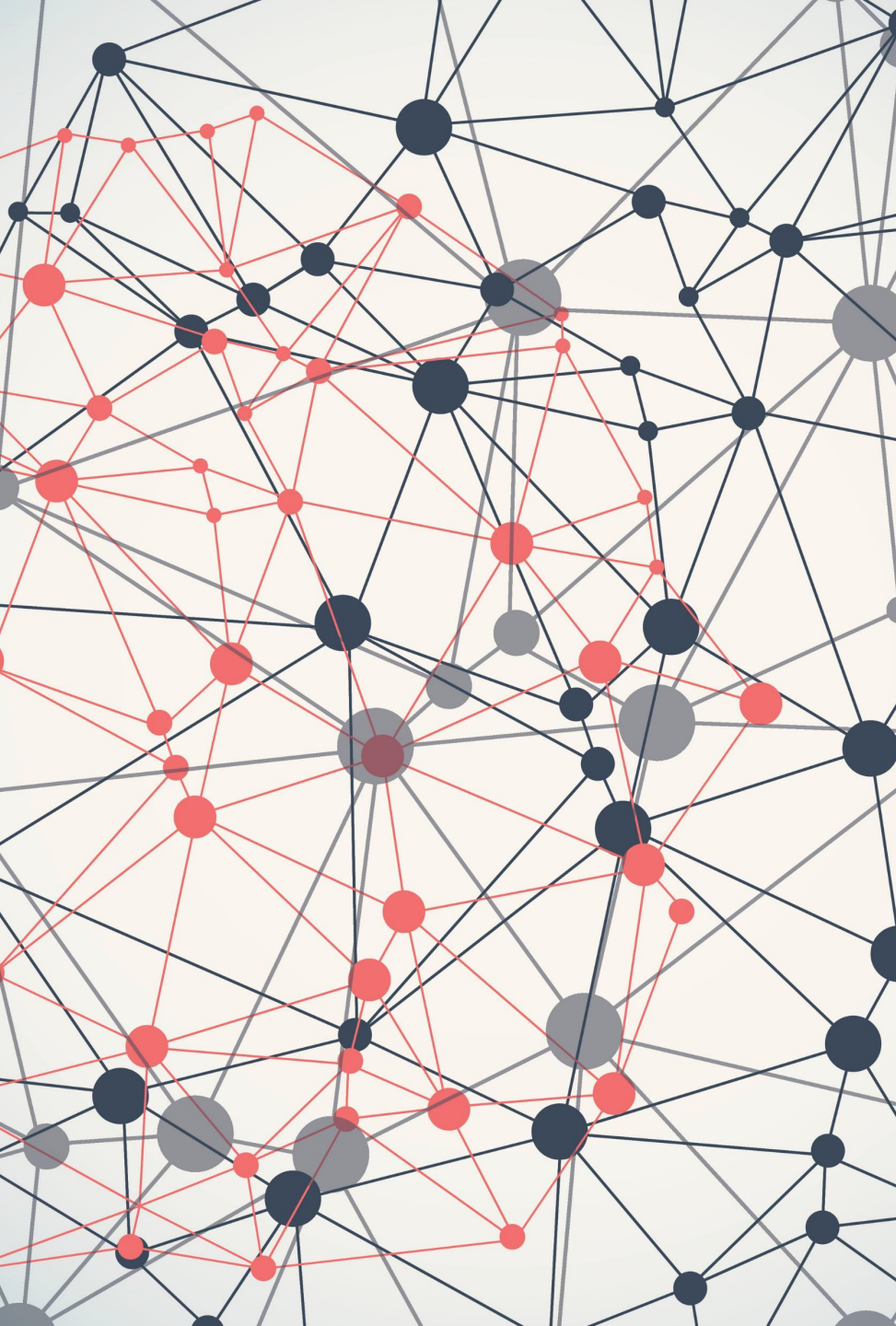


# About the NIA Division of Behavioral and Social Research (BSR)

- **NIA** is one of the 27 institutes and centers of the National Institutes of Health - understand the **nature of aging** and **extend the healthy, active years of life**
- BSR is an extramural division of NIA focusing on social, behavioral, and economic **research**, research **infrastructure** and research **training** on the processes of aging at the individual and societal level
- **Cross-disciplinary** research at **multiple levels** from genetics to **cross-national comparative research**, and at stages from basic through translational
- **Alzheimer's disease** and Alzheimer's disease-related dementias (AD/ADRD) research in addition to **life course health and aging** research
- Science managed across two research branches:
  - [Population and Social Processes](#): Demographic, social, economic, institutional, geographic, and other factors at the population level including **nationally representative longitudinal studies**
  - [Individual and Behavioral Processes](#): Psychological, behavioral, and interpersonal processes at the individual and dyadic level; interventions
- More about us: <https://www.nia.nih.gov/research/dbsr>







## Selected NIA-Supported Networks to Develop Population Data Resources

- [Network for Innovative Methods in Longitudinal Aging Studies \(NIMLAS\)](#) will **combat declining response and consent rates** in large studies as well as improve measurement via innovative approaches to identify more efficient screening and data collection techniques, reduce respondent burden, and identify new ways to effectively consent respondents.
- [Network on Education, Biosocial Pathways, and Dementia across Diverse Populations](#) forge **collaboration** among investigators from **educational cohort studies** representing different birth cohorts and AD/ADRD researchers to coordinate data collection efforts, including measurement harmonization and coordinated analyses to address unanswered questions about the **education-ADRD relationship**.
- [Harmonization of Health and Retirement Study International Aging Studies](#) supports the development of **new international studies with comparable data** to the NIA-supported U.S. Health and Retirement Study (HRS), maintains harmonization and data development among existing comparable HRS studies, and encourages **cross-national aging research** using the international HRS family of studies.
- [Harmonized Cognitive Assessment Protocol Network](#) develops **international data resources** for the study of Alzheimer's Disease and Alzheimer's Disease Related Dementias (AD/ADRD) that expand research opportunities **to exploit cross-country variation in key life-course factors** that likely affect cognitive function and the risk for AD/ADRD, such as educational attainment, wealth, retirement policies, diet, and the prevalence and treatment of cardiovascular risk factors.
- See **many more** on our website



BSR Center  
Programs  
Develop Key  
Areas of  
Research

- Resource Centers for Minority Aging Research (RCMARs)
- Centers on the Demography and Economics of Aging (D&E Centers)
- Edward R. Roybal Centers for Translational Research in the Behavioral and Social Sciences of Aging & AD/ADRD (Roybals) – [Program Renewal Announced](#)
- Find more here:  
<https://www.nia.nih.gov/research/dbsr/bsr-centers>



## Social, Behavioral, & Economic COVID Coordinating Center

A **nexus of communication and collaboration** among NIH-funded projects undertaking social, behavioral, and economic research on COVID-19. We promote an innovative, cross-disciplinary approach to COVID-19 research across the behavioral and social science community, multiple NIH award recipients, and the public.

[Read More](#)

# COVID Social, Behavioral, & Economic Research Consortium Updates

- Promote an innovative research across the behavioral and social science community, multiple NIH award recipients, and the public.
- Pilot grants address COVID-19 impact on health disparities and vulnerable populations, foster new collaborations across research teams, and engage researchers from underrepresented groups in the consortium.
- [Webinars and Podcasts](#) on findings and resources for researchers
- See SBECCC [Website](#) for details

# Selected Approved Concepts from the National Advisory Council on Aging (NACA)

- [Networks to Develop Behavioral and Social Science Research in Aging and AD/ADRD](#) – will initiate/continue Networks on: **Stress** Measurement, **Life Course Health and Disparities** at Older Ages, Aging Research on **Criminal Justice** and Health Disparities, **Rural Aging**, **Genomics and Omics** of Behavioral and Social Sciences, Behavioral and Social Research on Aging in Animals, and the HCAP Network
- [National Health and Aging Trends and National Study of Caregiving Joint Renewal](#) - this concept proposes to renew and enhance **NHATS/NSOC** to support research on dementia and dementia care.
- [Small Research Grant Program for the Next Generation of Researchers in AD/ADRD Research](#) - This concept will support a reissuance of the “Small Research Grant Program for the Next Generation of Researchers in AD/ADRD Research” program” to build a career pipeline to encourage and support the next generation of AD/ADRD researchers and support important and innovative AD/ADRD research in a wide variety of areas where scientific investigation is needed.
- [Behavioral and Social Research on the Role of Immigration on Life Course Health and Aging, Including AD/ADRD](#) - explore how structural, community, and interpersonal mechanisms shape health outcomes and **disparities among Latino, Black, Asian, and other immigrant groups in the U.S.** and result in health disparities among various populations.
- [Enhancing Use of Harmonized Cognitive Assessment Protocol \(HCAP\) Data](#) This concept seeks to incentivize the use of HCAP and related resources to contribute to scientific advances and **expand international or cross-national analyses of HCAP data**. This research will help further our understanding of how different social, cultural, and institutional factors affect the trajectory of AD/ADRD in different contexts to move the field forward.



# Selected Current Notices of Funding Opportunity (NOFO)

- [Estimating the Monetary Costs of Dementia in the United States \(U01 Clinical Trial Not Allowed\)](#) - support the development of a **national estimate of the costs of dementia** using population-representative and administrative data on older Americans. (Due 7/3/2023)
- [Research Coordinating Center on the Exposome and Alzheimer's Disease \(AD\) and AD-Related Dementias \(ADRD\): Elucidating the Role of Social and Behavioral Determinants of Health in AD/ADRD Etiology and Disparities \(U24 Clinical Trial Not Allowed\)](#) - establish a national coordinating center that will serve as a centralized hub **for accessing, harmonizing, linking, and sharing environmental contextual data and individual exposure data** with NIA/NIH-funded projects to accelerate life course research on the social, behavioral, psychological, and economic exposures that shape Alzheimer's disease (AD) and AD-related dementias (ADRD) outcomes and inequities.
- [The Health and Retirement Study and Harmonized Cognitive Assessment Protocol \(U01 Clinical Trial Not Allowed\)](#) - to provide additional research opportunities to use HRS to formally **study Alzheimer's Disease (AD) and AD-Related Dementias (ADRD)**, this renewal will include support for the companion Harmonized Cognitive Assessment Protocol (HCAP).



## Support for Early Career/Transitional Researchers

- [Butler-Williams Scholars Program](#) - provides unique opportunities for junior faculty and researchers new to the field of aging to gain insight about aging research. The program offers diverse perspectives and includes presentations, seminars, and small group discussions.
  - Applications are sought from emerging researchers, including those who may have limited involvement in research on aging. The applicant must be a U.S. citizen, non-citizen national, or permanent resident.
- [Diversity Supplement and Re-Entry Program](#) - supports emerging researchers with a mentor-directed opportunity that foster research capabilities, knowledge, and skills of trainee-candidates.
  - **Diversity Supplement** program supports the development of eligible trainee-candidates who seek independent and productive careers in research on aging and enhance diversity in the biomedical workforce.
  - **Re-entry and Re-Integration** program supports eligible individuals in reentering an active research career after life events have placed their research careers on hold.

# Visit our PAA booth!

<https://www.nia.nih.gov/research/dbsr>

Follow us on *Twitter!*

Get information on:

- research resources
- funding opportunities
- research highlights
- upcoming webinars and meetings

**@NIA\_BSR**



## WHO'S AT PAA?

THE NATIONAL INSTITUTE ON AGING  
DIVISION OF BEHAVIORAL AND SOCIAL RESEARCH (BSR)



Lis Nielsen, PhD  
*BSR Division Director*



John Phillips, PhD  
*PSP Branch Chief*  
Economic Vulnerability,  
Work/Occupation; U.S.-  
Based Nationally  
Representative Surveys



Jonathan King, PhD  
*Senior Scientific Advisor  
to the Division Director*



Kriti Jain, PhD  
Social Policy; Field  
Experiments & Quasi-  
Experimental Studies



Elena Fazio, PhD  
Aging in Place; Palliative  
Care; Dementia Care



Emerald Nguyen, PhD  
Extreme Weather & Natural  
Disasters, Extended Family,  
Social Networks, Exosome  
Sat. April 15: Session 248  
discussant



Amelia Karraker, PhD  
Health & Place; Education  
& Health; Nuclear Family;  
Education Cohort Studies



Theresa Kim, PhD  
Health Systems; Pragmatic  
Trials in Health Care  
Settings



Minki Chatterji, PhD  
International HRS/HCAP  
Studies; Macro Social  
Factors in Global Contexts  
Thurs. April 13: Session 47  
Sat. April 15: Session 211



Frank Bandiera, PhD  
Race & Ethnic Health &  
Disparities; Immigration  
Thurs. April 13: Session 65



Charlie Le, MPH  
Program Analyst,  
Population & Social  
Processes Branch



Kaitlyn Lee, MPH  
Program Analyst,  
Population & Social  
Processes Branch

# The Next Decade of Survey Biology

Jonathan W. King, Division of Behavioral and Social Research

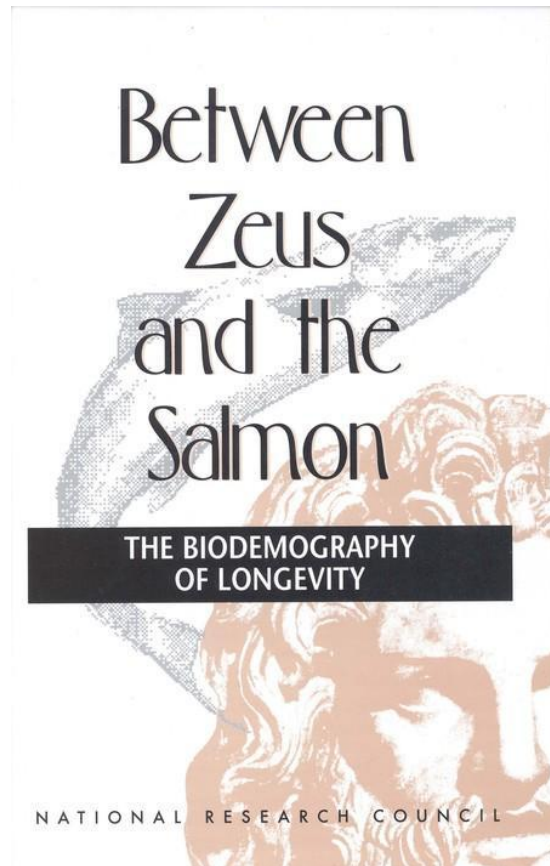
2022 Winter Retreat Presentation

Discussants: Yi-Ping Fu, DAB and Luigi Ferrucci, IRP



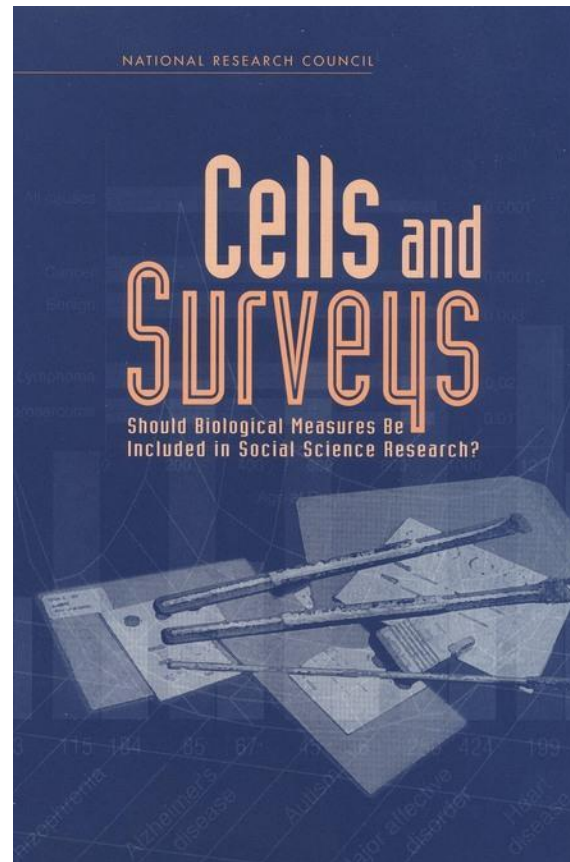
# Previous Decades of Survey Biology

1997



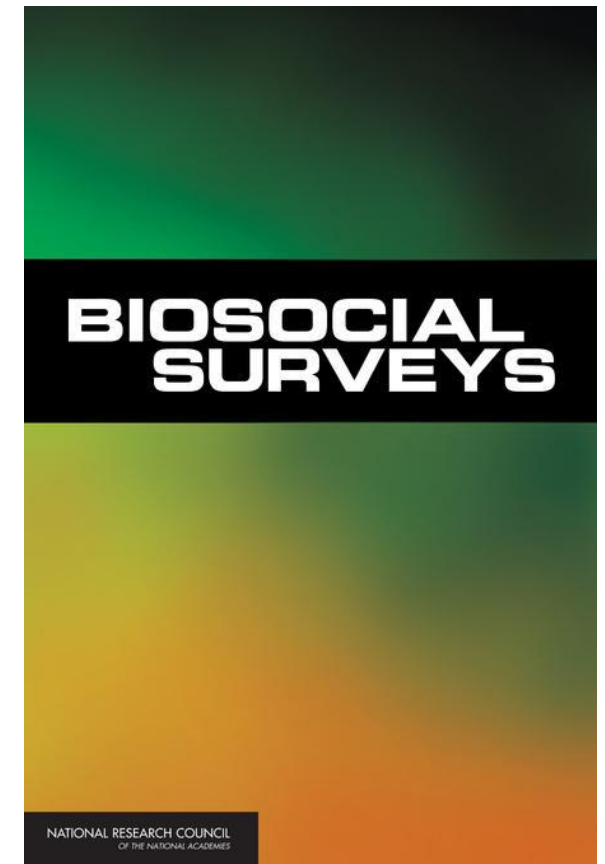
Wachter & Finch (Eds.)

2001



Finch, Vaupel, & Kinsella (Eds.)

2008



Weinstein, Vaupel & Wachter (Eds.)

# Survey Biology Before 2012 and Now

Then

Convenience Samples

Smaller sample sizes, cross-sectional

Most *data closely held*

Bespoke, often study-unique measures

One data set per paper

Candidate

Genes/Proteins/Metabolites

Now

**Population Representative Samples**

Larger sample sizes, longitudinal

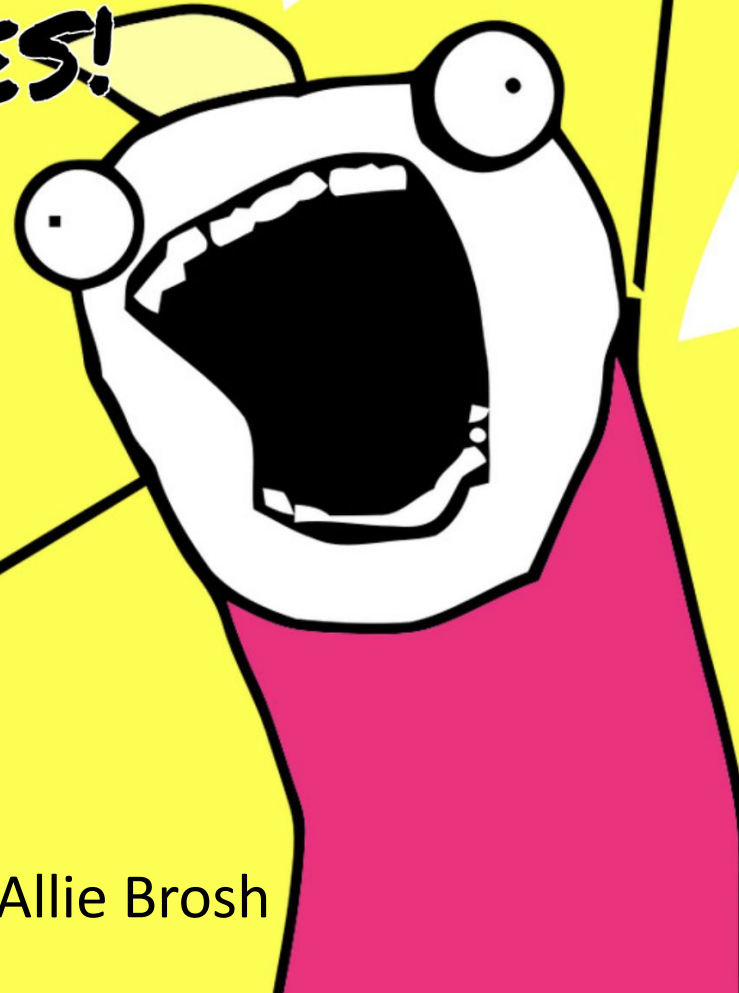
Data publicly available

Usually shared (common) data elements

Replication and Meta-analysis

**Omics where possible**

**SCREEN ALL THE  
OMES!**



After "Clean ALL the Things" © 2013 Allie Brosh



# Aging does not start at 50: BSR Representative Educational Cohorts

US Educational Cohort Studies	1st Year of Data Collection [birth years]	Nationally-Representative?	Blood Samples?	Brain Imaging?
Wisconsin Longitudinal Study	1957 [1939]	No	Yes	Yes
Project Talent	1960 [1942-1948]	Yes	No?	No
NLS-72	1972 [1954]	Yes	<b>Yes</b>	<b>Yes</b>
NLSY-79	1979 [1958-1965]	Yes	<b>No</b>	No
High School and Beyond	1980 [1962-1964]	Yes	No?	No
Add Health	1994 [1976-1982]	Yes	Yes	No

# Next: From Data Repository to Biorepository

- The default data-sharing policy for BSR-supported population-representative studies has always been: share as broadly as possible.
- In HRS, the default data-sharing policy for biomarker data is *essentially* the same, but with more restrictive data use agreements.
- The HRS renewal will establish sharing of limited quantities of biosamples to generate new biomarkers deemed important.

# A Decade of Survey Biology and Geroscience

Year	HRS or Survey Milestone
2011	OppNet Survey Biology Symposium
2012	HRS GWAS available at dbGAP
2013	First Educational Attainment GWAS
2014	HRS Venous Blood Study A0
2015	HRS Venous Blood Study A1
2015	HCAP Revision
2016-17	Venous Blood Collected, HCAP run
2018	HRS with VBS and HCAP renewed
2019	First HCAP and VBS data released

Year	Geroscience Milestone
2010	Indicators of Aging Workshop
2012	Geroscience Interest Group Founded
2013	Hannum Epigenetic Clock Published
2013	Horvath Epigenetic Clock Published
2013	First Geroscience Summit
2015	Lopez-Otin et al. Hallmarks of Aging
2015	Kennedy et al. 7 Pillars of Aging
2017	Sierra & Kohanski 5 years of GSIG
2019	Cellular Senescence CF Approval
2020-21	
2021	First SenNet RFAs