

**Department of Health and Human Services**

**National Institutes of Health**

**National Institute of Nursing Research**

**Minutes of the National Advisory Council for Nursing Research**

September 4–5, 2018

The 96<sup>th</sup> meeting of the National Advisory Council for Nursing Research (NACNR) was convened on Tuesday, September 4, 2018, at 1:00 p.m. in Conference Room 6, Building 31, National Institutes of Health (NIH), Bethesda, Maryland. The first day of the meeting was an open session and adjourned that same day at 4:50 p.m. The closed session of the meeting, which included consideration of grant applications, was convened on Wednesday, September 5, 2018, at 9:00 a.m. and continued until adjournment at 1:00 p.m. Dr. Ann Cashion, Acting Chair, NACNR, presided over both sessions of the meeting.

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**OPEN SESSION**

**I. CALL TO ORDER, OPENING REMARKS, COUNCIL PROCEDURES, AND RELATED MATTERS**—Dr. Ann Cashion, Acting Director, National Institute of Nursing Research (NINR)

Dr. Cashion called the 96<sup>th</sup> meeting of the NACNR to order and welcomed all Council members, visitors, and staff. She introduced three new Council: Dr. Nilda Peragallo-Montano, Dean and Professor, School of Nursing and Health Studies, The University of North Carolina at Chapel Hill; Dr. Ida Moore, Anne Furrows Professor and Director, Biobehavioral Health Science Division, University of Arizona; and Dr. Jeffrey A. Kelly, Professor and Director, Center for AIDS Intervention Research, Department of Psychiatry and Behavioral Medicine, Medical College of Wisconsin.

Conflict of Interest and Confidentiality Statement

Dr. Marguerite Kearney, Acting Executive Secretary, NACNR, and Director, Division of Extramural Science Programs, NINR, noted that the meeting would be recorded for purposes of the minutes and that audio recordings would be destroyed once the minutes were completed. She reminded attendees that NIH is a smoke-free campus. She asked Council members to update their addresses on the meeting roster that would be circulated during the meeting. Dr. Kearney referred to the conflict of interest and confidentiality statements provided in the Council materials and indicated that specific instructions would be provided at the beginning of the closed session on Wednesday.

### Minutes of the Previous NACNR Meeting

Council members received the minutes of the May 15–16, 2018, NACNR meeting via the Electronic Council Book. A motion to accept these minutes was made, seconded, and approved unanimously. The approved minutes of each NACNR meeting become part of the Institute’s official record and are posted on the NINR website ([www.ninr.nih.gov](http://www.ninr.nih.gov)).

### Dates of Future Council Meetings

Council members were asked to confirm their calendars for the following meeting dates and to contact Dr. Kearney about any conflicts or expected absences.

#### 2019

January 29–30 (Tuesday–Wednesday)

May 21–22 (Tuesday–Wednesday)

September 17–18 (Tuesday–Wednesday)

#### 2020

January 14–15 (Tuesday–Wednesday)

May 19–20 (Tuesday–Wednesday)

September 15–16 (Tuesday–Wednesday)

## **II. REPORT OF THE DIRECTOR, NINR—Dr. Ann Cashion, Acting Director, NINR**

The Director’s report focused on activities and news from the Department of Health and Human Services (HHS), NIH, and NINR since the Council met in May. Highlights of Dr. Cashion’s report included:

**Dr. Grady’s Retirement**—Dr. Patricia A. Grady has retired as NINR Director after 23 years of service. During her tenure, she developed programs and initiatives that demonstrated a commitment to future nurse scientists and to NINR’s stewardship of nursing research. The NIH Director’s Office is coordinating the search process for a new Director, and a search committee has been formed. Acting Director Cashion encouraged outstanding candidates to apply.

**Budget Update**—Limited information is available about the budget for Fiscal Year (FY) 2019, which begins October 1. The FY 2018 budget includes a 5.2 percent increase in the appropriation for NINR (\$158 million) and an 8.8 percent increase for NIH.

Dr. Cashion reviewed budget for FY2017 (the most recent completed FY), noting that the bulk of funds (80 percent) go to support extramural research, training awards, and research and development. Other

NINR budget allocations include the intramural research program (IRP, 8 percent), training (5 percent), and research management services (11 percent).

**HHS and NIH News**—Dr. Cashion reported that former HHS Secretary Margaret Heckler passed away in August. Dr. Helene M. Langevin has been named Director, National Center for Complementary and Integrative Health, and will join NIH in November.

The NIH Health Care Systems Research Collaboratory has announced five new research awards. Funded projects focus on palliative care (PC), decision support for emergency department naloxone initiation in opioid users, parent-focused prevention in pediatric primary care, adherence to chronic cardiovascular medication, and improving advance care planning in oncology.

In June, NIH released a Strategic Plan for Data Science (<https://datascience.nih.gov>) designed to accelerate data science advancements. A Chief of Data Strategies will be hired to provide leadership and manage plan implementation.

A new NIH initiative, Science and Technology Research Infrastructure for Discovery, Experimentation, and Sustainability (STRIDES), aims to reduce economic and technological barriers to using large datasets to accelerate biomedical advances. Google Cloud is its first industry partner, with additional partners to come.

A new Trans-NIH Pediatric Research Consortium will harmonize pediatric research activities across NIH Institutes and Centers (ICs), explore gaps and opportunities, and set priorities for new areas of collaboration, including efforts to enhance training for the next generation of pediatricians.

The Trans-NIH Coordinating Committee on Research on Women's Health (CCRWH) received an enhanced mandate from the *21<sup>st</sup> Century Cures Act* to develop collaborative strategies to answer pressing research questions related to women's health. Moving forward, all ICs must incorporate women's health in their strategic plans.

NIH has delayed enforcement of some requirements for prospective basic science studies involving human participants; these include a period of leniency for applications submitted to an incorrect Funding Opportunity Announcement (FOA) based on study-type designation and the requirement for investigators to register and report studies on [clinicaltrials.gov](http://clinicaltrials.gov).

Dr. Cashion mentioned a selection of NIH funding opportunities in which NINR participates. Announcements are available at <http://grants.nih.gov/grants/guide>.

**NINR News**—Dr. Cashion announced that Council Member Dr. Karen Meneses passed away unexpectedly on August 1. A Professor and Associate Dean for Research and Scholarship at the

University of Alabama School of Nursing, her research focused on dissemination of self-management interventions to improve quality of life among underserved breast cancer survivors.

On September 25, Dr. Ann-Marie McCarthy will present the third 2018 NINR Director's Lecture, "Distraction in Action: Helping Children Cope with Painful Procedures." Dr. Christopher Lee will present the final lecture for 2018 on November 14, "Integrative Biobehavioral Research in Heart Failure."

NINR's updated PC brochure provides information to patients with serious illness and their families about PC, who benefits, and how it works, and addresses misconceptions about PC; the brochure is available in English and Spanish. The redesigned NINR website features a cleaner design intended to make it easier for the scientific community and the public to find what they are looking for on the site.

NINR, the National Cancer Institute (NCI), and the National Human Genome Research Institute (NHGRI) have developed the [Omics Nursing Science & Education Network](#) (ONSEN), a web resource that provides opportunities to leverage samples and data from other investigators; identify research collaborators, mentors, and trainee positions; and build knowledge and skills required to integrate omics into nursing research.

NINR sponsored the Rural Health Workshop on July 31 to discuss rural health issues, identify knowledge gaps, and develop recommendations for future rural health nursing research. Attendees included U.S. Surgeon General Dr. Jerome Adams and Deputy Surgeon General Dr. Sylvia Trent-Adams.

Additional NINR activities that occurred this spring and summer included meetings with representatives from the American Thoracic Society and the Spanish General Council of Nursing, presentations to Fogarty Center Global Health Fellows and University of Virginia School of Nursing students, and participation in an American Association of Colleges of Nursing (AACN) convening to address concerns about the continuing decline in the number of nurses pursuing PhDs.

Dr. Cashion noted the range of NINR-sponsored funding opportunities. Announcements are available at [www.ninr.nih.gov/ResearchAndFunding/DEA/OEP/FundingOpportunities/](http://www.ninr.nih.gov/ResearchAndFunding/DEA/OEP/FundingOpportunities/).

**NINR Training Opportunities**—The 2018 NINR Methodologies Boot Camp featured a symposium on precision health with a focus on clinical applications of smart health, smart technology, digital health data, wearables, and sensors. The NINR Division of Intramural Research welcomed summer trainees—postdocs, grad students, postbacs, and local high school students—to conduct research for eight weeks at NINR.

**Staff News**—Dr. Cashion announced several recent honors awarded to NINR staff. Dr. Jessica Gill was named Deputy Scientific Director, Dr. Paul Joseph was selected as an NIH Distinguish Scholar, and Dr.

Karen Huss received the 2018 Kathleen A. Dracup Award from the American Heart Association. Six NINR staff received NIH Director's Awards: Mr. Nathan Brown and Drs. Ann Cashion, Matthew Eliseo, Martha Matocha, Rebekah Rasooly, and Lois Tully. Dr. Cashion welcomed Dr. Cheryl Nordstrom to NINR's Scientific Review Branch where she leads the Institute's Nursing Research Review Committee.

**III. INNOVATIVE DIAGNOSTIC AND MONITORING STRATEGIES TO IMPROVE CARE FOR STROKE AND BRAIN INJURY PATIENTS**—Dr. Taura Barr, Chief Science Officer and Founding Board Member, Valtari Bio™

Dr. Barr outlined her personal story and provided lessons learned during her days as an NINR Graduate Partnership Program (GPP) Fellow and her assistant professorship at the West Virginia University's first School of Nursing Laboratory, her personal health experience, through the founding of Valtari Bio™. The mission of Valtari Bio™ is to create precision stroke care through biomarker-based strategies that decrease the burden of brain injury and provide patients with every possible opportunity to reach their full recovery potential.

The current path for stroke diagnosis is subjective, based largely on clinical evaluation of symptoms, and may take more than 60 minutes before a patient has computed tomography (CT) imaging. Valtari Bio™'s Rapid Evaluation Stroke Triage Test (ReST™) will provide emergency clinicians with an unbiased stroke triage result in ten minutes or less. ReST™ is quantitative, eliminates ambiguity, and delivers actionable results six times faster than the current standard of care. The method is founded on immune system patterns; data from over 500 patients and multiple clinical studies confirm that immune system markers found in the blood immediately post stroke are diagnostically robust and can be used at the point of care (POC) for triage. ReST™ targets circulating cytokines, acute-phase reactants, and other immune-modulating molecules associated with the peripheral immune response to detect stroke pathology. To enable POC detection, the genomic profile is being translated to a protein profile. Dr. Barr described steps toward regulatory approval and commercialization of ReST™.

Dr. Barr also described her work with Deep Roots Healing, LLC, an executive-level health and wellness company that offers personalized health and wellness coaching programs and fellowships, wellness products, and leadership retreats for individuals who are returning to work after health challenges.

**IV. OVERVIEW OF THE NINR INTRAMURAL RESEARCH PROGRAM**—Dr. Jessica Gill, Deputy Scientific Director, NINR

Dr. Gill presented an overview of the NINR Division of Intramural Research (DIR) scientific focus, organization, research programs, and principal investigators (PIs). The DIR conducts novel, high-impact research that quantifies subjective symptom experiences, explores underlying molecular mechanisms,

determines environmental influences, recognizes individual variability, and employs clinical interventions. Programs focus on symptom science, including molecular and biobehavioral mechanisms underlying symptoms; environmental influences; the impact of genetic variability inherent in symptoms associated with conditions such as cancer-related fatigue, digestive disorders, traumatic brain injury (TBI), obesity, and diabetes, and congenital muscle diseases; and clinical interventions to alleviate symptoms.

The DIR is led by the Office of the Scientific Director, which includes the Offices of the Clinical Director and the Training Director. As Clinical Director, Dr. Suzanne Wingate oversees all clinical aspects of the on-campus research program and the majority of NINR clinical personnel. NINR Training Director Dr. Pam Tamez leads the Summer Genetics Institutes (SGIs), Symptom Methodologies Boot Camps, Graduate Partnership Programs, and other intramural training opportunities.

Led by Dr. Leo Saligan, the Symptom Science Center promotes understanding of the biologic and biobehavioral mechanisms of symptoms to improve patient outcomes and inform personalized approaches to symptom management.

The Biobehavioral Branch supports research into the interplay of behavioral, biological, and environmental determinants of health and wellness across populations. The Digestive Disorders Unit, led by Dr. Wendy Henderson, focuses on brain-gut-microbiota mechanisms in symptom distress related to digestive disorders as well as biobehavioral interventions that target digestive disorder symptoms. Dr. Paule Joseph leads the Sensory Science and Metabolism Unit, which aims to understand molecular and neural mechanisms associated with sensory symptoms and improved self-management and adherence to dietary modifications.

The Symptom Management Branch focuses on underlying biological mechanisms of a range of symptoms, their effect on patients, and the bases for patient responses to interventions. Dr. Leo Saligan, Chief of the Symptom Biology Unit, examines the nature and causes of fatigue in specific conditions as well as the molecular and biobehavioral underpinnings of fatigue-associated symptoms. The Genomic and Clinical Biomarkers Unit is led by Dr. Ann Cashion and conducts research to discover biomarkers within an environmental and clinical context to predict patient outcomes and guide therapies.

The Tissue Injury Branch conducts clinical and laboratory-based studies on the mechanisms of tissue injury, including identification of molecular targets and pathways for interventions. Dr. Jessica Gill is Chief of the Brain Injury Unit, which focuses on mechanisms associated with risks for neurological and behavioral symptoms in traumatic brain injuries and concussions. As Chief of the Neuromuscular

Symptoms Unit, Dr. Katy Meilleur focuses on novel clinical outcome measures and treatments in congenital myopathies and muscular dystrophies.

Dr. Patricia Brennan, Director of the National Library of Medicine, leads the Advanced Visualization Laboratory that focuses on immersive visualization technologies that allow for rehearsal and stimulate problem solving for individuals with complex diseases that rely on self-management.

In the Omics Laboratory, Dr. Hyungsuk Kim and other staff conduct cross-cutting research using leading-edge technologies, which they teach to NINR fellows and trainees.

## **V. ANNOUNCEMENT OF VISITORS**

Dr. Cashion announced the names of visitors and encouraged attendees to take advantage of the upcoming break to meet them.

## **VI. ADVANCING SCIENCE AND HEALTHCARE THROUGH NINR'S INNOVATIVE INTRAMURAL TRAINING PROGRAMS—Dr. Pamela Tamez, Acting Training Director, DIR, NINR**

Dr. Tamez described NINR training, research fellowships, and career development awards. Since its inception in 2010, over 600 nurse scientists have participated in the annual Symptom Methodologies Boot Camps. The NINR SGIs began in 2000 and offer one month of intensive training for 25 nurse scientists during June; registration for this highly competitive program opens mid-November and closes March 1.

NINR Postdoctoral Fellows are mentored by an NINR investigator over a two- to three-year period. The GPP doctoral fellowship training program provides coordinated training and funding for PhD students attending a school of nursing; coursework is done at the student's home institution and dissertation research is conducted at NIH. Postbaccalaureate Fellows receive one to two years of mentoring and hands-on lab and clinical protocol training.

The eight-week intramural Summer Internship Program is open to students through graduate school. This is a highly competitive program; NIH receives approximately 6,000 applications for 1,000 openings.

The NIH Pathway to Independence Award (K99/R00) provides up to five years of support. The award is intended to foster development of a creative, independent research program that will be competitive for subsequent independent funding and help advance the NIH mission. Applicants are individuals with significant research experience who require at least 12 additional months of mentored research and career development (K99 phase) before transitioning to the independent R00 award phase of the program.

**VII. BIOMARKERS OF WOUND PAIN AND WOUND HEALING**—Dr. Taichi Goto, Japan  
Society for Promotion of Science Overseas Research Fellow, Postdoctoral Fellow

Dr. Goto summarized his educational pathway, recent research, and plans for the future. After obtaining a bachelor's degree in nursing and three years of experience as an inpatient cardiovascular nurse, Dr. Goto obtained his master's degree and PhD in health science from the University of Tokyo.

Dr. Goto's research focuses on developing an objective wound pain assessment tool for cognitively impaired patients. Future research plans include expanding initial data to validate a wound pain biomarker that can predict wound healing status, identify patients with high wound pain who are at risk of developing a nonhealing wound, and use biomarkers to assess wound pain and develop treatments to improve healing.

**VIII. ANTIBIOTICS DURING GESTATION LEADS TO OBESITY IN ADULT**

**OFFSPRING**— Stephanie Prescott, Predoctoral fellow with the NINR Graduate Partnerships Program and University of Virginia

Stephanie Prescott described her research linking antibiotics during gestation to obesity in adult children. Although studies have shown a connection between child exposure to antibiotics and adverse health outcomes (e.g., obesity, allergic asthma), antibiotics administered during pregnancy have been less well studied. Using an animal model of the impact of antibiotics on offspring microbiota, Ms. Prescott found that the relative abundance of Bacteroidetes diminished in antibiotic-treated mothers and that offspring of treated mothers had decreased alpha and beta diversity in feces; antibiotics during gestation increased glucose and insulin levels.

Ms. Prescott plans to study which microbes are affected by antibiotic exposure and how this effect occurs.

**IX. DEVELOPING THERAPEUTICS FOR *RYRI*-RELATED DISORDERS**—Dr. Joshua Todd,  
Visiting Research Fellow, NINR

Dr. Todd highlighted his research activity and presented his plans for future education and research.

*RYRI*-related disorders (*RYRI*-RD) include genetic, rare neuromuscular disorders with variable expressivity of symptoms. Symptoms can include delayed motor milestones, contractures, proximal muscle weakness, scoliosis, respiratory muscle weakness, and ophthalmoplegia. Recessive cases are typically more severe. Dr. Todd's research includes transforming orphan drug research via translational science collaborations, preclinical research using tissue from Rycal treatment in *RYRI*-RD affected individuals, and the first natural history study and clinical trial in the *RYRI*-RD population. Final results of the intervention phase are pending. A phase I, first-in-patient trial of pharmacokinetic, safety, and

pharmacodynamic effects is in the pipeline. During his remaining year as a visiting fellow, Dr. Todd hopes to complete a phase IB clinical trial and establish a longer-term *RYRI*-RD natural history study as a research fellow.

**X. THE ROLE OF INFLAMMATORY CYTOKINES IN RECOVERY FROM MILD TRAUMATIC BRAIN INJURIES**—Dr. Katie Edwards, Postdoctoral Fellow, NINR

Dr. Edwards described her educational experiences and research that explores how biomarkers map to imaging and neurological findings in patients with mild traumatic brain injuries.

Although the U.S. Food and Drug Administration recently approved the first blood-based screening for individuals who experience concussion, there are still no approved therapies specific for concussion. Peripheral biomarkers of inflammation following blast exposure allow detection of slight changes in protein concentrations. A gene expression study found dysregulated gene expression after blast exposure altered expression of three genes: *TRIP12* (ubiquitination), *NAE1* (neddylation), and *AKT1* (immune activity).

Dr. Edwards plans to explore blood tests for investigating pathogenesis of post concussive neurologic conditions (e.g., trouble sleeping, headaches, tinnitus, irritability, memory problems, concentration impairment) as she continues investigating biomarker-associated patient outcomes.

**XI. PANEL DISCUSSION**—Intramural Research Program Presenters Drs. Goto, Prescott, Todd, and Edwards

IRP presenters responded to questions from Council members.

- Dr. Edwards noted that she studied two different populations: individuals in the training environment versus those who were deployed.
- It was commented that Dr. Goto's objective wound pain assessment tool for cognitively impaired patients might be useful for other populations, such as those who do not speak the care provider's language. Dr. Goto plans to validate the biomarkers in communicative patients first and follow with patients who have dementia.
- IRP presenters described challenges they have faced. Dr. Edwards noted that she was Clemson's first GPP student; Dr. Tamez helped the institution navigate this new experience. Dr. Prescott commented that she started with limited lab experience but acquired the basics while attending an SGI.
- Ms. Prescott noted that Dr. Henderson made the interaction with her dissertation committee practically seamless; because no one on her dissertation committee was following her line of

research, she added outside content experts. Dr. Edwards reported that Dr. Gill supplied TBI expertise that her faculty advisors lacked. Dr. Tamez added that potential GPP students are not required to identify a research match at NINR; she provides resources to help them find a good match within NINR and across NIH ICs.

**XII. ADJOURNMENT**—Dr. Ann Cashion, Acting Director, NINR

Dr. Cashion thanked meeting attendees and adjourned the open session of the meeting at 4:40 p.m.

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**CLOSED SESSION**

This portion of the meeting was closed to the public in accordance with the determination that this session concerned matters exempt from mandatory disclosure under Sections 552b(c)(4) and 552b(c)(6), Title 5, U.S. Code, and Section 10(d) of the Federal Advisory Committee Act, as amended (5, USC Appendix 2). Members absented themselves from the meeting during discussion of and voting on applications from their own institutions or other applications in which there was a potential conflict of interest, real or apparent. Members were asked to sign a statement to this effect.

**REVIEW OF APPLICATIONS**

NACNR members considered 150 research and training grant applications on which NINR was the primary Institute; these applications requested a total of \$40,464,976 (direct costs year 01). The Council also considered 230 applications on which another Institute/Center was primary and NINR was secondary. These applications requested a total of \$126,899,873 (direct costs year 01). The Council concurred with the Institutional Review Group recommendations on these 380 applications.

**ADJOURNMENT**

The 96<sup>th</sup> meeting of the NACNR was adjourned at 1:00 p.m. on Wednesday, September 5, 2018.

**CERTIFICATION**

I hereby certify that the foregoing minutes are accurate and complete

\_\_\_\_\_  
Ann Cashion, Ph.D., R.N., F.A.A.N.  
Acting Chair  
National Advisory Council for Nursing Research

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Marguerite Kearney, Ph.D., R.N., F.A.A.N.  
Acting Executive Secretary  
National Advisory Council for Nursing Research

## **COUNCIL MEMBERS PRESENT**

Dr. Ann Cashion, Acting Chair  
Dr. Marguerite Kearney, Acting Executive Secretary  
Dr. Kathryn H. Bowles  
Dr. Yvette Conley  
Dr. George Demiris  
Dr. Audwin Fletcher  
Dr. Jennifer Hatzfeld, Ex Officio  
Dr. Jeffrey A. Kelly  
Dr. Deborah Koniak-Griffin  
Dr. Ida Moore  
Dr. Shirley Moore  
Dr. Nilda Peragallo-Montano  
Dr. Rita Pickler  
Dr. Alexa K. Stuijbergen  
Dr. Sheila C. Sullivan, Ex Officio  
Dr. Jennifer Temel  
Dr. JoEllen Wilbur

## **MEMBERS OF THE PUBLIC PRESENT**

Dr. Joel Anderson, University of Tennessee College of Nursing  
Dr. Taura L. Barr, Valtari Bio™  
Ms. Heidi Chang, McAllister & Quinn  
Ms. Vanessa Curlee, Duke University School of Nursing  
Ms. Lisa Mansfield, Duke University School of Nursing  
Dr. Lea Ann Matura, University of Pennsylvania  
Dr. Tamar Rodney, Johns Hopkins University  
Ms. Kathy Sedgwick, NOVA Research Company  
Ms. Vicki Stocker, Social & Scientific Systems  
Ms. Ashlee Vance, Duke University School of Nursing  
Mr. Barrett Whitener, IQ Solutions  
Dr. Tami H. Wyatt, University of Tennessee College of Nursing

## **FEDERAL EMPLOYEES PRESENT**

Dr. Lynn Adams, NINR/NIH  
Mr. Brian Albertini, NINR/NIH  
Dr. David Banks, NINR/NIH  
Ms. Melissa Barrett, NINR/NIH  
Dr. Ruel Billones, NINR/NIH  
Dr. Yvonne Bryan, NINR/NIH  
Ms. Adrienne Burroughs, NINR/NIH  
Dr. Edmond Byrnes, NINR/NIH  
Dr. Ann Cashion, NINR/NIH

Ms. Pamela Davis, NINR/NIH  
Dr. Augie Diana, NINR/NIH  
Dr. Katie Edwards, NINR/NIH  
Dr. Matthew Eliseo, NINR/NIH  
Ms. Ana Ferreira, NINR/NIH  
Ms. Diana Finegold, NINR/NIH  
Dr. Gabriel Fosu, Center for Scientific Review (CSR)/NIH  
Ms. Alexis Franks, NINR/NIH  
Mr. Timothy Fuss, NINR/NIH  
Dr. Nara Gavini, NINR/NIH  
Dr. Jessica Gill, NINR/NIH  
Dr. Taichi Goto, NINR/NIH  
Dr. Michelle Hamlet, NINR/NIH  
Dr. Rebecca Hawes, NINR/NIH  
Dr. Wendy Henderson, NINR/NIH  
Dr. Rebecca Henry, NINR/NIH  
Dr. Karen Huss, NINR/NIH  
Mr. Doug Hussey, NINR/NIH  
Ms. Deborah Jennings, NINR/NIH  
Dr. Paule Joseph, NINR/NIH  
Dr. Karen Kehl, NINR/NIH  
Dr. Jeff Kelly, NINR/NIH  
Ms. Saloni Kumar, NINR/NIH  
Mr. Tokunbor Lawal, NINR/NIH  
Ms. Mary Ley, NINR/NIH  
Dr. Weiqun Li, NINR/NIH  
Ms. Josephine Liwang, NINR/NIH  
Dr. Martha Matocha, NINR/NIH  
Dr. Jessica McIlvane, NINR/NIH  
Dr. Katy Meilleur, NINR/NIH  
Dr. Arthur Meltzer, NINR/NIH  
Dr. Jeri Miller, NINR/NIH  
Ms. Meghan Murray, NINR/NIH  
Dr. Preethy Nayar, CSR/NIH  
Dr. Cheryl Nordstrom, CSR/NIH  
Dr. Ananya Paria, NINR/NIH  
Ms. Shavonne Pocock, NINR/NIH  
Ms. Stephanie Prescott, NINR/NIH  
Dr. Mary Roary, NINR/NIH  
Dr. Louise Rosenbaum, NINR/NIH  
Mr. Abhrrup Roy, Office of the Director (OD)/NIH  
Dr. Leorey Saligan, NINR/NIH  
Ms. Bonnie Snyder, OD/NIH  
Ms. Carrie Stroup, OD/NIH

Dr. Pamela Tamez, NINR/NIH  
Dr. Chelvi Thyagarajn, NINR/NIH  
Dr. Joshua Todd, NINR/NIH  
Dr. Lois Tully, NINR/NIH  
Mr. Simon Turkington, NINR/NIH  
Dr. Brian Walitt, NINR/NIH  
Mr. Kevin G. Wilson, NINR/NIH  
Dr. Sue Wingate, NINR/NIH  
Dr. Lichen Xiang, NINR/NIH  
Mr. Ajay Yadava, NINR/NIH  
Dr. Sung “Sarah” Yoon, NINR/NIH