OPEN SESSION

I. CALL TO ORDER AND OPENING REMARKS—Dr. Shannon Zenk, Director, National Institute of Nursing Research (NINR)

Dr. Zenk called the 103rd meeting of the NACNR to order and welcomed all Council members, visitors, and staff and introduced Dr. Susan E. Old, Acting Executive Secretary for NACNR. She acknowledged new Council members: Drs. Grayson Holmbeck, Professor of Clinical Psychology and Director of Clinical Training in the Department of Psychology at Loyola University, Chicago; Mallory Johnson, a Licensed Clinical Health Psychologist at the University of California, San Francisco; Christopher Lee, Professor and Associate Dean for Research at the Boston College William F. Connell School of Nursing; Cindy Munro, Dean and Professor at the University of Miami School of Nursing and Health Studies; and Elias Provencio-Vasquez, Dean and Professor at the University of Colorado College of Nursing.

II. COUNCIL PROCEDURES AND RELATED MATTERS—Dr. Susan E. Old, Acting Executive Secretary, NACNR

Dr. Old noted that the open session of the meeting was being videocast live and will be archived on the NIH videocast website.
Conflict of Interest and Confidentiality Statement

Dr. Old 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 in the afternoon.

Minutes of the Previous NACNR Meeting

Council members received the minutes of the September 15, 2020, 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

Dates for future Council meetings were included in the electronic Council book. The next Council meeting (May 18, 2021) will be virtual.

III. REPORT OF THE DIRECTOR, NINR— Dr. Shannon Zenk, 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 September 2020 Council meeting. Highlights of Dr. Zenk’s report included:

HHS News— Dr. Zenk announced that President Biden has selected Mr. Xavier Becerra, Attorney General of California, as his nominee for Secretary of Health and Human Services.

NIH News— President Biden has announced that Dr. Francis Collins will continue in his role as NIH Director. Dr. Collins has served in this position since 2009.

NIH has launched a new website that will provide trusted information on COVID-19 research at NIH and the agency's role in the pandemic, including information on available vaccines, testing, and treatments; how to join clinical trials; and resources from other federal agencies.

In December, NIH announced it will fund the Faculty Institutional Recruitment for Sustainable Transformation (FIRST) program to recruit diverse cohorts of early-stage research faculty and prepare them to thrive as NIH-funded researchers. In addition, FIRST will support development and strengthening of institution-wide approaches to facilitate success of cohort members and faculty and fund a coordination and evaluation center to develop and guide collection of common data metrics to assess effects of new faculty cohorts on institutional culture. Lessons learned will be shared with the broader biomedical research community.
Funding Opportunity Announcements (FOAs) have been released for the **Stephen I. Katz Early Stage Investigator Research Grant Program**, named to honor Dr. Katz, who directed the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) until his death in December 2018. The program supports innovative projects in an area of science that represents a change in research direction for an early stage investigator (ESI) and for which no preliminary data exist.

**NINR News**—Dr. Zenk reported that she was sworn in as Director of NINR on October 14, 2020, via a virtual ceremony that included remarks from Drs. Francis Collins and Lawrence Tabak as well as Dr. Tara Schwetz, who served as Acting Director of NINR last year.

**Budget**—In late December 2020, Congress passed an Omnibus spending bill for Fiscal Year (FY) 2021. The NIH budget increased by 3 percent, and NINR’s budget increased by 3.3 percent to just under $175 million.

**COVID-19 Efforts**—NINR is supporting several Rapid Acceleration of DiagnosticsSM (RADx) initiative awards: Reaching Communities through the Design of Information Visualizations Toolbox for Return of COVID-19 Results, Alive Church Network: Increasing COVID-19 Testing in Chicago’s African American Testing Deserts (RADxSM Underserved Populations [RADx-UP]) and Multi-modal Wireless COVID Monitoring & Infection Alerts for Concentrated Populations (RADxSM Radical [RADx-rad]).

**NINR News**—NINR and several other Institutes and Offices convened a virtual workshop on innovative models of care for reducing inequities in maternal health in September. The workshop explored how nurses, midwives, and birth companions can improve maternal and infant health for women in U.S. communities affected by racial discrimination, socioeconomic inequities, and other system-level factors.

Noting that she was invited to join the Helping to End Addiction Long-termSM (HEAL) initiative Executive Committee, Dr. Zenk encouraged meeting attendees to explore open FOAs for HEAL.

On December 4, NINR and the National Institute on Minority Health and Health Disparities hosted The Science of Structural Racism. Dr. David R. Williams presented science on mechanisms by which racism affects health and contributes to health disparities and described directions for future research.

Dr. Sarah Szanton will present the next NINR Director’s Lecture on the topic of leveraging strengths to achieve health equity, with a focus on health disparities of older adults. The March 4 event will be broadcast live and archived on videocast.

On March 4 and 5, the National Nursing Research Roundtable, “Nursing Research of the Future: Using Clinical Big Data to Explore Health Inequities and Social Determinants of Health,” will focus on how clinical big data can be mined to inform interventions to reduce health inequities. For the first time, this
Roundtable will be open to the public. Dr. Zenk encouraged everyone to attend the NIH Videocast for this event.

**NINR Strategic Planning**—Dr. Zenk’s vision for the future of NINR builds on nursing’s holistic perspective on healthcare and the understanding that promoting and restoring health involves addressing needs at multiple levels—physical, emotional, social, and economic. Nursing science is ideally positioned to improve health. Dr. Zenk commented that a joint responsibility is to increase the impact of nursing science in solving the most pressing health problems and health inequities by taking nursing science to new levels, working collaboratively to push scientific boundaries, maximize the impact of scientific breakthroughs, and focus on translation. NINR’s Strategic Plan Working Group plays an important role in guiding thoughts about the future of NINR and the field of nursing research. Information about the strategic planning process and how to communicate ideas for future research directions is available on the [NINR Strategic Plan web page](#).

**NINR Staff News**—Since joining NINR, Dr. Zenk has addressed multiple audiences, including NINR staff, nursing organizations, and outside groups with interests in nursing science. For example, she presented “All Health Is not Equal: Where You Live Matters,” the [2020 Stephen E. Straus Lecture](#) hosted by the National Center for Complementary and Integrative Health.

NINR has welcomed the following new staff to the Institute: Amanda Price, Program Director, Division of Extramural Science; Liz Bartrum, Regulatory Affairs Specialist; Janis Fleisher, Management Analyst; Chen Lai, Staff Scientist; Nicholas Morrow, Administrative Technician; David Tilley, Program Analyst; and Susan Old, Acting Deputy Director.

Dr. Jessica Gill has been appointed to the National Academies of Sciences, Engineering, and Medicine Committee on Accelerating Progress in Traumatic Brain Injury Research and Care. NINR Program Directors Drs. Sung Sug (Sarah) Yoon and Kristopher Bough received Trans-NIH Awards. Dr. Jeri Miller led a panel on palliative nursing in the COVID-19 era for the inaugural U.S. World Hospice & Palliative Care Day celebration; an interview with Dr. Miller was also featured in [NIH MedlinePlus Magazine](#).

**Training**—The NIH-wide [Summer Internship Program in Biomedical Research](#) for college students, including rising freshman, is expected to take place this year.

**IV. IMPROVE Initiative**—Dr. Janine Clayton, Director, NIH Office of Research on Women’s Health (ORWH)

Dr. Clayton presented the ORWH mission—to enhance and expand women’s health research, include women and minority groups in clinical research, and promote career advancement for women in biomedical careers—and vision for women's health articulated in the [Trans-NIH Strategic Plan](#) for
Women’s Health Research: that sex and gender are integrated across the biomedical research continuum; that every woman receives evidence-based care patterned after her own circumstances, needs, and goals; and that all women in science careers reach their full potential.

Maternal mortality has been identified as a priority area for additional study. Even as it declines around the world, maternal mortality is increasing in the United States. Its causes are diverse and complex. Pregnancy-related mortality data identify differences in timing (i.e., during pregnancy, day of delivery, up to six days postpartum, the year postpartum) and leading causes (i.e., cardiovascular, infection, hemorrhage) for women at different ages. Other factors include age, race, and ethnicity. Women over 40 have higher rates of maternal mortality than younger women, and African American and Native women have maternal mortality rates three to four times that of non-Hispanic white women.

NIH-wide efforts targeting maternal health disparities include Implementing a Maternal health and Pregnancy Outcomes Vision for Everyone (IMPROVE) initiative; supplements for Understudied, Underreported, Underrepresented (U3) women; and Institutional Development Award (IDeA) grants that expand women’s health research and research capability across the country.

Jointly led by Drs. Clayton, Tara Schwetz, and Diana Bianchi (Director of the National Institute of Child Health and Human Development), IMPROVE supports research to reduce preventable causes of maternal death and improve health for women before, during, and after delivery. IMPROVE focuses on maternal mortality, cardiovascular disease, immunity, and mental health. Dr. Clayton described several of the 36 IMPROVE projects funded in FY 2020.

ORWH is leading the sex as a biological variable (SABV) initiative with a goal of improving design of clinical research and trials to inform sex- and gender-aware diagnosis and treatment, enable individualized care, and foster a system-based understanding of how sex and gender influence health and disease.

V. Training Pathways Working Group Report—Dr. Shirley Moore, Case Western Reserve University School of Medicine and NACNR Member, and Dr. Jessica Gill, Acting Scientific Director, NINR

Co-chaired by Drs. Moore and Gill, the NINR Training Pathways Working Group was charged with providing information to NINR leadership; identifying strengths, limitations, and challenges; and developing recommendations to enhance nursing research education and training in all phases of education and progression.

Dr. Moore described the working group process and presented the working group report, which includes background, findings, and a set of recommendations. Data sources include evidence-based literature and
expert opinion from the literature as well as discussions with key people involved in training of nurse scientists. Recommendations include enhancement of current NINR activities, new ideas for NINR, recommendations for the larger training community to carry out, and policy recommendations that NIH might advocate. Recommendations address the following broad topics: recruiting trainees for research training; funding initiatives that focus on the needs of some special nurse researcher populations; development of essential skills; mentoring; interdisciplinary research and collaboration; diversity, equity, and inclusion; and tracking and analysis of data on training and career path outcomes.

Specific recommendations include:

- **Research training recruitment**: Target marketing, provide early exposure to nursing research, fund research internships, streamline programs, and promote understanding of distinctions between Doctor of Nursing Practice (DNP) and PhD roles, training, and models of collaboration.

- **Funding**: Focus on needs of clinician scientists, those who cannot relocate for training, those in non-research-intensive universities, underrepresented minorities (URMs), individuals with career interruptions, and those working to obtain their first large grant after training; incentivize inclusion of trainees in research project grants; encourage graduate student research assistant positions on grants; support development of low-cost or summer postdoctoral programs; increase the number and scope of scientific laboratory facilities at schools of nursing; provide small grants; and bridge time between career stages.

- **Development of essential skills**: Provide workshops, modules, and resources for students and early stage investigators (ESIs) on writing, presentation, grant writing, and publication skills; develop a research career roadmap that includes guiding principles for procedures, funding models, and policies; develop a dedicated Early Career webpage with resources, training, and career opportunities; and increase numbers of ESIs, new investigators, and URMs participating in the grant application review process.

- **Mentoring**: Provide mentor training modules and programs, and longitudinal programs of mentorship/engagement with training awardees; support mentoring models that encourage collaborations between universities; use grant mechanisms that require ESIs as co-investigators; and develop a formal mentee/mentor online resource center that includes peer and senior mentorship options.

- **Interdisciplinary research and collaboration**: Expand collaboration with agencies/professional organizations; sponsor interdisciplinary meetings, workshops, and conferences; facilitate collaborations between non-research-intensive institutions and research-intensive programs to
provide joint training opportunities; and facilitate collaborations between non-nursing and nursing programs.

- **Diversity, equity, and inclusion:** Increase use of specific funding mechanisms to support URMs; provide dedicated mentorship, training, and educational opportunities; provide incentives to encourage minority-serving academic institutions to increase recruitment and retention of nurse researchers; implement a diversity and inclusion plan that is described in NINR’s forthcoming Strategic Plan; and conduct tracking and analysis of data on training and career path outcomes.

- **Systematic tracking, analysis, and annual public reporting of training and career outcome data:** Collect data on investigator characteristics, longitudinal outcomes, and predictors of success of training initiatives; and develop an advisory group to sustain the work of the task force and advocate for recommendations within the NIH, NINR, nursing schools, and professional organizations such as the American Association of Colleges of Nursing and the American Academy of Nursing.

**Discussion:**

Drs. Im, Fletcher, Montano, and Wilbur facilitated a discussion on topics related to the working group report and how NINR can help schools of nursing.

**Interdisciplinary training:** Council members described unique aspects of nursing research that should be part of interdisciplinary training, including the holistic perspective of nursing, basic research techniques, and respect for and understanding of different mental models of collaborators from other fields. Nurse researchers build their own toolbox that includes what they need for their research trajectory, but they do not need to be experts in everything; that is the beauty of team science.

**Postdoctoral training:** Noting that postdoctoral training is less prevalent among nurse scientists than in any other field of biomedical research, Council members discussed ways NINR can provide incentives and new methods for this level of training. Virtual learning offers opportunities for individuals who cannot relocate for training, those in non-research-intensive universities, and others who cannot follow traditional pathways. NINR might adopt some of the mechanisms used by other Institutes and Centers; for example, the R25 research education program offers flexibility and has been used to support short summer courses for trainees in non-research-intensive institutions. An inter-institutional matching program would enable trainees who have a passion for their communities to make important connections outside of those communities and provide continuity to achieve their research goals. Another suggestion was to require nursing postdoctoral positions on grants.
Diversity: Council members discussed ways to incentivize diversity, create opportunities to hear the voices of underrepresented minorities who are interested in nursing science careers, and address the struggle with recruiting URM faculty at a university where the nursing faculty is primarily white. Suggestions included increasing awareness of minority supplements for the R mechanisms that would allow principal investigators (PIs) to bring undergraduates and postdoctoral fellows on as co-investigators. Council members noted that NINR does not report minority composition of its PIs; this is because the Institute does not fund enough individuals to report without potentially violating the privacy of individual PIs.

Helping schools of nursing encourage and support careers in nursing science: Council members discussed concrete ways NINR can help new and mid-career nurse scientists who are excited about research but anxious about getting grants. Small grants (e.g., R03, R15) could enable investigators to conduct additional pilot or background work needed to obtain larger grants. (Dr. Zenk noted that NINR has signed on to the R15 mechanism and will consider signing on to R03s.) Grant review panels critique applications that include too many co-investigators or investigators who have not published together. The message that nurse practitioner certifying agencies no longer require clinical hours to maintain certification needs to be broadly shared.

VI. Review of Council General Operating Procedures—Dr. Susan E. Old, Acting Executive Secretary, NACNR

Revised Council General Operating Procedures were included in the electronic Council book. Dr. Old explained that the proposed revisions attempt to make the best use of Council expertise during the open session and allow more time for NINR to ask questions during the closed session.

A motion to adopt the streamlined operating procedures was made, seconded, and carried.

VII. Council Discussion

Dr. Zenk acknowledged Council for their contributions to important discussions and opened the floor to Council for additional discussion.

Dr. Shirley Moore announced that a trans-NIH Council Working Group led by the National Institute of Dental and Craniofacial Research (NIDCR) is seeking information from other Institutes on how they can contribute to research on temporal mandibular joint disease (TMJD). She requested suggestions from Council members.

The NINR Strategic Plan is being developed using a cyclical, iterative process that seeks Council feedback at different stages in the process.
Adjournment

Dr. Zenk thanked meeting attendees and adjourned the open session of the meeting at 1:10 p.m.

VIII. 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 120 research and training grant applications on which NINR was the primary Institute; these applications requested a total of $38,889,585 (direct costs year 01). The Council also considered 298 applications on which another Institute/Center was primary and NINR was secondary. These applications requested a total of $147,056,381 (direct costs year 01). The Council concurred with the Institutional Review Group recommendations on these 418 applications.

ADJOURNMENT

The 103rd meeting of the NACNR was adjourned at 2:30 p.m. on Tuesday, January 26, 2021.

CERTIFICATION

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

_______________________________________
Shannon N. Zenk, PhD, MPH, RN, FAAN
Chair
National Advisory Council for Nursing Research

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Susan E. Old, PhD
Acting Executive Secretary
National Advisory Council for Nursing Research
COUNCIL MEMBERS PRESENT

Dr. Shannon N. Zenk, Council Chair
Dr. Susan E. Old, Acting Executive Secretary
Dr. Yvette Conley
Dr. Audwin Fletcher
Dr. Grayson Holmbeck
Dr. Eun-Ok Im
Dr. Mallory Johnson
Dr. Christopher Lee
Dr. Peter A. Lewin
Dr. John Lowe
Dr. Nilda (Nena) Peragallo Montano
Dr. Ida M. Moore
Dr. Shirley M. Moore
Dr. Cindy Munro
Dr. Elias Provencio-Vasquez
Dr. Sheila Sullivan, Ex Officio
Dr. JoEllen Wilbur
Dr. Joanne Wolfe

The entire meeting was held by NIH videocast, and all observers, including members of the public, attended virtually.