The 92nd meeting of the National Advisory Council for Nursing Research (NACNR) was convened on Tuesday, May 23, 2017, at 1:00 p.m. in Conference Room 6, Building 31, National Institutes of Health (NIH), Bethesda, Maryland. The meeting was in open session until 4:55 p.m. on Tuesday, reconvening at 9 a.m. on Wednesday, and continued until 9:45 a.m. The closed session of the meeting, which included consideration of grant applications, was convened on Wednesday, May 24, 2017, at 9:45 a.m. and continued until adjournment at 12:00 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 92nd meeting of the NACNR to order and welcomed all Council members, visitors, and staff, including Council members in process who attended in an ad hoc capacity.

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 24–25, 2017, NACNR meeting by email. 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.

2017
September 12–13 (Tuesday–Wednesday)

2018
January 23–24 (Tuesday–Wednesday)
May 15–16 (Tuesday–Wednesday)
September 11–12 (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 since the Council met in January. Highlights of Dr. Grady’s report included:

Budget Update—Dr. Grady noted that the Fiscal Year (FY) 2017 budget approved on May 5 included a larger increase than predicted. NINR’s allocation of $150,273 million represents a 2.6 percent increase compared with a 6.2 percent increase of $34,300,999 for all of NIH.

Dr. Grady reviewed FY 2016 budget allocations, noting that the majority of funds (80 percent) go to support extramural research, training awards, and research and
development. Other NINR budget allocations include the intramural program (6 percent) and research management services (11 percent).

**HHS News**—Dr. Grady reported that Scott Gottlieb, M.D., has been confirmed as U.S. Food and Drug Administration (FDA) Commissioner; Rear Admiral Sylvia Trent-Adams has been named Acting Surgeon General; and Gopal Khanna, M.B.A., has been appointed Director of the Agency for Healthcare Research and Quality.

Faye G. Abdella, the first nurse and woman to serve as Deputy Surgeon General of the United States (1981–1989), passed away in February; she was Founding Dean of the Graduate School of Nursing, Uniformed Services University of Health Sciences, and authored one of the first books on nursing research.

**NIH News**—Dr. Grady reported that the National Center for Advancing Translational Science Clinical and Translational Science Award Program has developed a single Institutional Review Board (IRB) platform designed to serve as a roadmap to help implement the NIH policy requiring all NIH-funded multisite clinical studies to use a single IRB.

NIH and FDA have created a template to help facilitate the FDA review process for NIH-funded clinical trial protocols. Initially aimed at Phase 2 and 3 Investigational New Drug/Investigational Device Exemption protocols, the template aims to help investigators prepare protocols that include all the information needed to enable efficient and timely IRB review and compliance with FDA regulations.

**NINR News**—Dr. Grady acknowledged the following NACNR Council members in process: Drs. Yvette Conley, University of Pittsburgh, School of Nursing; Audwin Fletcher, University of Mississippi, Medical Center School of Nursing (unable to attend); Karen Meneses, University of Alabama, School of Nursing; Shirley Moore, Case Western Reserve University, Frances Payne Bolton School of Nursing; JoEllen Wilbur, Rush University, College of Nursing; and Sheila Sullivan, Director, Office of Nursing Services, Veterans Affairs.
On August 7–8, 2017, “The Science of Caregiving: Bringing Voices Together” will offer perspectives across the spectrum of caregiving, including current and future directions for research to improve the health of patients and caregivers.

A summary of the March 2017 “NINR Research Roundtable: Preparing Nurse Scientists for Sustainable Careers: Scientific Innovations & Transdisciplinary Collaborations” will be published.

In April, the NINR intramural program hosted “Symptom Science Research Symposium: A Path to Precision Health” to highlight NINR’s partnerships across other organizations. The videocast is available at https://videocast.nih.gov/Summary.asp?File=23241&bhcp=1.

In May, NINR hosted two webinars focused on the Institute’s ongoing efforts to develop common data elements (CDEs).

Dr. Grady noted that Dr. Kate Lorig’s May 23 NINR Directors Lecture would be posted with other NINR Director’s Lectures at https://www.ninr.nih.gov/newsandinformation/events/pastevents.

Dr. Grady listed several new features on the NINR website including an interactive Milestones in NINR History timeline that highlights the Institute’s significant accomplishments, discoveries, and initiatives.

NINR, the National Human Genome Research Institute, and the National Cancer Institute invite public comment on the draft Genomic Knowledge Matrix for Nursing Scientists, which recommends core educational elements to help nurse scientists expand their research into the field of genomics.

Dr. Grady showed a list of current NINR funding opportunities. Announcements are available at www.ninr.nih.gov/ResearchAndFunding/DEA/OEP/FundingOpportunities/.
Training Opportunities—

- The application period for the 2018 Graduate Partnerships Programs opens in August.
- NINR is engaging in a new intramural postdoctoral partnership with the Robert Wood Johnson Foundation and the University of Pennsylvania.

Staff News—Dr. Jessica Gill, NIH Lasker Clinical Research Scholar and Chief of the NINR Intramural Research’s Brain Injury Unit, has been selected to lead biomarker efforts for the Concussion Assessment, Research and Education Consortium. Dr. Gill will lead NIH Clinical Center grand rounds in September; Dr. Leorey Saligan did so in May.

Dr. Saligan and Dr. Wendy Henderson provided information about the unique measuring tools used in NINR studies to be featured in a video journal.

Dr. Weiqun Li has been appointed Chief of the NINR Scientific Review Branch. Dr. Sung (Sarah) Yoon has joined the NINR Wellness, Training, and Technology Branch as a Program Director where she will manage the women’s health portfolio.

Dr. Marguerite Kearney, Director of NINR’s Division of Extramural Science Programs, was named a Distinguished Alumna by the Augusta University College of Nursing.

III. POPULATION HEALTH PORTFOLIO: FUTURE RESEARCH PRIORITIES—Dr. Flora Katz, Director, Division of International Training and Research, Fogarty International Center (FIC), NIH

Dr. Katz presented an overview of FIC activities, including key strategies employed to address global health as well as opportunities for partnerships with NINR.

The FIC addresses global health challenges through innovative and collaborative research and training programs. All FIC funding involves collaborations between scientists in the United States and in low and middle income countries (LMICs) designed to build capacity of LMIC partners to carry out independent research. All FIC
initiatives leverage and partner with other NIH Institutes and Centers (ICs) and sometimes other federal agencies.

Dr. Katz outlined FIC’s Human Research Capacity Pipeline and described key research, training, and career development programs. The AIDS International Training & Research Program (AITRP) and HIV Research Training Program have employed U.S.-LMIC institutional collaborations to train more than 2,500 LMIC physicians and scientists from 47 countries. NINR was an AITRP partner.

Fogarty offers two mentored global health research career development programs: a K01 designed to provide protected time to U.S. investigators for research abroad and a K43 to provide a postdoctoral maturing period for LMIC investigators.

Sponsored by the U.S. President’s Emergency Plan for AIDS Relief and administered by NIH, Medical Education Partnership Initiative (MEPI) aims to strengthen the medical education system in Africa in an environment that values and nurtures research to increase quality, quantity, and retention of physicians. MEPI grantees expanded their networks within and outside their countries to strengthen the entire medical system, stimulating growth of a new research culture that led to a transformation of how schools educate physicians.

The Nursing Education Partnership Initiative (NEPI) engaged 22 nursing schools in six African countries to promote sustainable control of the HIV epidemic by addressing shortfalls in the number, quality, and capacity of nurses and midwives. NEPI focuses on curricula, skills labs, rural placements, and development of degree programs and leadership.

Following the 2016 jointly led MEPI/NEPI annual symposium in Nairobi, the African Forum for Research and Education in Health was launched to take the lead in driving solutions to African health challenges from an African perspective.

Dr. Katz noted that biomedical science is increasingly global as demonstrated by the increased number of foreign affiliations cited in NIH-funded papers and the growing number of international undergrad and graduate students and faculty at universities.
IV. NINR’S POPULATION HEALTH PORTFOLIO UPDATE—Dr. Rebecca Henry, Program Director, HIV-AIDS Program, NINR

Dr. Henry provided an overview of NINR engagement in research designed to improve the health of diverse populations within the United States and across the world. NINR supports global nursing science through participation in training and capacity building (e.g., MEPI, Human Heredity and Health in Africa, and FIC partnerships in seven countries).

Essential components that increase the impact of a population project include cost-effectiveness for sustainability, accounting for the sociocultural context of the population, and including local partners to ensure buy-in. For example, NINR supported pilot testing of an antenatal group care model in Malawi; the pilot established that the model could be implemented successfully in resource-constrained, low-literacy, high-HIV settings in sub-Saharan Africa. NINR also funded development and evaluation of a curriculum to train Mayan women with low literacy to provide community outreach on oral rehydration therapy with zinc supplements. Recently, NINR awarded funding for development of a group prenatal care intervention to address maternal and child non-communicable disease risk in American Samoa.

Dr. Henry described several NINR successes in the area of HIV/AIDS. "Maybe Someday: Voices of HIV-Positive Women" tested an iPod-delivered stigma reduction intervention with HIV-infected women in North Carolina. "Advanced Care Planning: HIV+ Adults and Their Surrogate Decision Makers" tested a family-centered advanced care planning strategy among adults living with HIV/AIDS and co-morbidities in Washington, DC.

Dr. Henry discussed three ongoing HIV/AIDS R01s designed to address specific gaps: understanding delayed access to HIV prevention services among black men who have sex with men; adaptive intervention strategies to strengthen adherence to antiretroviral therapy HIV treatment among youth; and an evaluation of nurse-led HIV treatment retention interventions with women living with HIV in South Africa.
In light of the rise of chronic, non-communicable diseases in populations, the NINR population health portfolio will focus on non-communicable diseases such as obesity, metabolic syndrome, diabetes, cardiovascular disease/hypertension, and depressive symptoms.

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

VI. A COMMUNITY-BASED HIV PREVENTION MODEL: A GLOBAL JOURNEY—
Dr. Kathleen F. Norr, Professor Emerita, University of Illinois at Chicago, College of Nursing

Dr. Norr reported on implementation of a community-based behavioral approach for HIV prevention in Botswana and Malawi that involved training community members and trained healthcare workers to lead peer groups.

The Botswana Council of Women adopted the intervention, and the Malawi Ministry of Education incorporated the program into the teacher-training curriculum. NINR funding supported program implementation in a rural area. The intervention led to increased HIV prevention for rural and urban health workers, adults, and youth and demonstrated that volunteers can effectively deliver the intervention. Long-term follow-up showed that peer leaders remained active in their communities, although the formal peer group program was not sustained.

The community-based approach was extended and adapted for delivery to urban hospital workers and to include reproductive health for young women. However, improved outcomes from the reproductive health intervention at 6 months post-intervention did not extend to 12 months, and young women reported that their partners and parents did not support behavior changes. Implications for future research include engaging partners, parents, and community members and providing ongoing “booster” sessions to support women as their lives change.
Dr. Norr described a current research project, *Phalombe Mzake ndi Mzake*, that is evaluating community-based implementation models for HIV prevention in the area of highest HIV prevalence in Malawi. The study aims to improve HIV prevention and treatment and scale up research efforts based on strong local partnerships. A South African model originally used to introduce facility-based kangaroo mother care for preterm infants was adapted for staggered implementation in three villages. Findings to date show that communities understand the need for HIV prevention and are eager to take on the program.

The approach has been adapted and implemented among various populations across the world. In Lithuania, the program was delivered as a one-day workshop to trained nurses in hospitals, nursing schools, and communities and became a permanent offering in the required continuing education program for nurses. In Chile, community clinic health workers had positive results similar to those in Malawi. A group antenatal care and HIV prevention pilot in Malawi and Tanzania incorporates self-assessments, consultation with a midwife, interactive learning, and support in a circle, enabling one midwife and a helper to see 12 women in 2 hours.

Dr. Norr also described how these global community research efforts have supported the next generation of nurse researchers.

**VII. INTRODUCTION OF CONCEPT PLANNING PROCESS—Dr. Patricia A. Grady**

Dr. Grady provided an overview of the concept planning process that involves identifying gaps in the portfolio, emerging problems, and opportunities for innovation. Five concepts are being presented to Council today.

**VIII. CONCEPT PRESENTATION AND DISCUSSION—Dr. Nara Gavini, Chief, Office of Extramural Programs, Division of Extramural Science Programs, NINR**

Dr. Gavini facilitated discussion of the five concepts. Each assigned Council member provided a brief overview of each concept, remarking upon its importance and relevance to the NINR mission. Discussion by the entire Council followed.
Concept 1: Palliative Care Health Literacy: Improving Outcomes in Serious, Advanced Illness

The concept focuses on determining how individuals comprehend end-of-life and palliative care options and the elements necessary to create meaningful conversations between individuals, their families, and health care providers within heterogeneous populations and communities of practice. Council recommended reframing the concept to focus on better communication about serious illness, care options that include PC early in treatment, and balancing risk. Council suggested including pathways to guide decision making for unbefriended patients during long hospital stays as well as time-sensitive decision making with families of trauma patients.

Concept 2: Symptom Cluster Characterization in Chronic Conditions

The concept proposes discerning the underlying pathology of many common chronic conditions to inform improved symptom cluster treatment and intervention to improve patient outcomes and quality of life. Council endorsed the need to leverage existing CDEs in symptom cluster research and recommended including symptom clusters in children as well as aging patients. It was suggested that language be updated to align with precision medicine.

Concept 3: Implementing the Most Successful Interventions to Improve HIV/AIDS Outcomes in U.S. Communities

The concept proposes translating and adapting successful global, evidence-based HIV-related service provision strategies—including community-based settings that have been shown to be more effective than individual approaches—to serve marginalized U.S. populations. Council recommended referencing the Centers for Disease Control and Prevention’s compendium of effective programs, analyzing why some implemented programs have not been effective, and incorporating economic impact on communities, associated costs, and their relation to communities.

Concept 4: New Onset Depressive Symptoms in Acute Illness

An improved understanding of the pathobiological underpinnings of new onset
depressive symptoms that emerge during acute illness may inform risk reduction strategies aimed at preventing depressive symptoms from becoming a chronic condition requiring pharmacologic therapies. Council noted a need for greater clarity and definition of depression versus anxiety and posttraumatic stress disorder in the concept. Council members recommended including critically ill children, accounting for gender issues (e.g., underreporting in men) and cultural factors, and broadening focus to include new diagnoses of chronic illness.

**Concept 5: Addressing Chronic Wound Trajectories through Social Genomics Research**

The research generated by this initiative will lay the foundation for targeted, individualized, nonpharmacological interventions addressing the social environment that will improve chronic wound trajectories and quality of life. Council members agreed that marrying behavior with biology is a good approach and that incorporating genomics will take research to a different level. They discussed possible roadblocks to recruitment of ethnic minorities and recommended including the elderly population, incorporating nutrition to address the diabetic population, and taking cultural factors into account.

**IX. OPPORTUNITIES AND INNOVATIONS IN NIH GRANT AWARDS PROCESS**—Dr. Larry Tabak, NIH, Principal Deputy Director

Dr. Tabak described a new NIH approach to grant funding aimed at optimizing stewardship of taxpayer dollars and promoting a stronger, more stable biomedical research workforce. He presented statistics demonstrating a skewed distribution of NIH resources that concentrates funding in a relatively small group of senior investigators, which not only challenges NIH’s ability to maintain a future biomedical research workforce but also leads to reduced productivity. Analysis of incremental research output according to extent of grant support using weighted Relative Citation Ratio (RCR) shows that output increases with an investigator’s first and second R01-level grant award but diminishes incrementally as grant support increases. Further analyses suggest that funding more researchers increases overall research productivity and increases the likelihood that some of them will make major discoveries.
Dr. Tabak described several approaches: redistribution of funds to support early-stage investigators (ESIs) and pioneering projects, capping the number of NIH grants or amount of funds a principal investigator (PI) can receive, and continuing existing approaches such as the ESI policy, expanding R01 investigator-initiated research, encouraging R56 Bridge Awards for ESIs, and targeting R35 awards for mid-career “emerging investigators.” However, none of these approaches directly address the issue of diminishing returns from highly funded investigators. A trans-NIH solution is necessary because most highly funded investigators are supported by two or more ICs.

NIH proposes instituting a new trans-NIH policy that resets expectations for support provided to any single investigator. Levels of PI research project support will be monitored using the Grant Support Index (GSI), which assigns a point value to various kinds of grants based on type, complexity, and size. Applications for NIH-funding that will support researchers whose GSIs exceed 21 (the equivalent of three single-PI R01 awards) must explain how they will adjust the existing grant load of those investigators to be within GSI limits if their application is awarded. If the maximum GSI across all of NIH is 21 and only includes research project grants, approximately 3.1 percent of investigators would be affected. Resources would be redirected to make roughly 900 new awards over the next several years.

An analogous program will be put into place for the NIH intramural program.

Implementation of the plan will begin with applications submitted this fall. IC Directors will initiate a rigorous exceptions process that takes into account unique research requirements of an IC, a commitment to support investigators at all career stages, and the need to maximize productivity of grant resources. The NIH Director’s Office will make final decisions.

X. ADJOURNMENT—Dr. Patricia Grady, Director, NINR

Dr. Grady thanked participants and attendees and adjourned the open session of the meeting at 9:45 a.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 131 research and training grant applications on which NINR was the primary Institute; these applications requested a total of $37,292,937 (direct costs year 01). The Council also considered 316 applications on which another Institute/Center was primary and NINR was secondary. These applications requested a total of $117,339,540 (direct costs year 01). The Council concurred with the IRG recommendations on these 447 applications.

ADJOURNMENT

The 92nd meeting of the NACNR was adjourned at 12:00 p.m. on Wednesday, May 24, 2017.

CERTIFICATION

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

_________________________________________         ________________________________
Patricia A. Grady, Ph.D., R.N., F.A.A.N.             Marguerite Kearney, Ph.D., R.N.,
Chair                                              F.A.A.N.
National Advisory Council for                    Acting Executive Secretary
Nursing Research                                  National Advisory Council for Nursing
                                                   Research
COUNCIL MEMBERS PRESENT

Dr. Patricia Grady, Council Chair
Dr. Marguerite Kearney, Acting Executive Secretary
Dr. Kathryn H. Bowles
Dr. Aaron G. Buseh
Mr. James M. Corbett
Dr. George Demiris
Dr. Donna Hathaway
Dr. Jennifer Hatzfeld, Ex Officio
Dr. Jillian Inouye
Dr. Deborah Koniak-Griffin
Dr. Bernadette Melnyk
Dr. Rita Pickler
Dr. Nancy Redeker
Dr. Meredith A. Rowe
Dr. Alexa K. Stuifbergen
Dr. Jennifer Temel
Dr. Marjana Tomic-Canic

MEMBERS OF THE PUBLIC PRESENT

Dr. Glenna Brewster, University of Pennsylvania, School of Nursing
Dr. Pei-Ying Chuang, University of Maryland, School of Nursing
Dr. Yvette Conley, University of Pittsburgh, School of Nursing
Dr. Miyeon Jung, Indiana University, School of Nursing
Dr. Karen Meneses, University of Alabama, School of Nursing
Dr. Shirley Moore, Case Western Reserve University, Frances Payne Bolton School of Nursing
Ms. Joy Nathan, BETAH Associates
Dr. Elizabeth NeSmith, Augusta University, College of Nursing
Dr. Veronica Njie-Carr, University of Maryland, School of Nursing
Dr. Kathleen Norr, University of Illinois at Chicago
Dr. Susan Pressler, Indiana University
Ms. Beeta Rasouli, Lewis-Burke Associates, LLC
Dr. Hyekyung Rhee, University of Rochester, School of Nursing
Ms. Kathryn Rimand, American Association of Colleges of Nursing
Ms. Kathy Sedgwick, NOVA Research Company
Dr. Kelly Seyed, McAllister & Quinn
Dr. S. Pam Shiao, Augusta University, College of Nursing
Dr. Karen Wickersham, University of Maryland, School of Nursing
Dr. JoEllen Wilbur, Rush University, College of Nursing

FEDERAL EMPLOYEES PRESENT

Dr. Lynn Adams, NINR/NIH
Dr. David Banks, NINR/NIH
Ms. Melissa Barrett, NINR/NIH
Mr. Nathan Brown, 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
Mr. Matt Eliseo, NINR/NIH
Ms. Ana Ferreira, NINR/NIH
Dr. Nara Gavini, NINR/NIH
Dr. John Grason, NINR/NIH
Dr. Michelle Hamlet, NINR/NIH
Dr. Martha Hare, CSR/NIH
Dr. Rebecca Henry, NINR/NIH
Dr. Karen Huss, NINR/NIH
Dr. Flora Katz, NINR/NIH
Dr. Karen Kehl, NINR/NIH
Ms. Mary A. Kelly, NINR/NIH
Ms. Jo-Ann Kriebel, NINR/NIH
Ms. Connie Latzko, NINR/NIH
Ms. Alison Lemon, NINR/NIH
Dr. Weiqun Li, NINR/NIH
Dr. Martha Matocha, NINR/NIH
Dr. Arthur Meltzer, NINR/NIH
Dr. Cheryl Nordstrom, CSR
Dr. Ananya Paria, NINR/NIH
Dr. Mario Rinaudo, NINR/NIH
Dr. Mary C. Roary, NINR/NIH
Dr. Becky Roof, NINR/NIH
Dr. Louise Rosenbaum, NINR/NIH
Dr. Sheila Sullivan, Veterans Affairs
Dr. Lawrence Tabak, OD/NIH
Dr. Chelvi Thyagarajn, NINR/NIH
Dr. Lois Tully, NINR/NIH
Mr. Kevin G. Wilson, NINR/NIH
Dr. Sung “Sarah” Yoon, NINR/NIH