

Department of Health and Human Services

National Institutes of Health

National Institute of Nursing Research

Minutes of the National Advisory Council for Nursing Research

May 15–16, 2018

The 95th meeting of the National Advisory Council for Nursing Research (NACNR) was convened on Tuesday, May 15, 2018, at 12:30 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, May 16, 2018, at 9:00 a.m. and continued until adjournment at 1:00 p.m. Dr. Patricia A. Grady, Chair, NACNR, presided over both sessions of the meeting.

OPEN SESSION

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

Dr. Grady called the 95th meeting of the NACNR to order and welcomed all Council members, Council member candidates, visitors, and staff.

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 January 24, 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).

Dates of Future Council Meetings

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

2018

September 4–5 (Tuesday–Wednesday)

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. Patricia Grady, Director, NINR

The Director's report focused on activities and news from the Department of Health and Human Services (HHS), NIH, and NINR occurring since the January Council meeting. Highlights of Dr. Grady's report included:

Budget Update—The Fiscal Year (FY) 2018 budget includes a 5.2 percent increase in the appropriation for NINR (\$158 million) and an 8.8 percent increase for NIH. Some of the programs targeted for the NIH budget increase include \$1.8 billion for Alzheimer's disease research, \$400 million for the Brain Research through Application of Innovative Neurotechnologies (BRAIN) initiative, \$300 million for the Cancer Moonshot, and \$290 million for the *All of Us* research initiative.

Dr. Grady noted that the bulk of funds (close to 80 percent) supports extramural research, training awards, and research and development. Other NINR budget allocations include the intramural program (8 percent), and research management services (11 percent).

HHS and NIH News—Dr. Grady reported recent appointments within the Department of Health and Human Services. Mr. Alex Azar was confirmed as Secretary of Health and Human Services in January, and Dr. Robert R. Redfield has been named Director of the Centers for Disease Control and Prevention (CDC).

New NIH clinical trial (CT) policies that became effective January 25, 2018, are detailed at <https://grants.nih.gov/policy/clinical-trials.htm>. NIH now requires all applications involving one or more CTs be submitted in response to a Funding Opportunity Announcement (FOA) designated specifically for CTs. New CT-specific review criteria will be used to evaluate CT applications, and a new form that consolidates all human subjects and CT information has been introduced.

The NIH Policy on the Use of a Single Institutional Review Board (sIRB) for Multi-Site Research (<https://grants.nih.gov/policy/clinical-trials/single-irb-policy-multi-site-research.htm>) is designed to streamline the IRB review process for NIH-funded, multisite clinical research studies without compromising ethical principles and protections for human research participants.

NIH convened its first *All of Us* Research Priorities Workshop in March to identify key research priorities and associated data requirements that will capitalize on the *All of Us* one-million-participant cohort. The overall aim is to enroll volunteers, oversampling communities that have been underrepresented in research. The initiative offers benefits for participants and for researchers. The six major components of this research program consortium are as follows: a data and research center, a biobank, a participant technology systems center, a participant center/direct volunteer network, a healthcare provider organization network, and a communications and community network.

The NIH HEAL (Helping to End Addiction Long-term) Initiative (www.nih.gov/heal-initiative) was launched in April to stem the national opioid public health crisis. NIH will work with partners from the biopharmaceutical industry to develop a data sharing collaborative, new biomarkers for pain, and a clinical trials network for testing new pain therapies. The NIH-industry partnership will focus on sharing intellectual capital rather than monetary capital.

Applications are being accepted for the 2018 Lasker Clinical Research Scholars Program (<https://www.nih.gov/research-training/lasker-clinical-research-scholars>) through August 31, 2018. Lasker Scholars receive a unique combination of NIH funding for clinical research for up to ten years. Dr. Jessica Gill, Chief of the Brain Injury Unit in NINR's Division of Intramural Research, is a current Lasker Clinical Research Scholar.

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

NINR News—Dr. Grady acknowledged the contributions of three retiring Council members: Mr. James Corbett and Drs. Nancy Redeker and Meredith Rowe.

Dr. Andrea Barsevick presented the first NINR Director's Lecture of 2018 (science of symptom management). Upcoming Director's Lectures include Dr. Jacquelyn Taylor on May 22 (hypertension genomics in black families) and Dr. Ann-Marie McCarthy on September 25 (helping children cope with painful procedures). Director's lectures are available for viewing on NINR's YouTube channel.

A new video from Medscape TV features NINR's 2017 Precision Health Boot Camp. The video is available at <http://www.medscape.com/mtv/oncology-nursing/basic-training-and-then-some>.

A summary of "The Science of Caregiving Summit" hosted by NINR and partners in August 2017 is available on the NINR website. Dr. Marguerite Kearney and Dr. Grady co-authored a *Nursing Outlook* editorial summarizing the Summit and the role of research in addressing issues related to caregiving.

Papers from the 2017 National Nursing Research Roundtable (NNRR) meeting are featured in the January 2018 issue of the *Journal of Nursing Scholarship*. In addition to a guest editorial co-authored by Dr. Grady and Dr. Deborah Trautman, President and CEO of the American Association of Colleges of Nursing, the issue includes papers authored by Drs. Antonia Villarruel, Jacquelyn Taylor, and Kathleen Hickey on preparing nurse scientists for sustainable careers. The 2018 NNRR focused on promoting biobehavioral approaches in symptom science research through professional collaboration.

In March, three NINR-supported scientists received "State of the Science" citations at the Annual Assembly of the American Academy of Hospice and Palliative Medicine (AAHPM)/Hospice and Palliative Nursing: Drs. Joseph Rogers and James Tulsky (palliative care in heart failure), Dr. Mi-Kyung Song (advance care planning and end-of-life decision making in dialysis), and Dr. Maureen Lyon (a randomized CT of adolescents with HIV/AIDS).

MedLinePlus and NINR are collaborating to offer a text message campaign for those living with serious illnesses and their families. Launched in February, the campaign offers weekly messages about palliative care in English and Spanish.

Dr. Grady noted the range of NINR funding opportunities available at www.ninr.nih.gov/ResearchAndFunding/DEA/OEP/FundingOpportunities/.

NINR Training Opportunities—On May 2, nine NINR early-career trainees participated in the NIH Postbac Poster Day, an opportunity to present their research to the rest of the NIH community.

Registration has closed for two NINR training opportunities: the 2018 Summer Genetics Institute course (June 4–29) and the NINR Methodologies Boot Camp, “Precision Health: Smart Technologies, Smart Health” (July 23–27).

The following NINR Intramural news was noted:

- Dr. Jessica Gill has been tapped to serve on the National Academies Study Committee that is reviewing the Department of Veterans Affairs’ examinations for brain injury research. Dr. Gill and her collaborator, Dr. Ava Puccio, received a grant from the Chuck Noll Foundation for Brain Injury Research to study a biomarker panel for inflammation and tau in concussed athletes.
- An invention developed by NINR’s Dr. Wendy Henderson and Dr. Chang Hee Kim of GoDx won the 2018 American Gastroenterological Association’s Tech Summit Shark Tank competition. Their point-of-use stool method tests for infectious pathogens in real time.
- Dr. Paule Joseph received the 2018 Penn Nursing Science Lillian Sholtis Brunner Award for Innovation.
- Dr. Kristen Weaver, a former Graduate Partnerships Program fellow, received the 2017–2018 Outstanding Dissertation Award from the American Association of Critical Care Nurses.

The following NINR staff news was noted:

- Dr. Jeri Miller received the AAHPM Presidential Citation.
- Dr. Lynn Adams was inducted into the Nutrition Science Hall of Fame at Purdue University.
- Dr. David Banks received the inaugural NIH **Yvonne Maddox Award for Equity, Diversity, and Inclusion**.

III. NIH INITIATIVES TO IMPROVE STEWARDSHIP OF CLINICAL TRIALS—

Dr. Michael Lauer, Deputy Director for Extramural Research, NIH

Dr. Lauer described new NIH policies on dissemination of NIH-funded CT information and NIH initiatives designed to enhance stewardship of clinical research, from concept to reporting of results.

Over the past eight years, a number of medical journals have pointed to a lack of policies to ensure public access to results from publicly funded research. Failure to disseminate results of CTs in a timely way is perceived as a violation of scientific method principles that not only dishonors volunteers who bore the risk of participating but also impedes scientific progress and wastes research funding. A Government

Accountability Office study of NIH oversight of CTs expressed concern that NIH was not systematically collecting data to enhance stewardship of public funds.

The [NIH Policy on Dissemination of NIH-Funded Clinical Trial Information](#) requires all NIH-funded CTs to register and submit results to [Clinicaltrials.gov](#). Reforms include requirements for trial registration, timely posting of results, and labeling of FOAs to indicate whether they accept CTs. NIH reserves the right to withhold funding for future trials from an institution that fails to register and/or report CT results.

Clinical trial resources posted at <https://grants.nih.gov/policy/clinical-trials.htm> spell out requirements for CT registration and reporting and include videos and decision tools as well as case studies designed to help investigators determine whether NIH would consider their proposed study to be a CT.

IV. ANNOUNCEMENT OF VISITORS

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

V. OVERVIEW OF THE NINR PALLIATIVE CARE AND END-OF-LIFE PORTFOLIO—

Drs. Lynn Adams and Karen Kehl, Health Science Administrators, Office of End-of-Life and Palliative Care Research, NINR

Drs. Adams and Kehl presented an update on NINR's end-of-life and palliative care (EOLPC) portfolio and described how NINR continues in leading the science of EOLPC through research career enhancement, strengthening of research resources (such as the Palliative Care Research Cooperative Group), and building of the science through targeted program announcements. NINR targets research efforts to assist individuals, families, and health care professionals in managing symptoms of advanced, serious illness and planning for end-of-life decisions. The NINR Office of EOLPC Research coordinates and supports these efforts.

Pediatric palliative care (PC) interventions are needed that bring the voice of the child into important care decisions and planning. Dr. Maureen Lyon's research aims to understand the needs, perspectives, and decision-making processes of teens with advanced cancer and their families. The intervention engages parents more intensely, empowers teens to communicate their wishes, and helps families feel better-informed when making decisions. Principal Investigators (PIs) expect to identify ethnocultural differences in response to the intervention in future research studies.

Support for palliative caregivers needs to be translated and adapted to the settings where individuals receive care, including the home. Dr. Betty Ferrell's research aims to translate an evidence-based

intervention into a large community-based healthcare system. Results indicate successful uptake of the intervention by medical oncology and PC teams.

Communication interventions identify strategies to facilitate, understand, and communicate advance care planning goals. Drs. Michael Paasche-Orlow and Timothy Bickmore aim to understand how emotions drives decision-making processes. Results indicate that patients were comfortable interacting with an avatar-based interactive software program about issues they may have never discussed with their doctors.

Palliative care (PC) interventions must address cultural barriers within diverse populations. Dr. Stacey Fisher is testing a culturally tailored, community-based intervention to facilitate PC for Latinos. Preliminary results indicate that the intervention increased the number of advance directives completed and the number of patients who talked with their families about care preferences and with their healthcare providers about future care decisions.

VI. PALLIATIVE CARE: ADDRESSING THE URGENCY OF SUPPORTING SERIOUS ILLNESS FAMILY CAREGIVERS—Dr. Nicholas Dionne-Odom, Postdoctoral Fellow, University of Alabama School of Nursing

Dr. Dionne-Odom described the urgent need to find ways to support family caregivers and how PC can help address this need. With estimates that caregivers engage in 1.5 million challenging and often stressful EOL decisions each year as surrogate health care decisionmakers. Statistics indicate that 1 in 3 of these surrogates experience negative mental health effects.

Dr. Dionne-Odom's research confirmed that family surrogate decisionmakers are under extreme duress during EOL decision-making, primarily due to poor preparation; 1 in 3 family caregivers for poor-prognosis cancer patients had anxiety and 2 in 5 had depression. Anxious and depressed caregivers reported poor self-care behaviors. Dr. Dionne-Odom hypothesized that decision preparation for family members needs to occur early in their care recipient's illness trajectory. Other research demonstrated that caregivers who received a phone-based PC intervention at an early stage had reduced stress burden and depressed mood and improved quality of life.

NINR supports Dr. Dionne-Odom's K99/R00, which aims to tailor a telehealth intervention outline for Southern, rural-dwelling, advanced-cancer family caregivers and evaluates acceptability of the intervention and feasibility of enrolling and retaining 60 participants into a small-scale randomized controlled trial (RCT). To date, he has collected qualitative data from 26 navigators, 20 caregivers, and 18 patients and is developing the protocol for the RCT he hopes to start this summer.

Dr. Dionne-Odom noted that leadership skills are essential for early-career nurse scientists to conduct trials that develop and disseminate models of care. Developing these skills requires real-world implementation support from a robust research community, thought leadership opportunities, and outstanding mentors who model leadership and how to manage large, complex research studies.

VII. DECISIONS THAT MATTER: TRANSLATING PALLIATIVE CARE RESEARCH INTO POLICY AND PRACTICE—Dr. Susan Hickman, Professor, Indiana University (IU) School of Nursing and Co-Director, IU Purdue University Indianapolis RESPECT Center

Dr. Hickman described efforts to translate research supporting an advance planning tool called POLST (Physician Orders for Life-Sustaining Treatment) into policy and transform policy into practice.

An NINR R01 that evaluated use of POLST in nursing homes found that preferences of residents who had a POLST were better documented and that treatment was more consistent with POLST. Hospice staff reported that POLST prevents unwanted hospitalizations and helps initiate conversations; chart reviews showed that 98 percent of POLST orders to limit treatment were respected.

Through grassroots efforts, legal barriers to POLST implementation in Indiana were overcome in 2013. By 2017, nearly every state was developing or had endorsed a POLST program. A second NINR R01 evaluated quality of POLST decisions in the nursing home setting and found that 65 percent of responding nursing homes complete a POLST after admission.

Dr. Hickman's NIA R21/R33 will test an Advance Care Planning Specialist program designed to improve care and reduce unwanted hospitalizations for nursing home patients with Alzheimer's disease and related dementias.

NINR-funded research produced high-quality data that led to more research on POLST. These data have supported policy changes that meaningfully affect the lives of thousands of people every day.

VIII. PEDIATRIC PALLIATIVE CARE: FROM POPULATION-LEVEL STUDIES TO INTIMATE DECISIONS—Dr. Chris Feudtner, Children's Hospital of Philadelphia

Dr. Feudtner discussed capacity of practice and research in pediatric PC, concepts that guide care, and the complexity of patients' and parents' needs.

Between 2000 and 2005, an Agency for Healthcare Research and Quality K08 supported efforts to profile the needs of dying children. The study looked at large, population-level data and led to formation of the

Pediatric Palliative Care Research Network (PPCRN) in 2006. Since its inception, PPCRN has expanded to include 121 individuals in 66 organizations across 7 countries. The network hosts monthly works-in-progress webinars and provides a collaborative platform for research projects.

A cross-sectional national survey found that 69 percent of responding hospitals had a pediatric PC program; substantial variation in staffing, funding, and services was reported across programs. Since then, the American Academy of Pediatrics has issued a policy statement on pediatric palliative and hospice care that provides guidelines and recommendations based on a combination of published observational studies, expert opinion, and consensus statements.

Dr. Feudtner described key concepts guiding care based on findings from a sequence of prospective cohort studies.

With the advent of successful technologies and life-saving interventions, seriously ill children are living longer but at high degrees of medical fragility and complexity. The first PPCRN study showed most patients were living more than one year after starting PC. Issues related to polysymptomology and polypharmacology associated with these children receiving long-term PC need to be addressed, as do the many parents who are at a clinical level of distress that warrants intervention.

There is a great need to continue building capacity to explore how to improve communication and decisionmaking and expand the science to address the challenges of medical complexity.

IX. MODERATED PANEL: END-OF-LIFE & PALLIATIVE CARE RESEARCH—Dr. Chris Feudtner, Children’s Hospital of Philadelphia

Dr. Dionne-Odom described opportunities and challenges for the PC field in the next ten years. As the number of people who will need PC increases, it seems likely that there will not be enough specialty professionals available to care for them. He foresees increased integration of PC across illnesses (e.g., heart failure, chronic obstructive pulmonary disease, and Alzheimer’s) with delivery occurring earlier. PC will continue to expand upstream from only EOL care to broader integration into serious illness care. Responsibilities of home caregivers will expand, and as people live longer with serious illnesses, greater value will be placed on tasks these caregivers perform. Dr. Dionne-Odom envisions the growth of a robust cadre of researchers with strong mentoring skills; the limited number of senior-level mentors already is stretched too thin.

Dr. Hickman pointed to the focus on pragmatic trials to evaluate evidence-based strategies and associated challenges such as limitations of existing data sources that may not measure what is required. PC interventions should be designed and tested in the real, world without discarding scientific approaches.

She applauded the current uptick in interest in PC and advance care planning specifically, coalitions that focus on honoring choices, and state-level efforts to improve policy and regulation. As PC moves upstream, the focus of research needs to broaden to serving people with chronic limitations and take advantage of opportunities in the nursing home setting

Dr. Feudtner described additional scientific and methodological challenges and opportunities such as how to study, understand, and manage the trajectory of care required over time and higher, longer caregiver burden. Communication interventions will be needed to address the deep human aversion to talking about serious illness, death, and dying.

Dr. Dionne-Odom noted the challenges of using RCTs for PC, including expense and recruitment issues and suggested that alternate trial designs (e.g., multiple optimization strategy trials) be considered. Dr. Hickman added the need to develop tools to assess basic concepts and important outcomes. The science around advance care planning is immature.

Council members discussed the potential role of the *All of Us* initiative to support the EOLPC research, the perceived divide between symptom science and PC, and the need to develop a theory of medical complexity.

X. INTRODUCTION OF CONCEPT PLANNING PROCESS—Dr. Patricia Grady,
Director, NINR

Dr. Grady provided an overview of the concept planning process and noted that NINR looks to Council members for guidance on future initiatives to pursue. Concept development is a deliberative process that involves identifying gaps in the portfolio, emerging problems, and opportunities for innovation.

XI. CONCEPT PRESENTATION AND DISCUSSION—Dr. Nara Gavini, Chief, Office of
Extramural Programs, NINR

Dr. Gavini facilitated discussion of seven concepts. Each Council member who was assigned as a lead discussant provided a brief concept overview and remarked upon its importance and relevance to the NINR mission. Discussion by the entire Council followed.

Concept 1. Strategies to Provide Culturally Tailored Palliative and End-of-Life Care for Seriously Ill American Indian and Alaska Native Individuals

The proposed concept aims to develop strategies for providing culturally tailored EOLPC for seriously ill American Indians and Alaska Natives, populations that have higher death rates and

delayed cancer diagnoses. Some Council members expressed concern about the lack of researchers qualified to study this small population and suggested including rural populations. Another Council member advocated keeping the aim narrow due to the immense disparities experienced by this population and the challenges of working with tribal governments.

Concept 2. Limited Competition: Modular Budget Research Project Grant for NIH Nurse Science Scholars

The concept aims to develop a new post-K funding mechanism to help early-career scientists get started. Council members expressed concern about the quality of the science and uniqueness of applications and suggested increased funding to the K99/R00 mechanism. Others supported the proposed concept and predicted it would be popular.

Concept 3. Addressing Caregiver Symptoms through Technological Tools

The proposed concept aims to deal with caregiver symptoms using technologies such as assistive medical devices, remote communication and monitoring tools, alert systems, and machine learning to enhance understanding of symptoms and changing needs. The concept fits at the intersection of NINR's strategic planning areas of technology and symptom science. Council recommended incorporating caregiver denial, dynamics of multiple caregivers, decision support, prevention and reduction of caregiver symptoms, social implications, and addressing the caregiver experience more broadly.

Concept 4: Symptom Science: Biobehavioral Underpinnings of Chronic Pain

This concept aims to gain a mechanistic understanding of chronic pain by optimizing approaches for combining phenotypic, omic, and behavioral measures; integrating data from multiple sources; and considering frameworks and interventions. Suggestions were made to incorporate geographical, cultural, and socioeconomic status; clarify whether the approaches focus on pediatric pain or cross the lifespan; expand the outcomes to include other symptoms, quality of life, etc.; and tap into existing data sources rather than focus on new data collection.

Concept 5. Self-Management of Chronic Pain: A Biopsychosocial Approach

The proposed concept looks at social determinants of health and addresses disparities in pain and biases that influence identification of pain as well as therapy and outcomes contributing to undertreatment of at-risk groups. Suggestions were made to add people living with disabilities, consider risk in terms of setting, and explore reimbursement models to support nonpharmaceutical

interventions.

Several Council members suggested combining Concepts 4 and 5.

Concept 6: Telomere Health in Wellness and Disease: A Biobehavioral Approach

The proposed concept focuses on using telomeres as biomarkers and fits within NINR's strategic plans for wellness, symptom science, and self-management. Telomere literature says little about symptoms—a gap that creates opportunities for NINR—and as the ability to measure telomere length has become more reliable, the timing of this proposal is right. Concerns were expressed about the use of the undefined term *telomere health* throughout the proposal, the absence of telomere regulation, and potential replication challenges. Suggestions included incorporating concept aims into ongoing research.

Concept 7: End-of-Life and Palliative Care Approaches to Advanced Signs and Symptoms

The proposed concept aims to improve quality of life, optimize interventions, and reduce caregiver burden. Suggestions included adding other symptoms (e.g., anorexia, weight loss, incontinence) and symptom clusters, encouraging use of new visualization techniques, addressing potential confounders (e.g., age, medical complexity), and eliminating references to management. The exploratory nature of the concept should be emphasized, with the idea that findings will lead to mechanistic and intervention studies.

Dr. Grady thanked Council members for their thoughtful discussion. These comments will be reviewed, and concepts will be revised in response to Council feedback.

XII. REVIEW OF THE STATEMENT OF UNDERSTANDING—Dr. Marguerite Kearney, Executive Secretary, NACNR, and Director, Division of Extramural Science Programs, NINR

The Statement of Understanding outlines the responsibilities of Council members regarding second-level review of grant applications and resolving special considerations. No substantial changes have been made since the last annual review except an addition about exclusions of Small Business Innovation Research and Small Business Technology Transfer grants from the high-budget criteria.

ADJOURNMENT—Dr. Patricia Grady, Director, NINR

Dr. Grady thanked participants and attendees and adjourned the open session of the meeting at 4:35 p.m.

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 161 research and training grant applications on which NINR was the primary Institute; these applications requested a total of \$42,566,539 (direct costs year 01). The Council also considered 356 applications on which another Institute/Center was primary and NINR was secondary. These applications requested a total of \$108,638,791 (direct costs year 01). The Council concurred with the IRG recommendations on these 517 applications.

ADJOURNMENT

The 95th meeting of the NACNR was adjourned at 1:00 p.m. on Wednesday, May 16, 2018.

CERTIFICATION

I hereby certify that the foregoing minutes are accurate and complete.

Patricia A. Grady, Ph.D., R.N., F.A.A.N.
Chair
National Advisory Council for Nursing Research

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

COUNCIL MEMBERS PRESENT

Dr. Patricia Grady, Council Chair
Dr. Marguerite Kearney, Executive Secretary
Dr. Kathryn H. Bowles
Dr. Yvette Conley
Mr. James Corbett
Dr. Audwin Fletcher
Dr. Jennifer Hatzfeld, *Ex Officio*
Dr. Deborah Koniak-Griffin
Dr. Karen Meneses

Dr. Shirley Moore
Dr. Rita Pickler
Dr. Nancy Redeker
Dr. Meredith A. Rowe
Dr. Alexa K. Stuijbergen
Dr. Sheila C. Sullivan, *Ex Officio*
Dr. Jennifer Temel
Dr. JoEllen Wilbur

MEMBERS OF THE PUBLIC PRESENT

Ms. Katelyn Clements, University of Delaware
Dr. Elizabeth Corwin, Emory University School of Nursing
Dr. James N. Dionne-Odom, University of Alabama at Birmingham
Dr. Susan Dorsey, University of Maryland
Dr. Chris Feudtner, Children's Hospital of Philadelphia
Dr. Christine Fortney, Ohio State University College of Nursing
Ms. Tamryn Gray, Johns Hopkins University
Dr. Marie Griffioen, University of Delaware
Dr. Barbara Habermann, University of Delaware
Ms. Lindsey Hertsenbergh, University of Maryland
Dr. Susan Hickman, Indiana University
Ms. Melanie Horning, University of Delaware
Dr. Mark Lazenby, Yale School of Nursing
Ms. Linah Lubin, IQ Solutions
Dr. Lea Ann Matura, University of Pennsylvania
Dr. Deborah McGuire, Virginia Commonwealth University School of Nursing
Ms. Michelle Ness, University of Delaware
Ms. Michelle Norton, University of Delaware
Dr. Shelly Orr, Virginia Commonwealth University School of Nursing
Dr. Mary Regan, University of Maryland
Dr. Cynthia Renn, University of Maryland
Ms. Kathy Sedgwick, NOVA Research Company
Dr. Lixin Song, University of North Carolina
Ms. Rhea Williams, University of Maryland

FEDERAL EMPLOYEES PRESENT

Dr. Lynn Adams, NINR/NIH
Mr. Brian Albertini, NINR/NIH
Dr. David Banks, NINR/NIH
Dr. Yvonne Bryan, NINR/NIH
Ms. Adrienne Burroughs, NINR/NIH
Dr. Edmond Byrnes, NINR/NIH
Dr. Ann Cashion, NINR/NIH
Ms. Heidi Chang,

Dr. Augie Diana, NINR/NIH
Ms. Ana Ferreira, NINR/NIH
Dr. Nara Gavini, NINR/NIH
Dr. Jessica Gill, NINR/NIH
Dr. John Grason, NINR/NIH
Dr. Michelle Hamlet, NINR/NIH
Dr. Martha Hare, NINR/NIH
Dr. Rebecca Hawes, NINR/NIH
Dr. Rebecca Henry, NINR/NIH
Dr. Karen Huss, NINR/NIH
Dr. Paule Joseph, NINR/NIH
Dr. Karen Kehl, NINR/NIH
Ms. Mary A. Kelly, NINR/NIH
Ms. Diane Kuszewski, NINR/NIH
Ms. Connie Latzko, NINR/NIH
Dr. Michael Lauer, Office of the Director (OD), NIH
Dr. Weiqun Li, NINR/NIH
Dr. Martha Matocha, NINR/NIH
Dr. Jessica McIlvane, NINR/NIH
Dr. Arthur Meltzer, NINR/NIH
Dr. Jeri Miller, NINR/NIH
Dr. Cheryl Nordstrom, Center for Scientific Review/NIH
Dr. Ananya Paria, NINR/NIH
Ms. Shavonne Porock, NINR/NIH
Dr. Rebekah Rasooly, NINR/NIH
Mr. Abhrrarup Roy, OD/NIH
Dr. Mary Roary, NINR/NIH
Dr. Pam Tamez, NINR/NIH
Dr. Lois Tully, NINR/NIH
Mr. Kevin G. Wilson, NINR/NIH
Dr. Sue Wingate, NINR/NIH
Dr. Brian Wolff, NINR/NIH
Mr. Ajay Yadava, NINR/NIH
Dr. Sung “Sarah” Yoon, NINR/NIH