

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 24–25, 2016

The 89th meeting of the National Advisory Council for Nursing Research (NACNR) was convened on Tuesday, May 24, 2016, at 1:00 p.m. in Conference Room 6, 6th Floor, 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 4:40 p.m. The closed session of the meeting, which included consideration of grant applications, was convened on Wednesday, May 25, 2016, 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, OPERING REMARKS, COUNCIL PROCEDURES, AND RELATED MATTERS—Dr. Patricia Grady, Director, National Institute of Nursing Research (NINR)

Dr. Grady called the 89th meeting of the NACNR to order and welcomed all Council members, visitors, and staff. Dr. Grady recognized four new Council members: Drs. Kathryn Bowles, George Demiris, Deborah Koniak-Griffin, and Rita Pickler. She noted that Council members Drs. Kathryn Bowles, Meredith Rowe, were unable to attend the meeting. Council members Bernadette Melnyk and Jennifer Temel were unable to participate in the open session.

Conflict of Interest and Confidentiality Statement

Dr. Marguerite Kearney, Acting Executive Secretary, NACNR, 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 informed the Council that presentations were being videotaped and video will be posted on the NINR YouTube channel (<https://www.youtube.com/user/NINRnews>). Dr. Kearney stated 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.

Minutes of the Previous NACNR Meeting

Council members received the minutes of the January 27, 2016, 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 permanent 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.

2016

September 13–14 (Tuesday–Wednesday)

2017

January 24–25 (Tuesday–Wednesday)

May 23–24 (Tuesday–Wednesday)

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 last Council meeting. Dr. Grady noted that, due to inclement weather, the January 2016 meeting consisted of closed session conducted via teleconference. She highlighted the following items:

Budget Update—The federal government is operating under a Continuing Resolution. The proposed President's Budget for fiscal year (FY) 2016 represents a 2.6 percent increase to NIH and approximately a break-even for NINR. Dr. Grady noted that NIH Director Francis Collins testified before Congress about the proposed FY 2017 budget and his comments were well received. She reviewed distribution of NINR

funds, noting that the largest allocation of NINR's budget (67%) goes to research project grants (RPGs). Combined allocations for RPGs, Centers, Other Research (primarily K awards), Training, and about half of the Research and Development (R&D) total slightly more than 80 percent of NINR funds that go to the extramural community to support research grants and training.

HHS News—HHS has released a National Pain Strategy that outlines the federal government's first comprehensive plan for reducing the burden of chronic pain that affects millions of Americans. The U.S. Senate confirmed Dr. Robert Califf, M.D., to be Commissioner of the U.S. Food and Drug Administration.

NIH News—Dr. Grady explained that overtime pay provisions in the newly revised Fair Labor Standards Act will have an impact on salaries of postdoctoral researchers. NIH plans to increase postdoctoral National Research Service Award (NRSA) stipends to levels at or above the new \$47,476 threshold. Institutions may choose to pay overtime to non-NRSA postdocs or increase salaries to or above the threshold. Dr. Grady noted that NINR cannot revise current grants or provide supplements to cover the increases.

Dr. Grady announced recent appointments to key NIH positions. Dr. Patricia Brennan has been named Director of the National Library of Medicine, Dr. Maureen Goodenow has been selected as Associate Director for AIDS Research and Director of the NIH Office of AIDS Research, and Dr. Matthew Gillman has been appointed Program Director of the Environmental Influences on Child Health Outcomes initiative, which will use existing study cohorts to conduct research on high-impact pediatric health outcomes. Dr. Eric Dishman has been named Director of the Precision Medicine Initiative Cohort Program and will lead NIH efforts to build the landmark longitudinal research study of 1 million U.S. volunteers; he will be invited to attend a future Council meeting.

NINR News—Dr. Grady expressed appreciation to Council members whose terms expired in January—Drs. Julie Anderson, Susan Gennaro, William Holzemer, and Anne Rosenfeld—and to Dr. Michael Schlicher whose term expires in May.

Dr. Grady described upcoming events that are part of NINR's yearlong 30th Anniversary celebration. On September 13, Ms. Ellen Goodman will present the NINR Director's Science and the Public Lecture. On September 14, the 2016 Scientific Symposium, "Advancing Science, Improving Lives: A Window to the

Future” will feature distinguished scientific speakers and panel discussions on the topics of sleep and omics science. Dr. Sandra Millon-Underwood will present the final NINR Director’s Lecture for 2016.

Videos of the NINR Director’s Lectures are available on the NINR website and YouTube channel. Recent lectures include Dr. Kathryn Bowles presenting “Innovations to Improve Discharge Planning” and Dr. Marie Nolan presenting “Reframing Shared Decision Making at the End of Life.”

NINR is developing a new five-year strategic plan scheduled for release in September 2016.

The March 2016 National Nursing Research Roundtable (NNRR), cosponsored by NIH, NINR, and the Emergency Nurses Association, focused on “Improving Symptom Outcomes for Persons with Complex Chronic Conditions through Continuity of Care.”

NINR has released Spanish-language versions of its Palliative Care: Conversations Matter® campaign materials for families of children with serious illnesses. In support of the campaign, Dr. Grady participated in a radio media tour May 11–14. The tour included 14 radio interviews conducted over a four hour.

The 2016 NINR Center Directors Meeting focused on “Exploring Biomarkers for Self-Management and Symptom Science.”

NINR’s Common Data Elements (CDE) web portal (<http://www.ninr.nih.gov/site-structure/cde-portal>) is designed to encourage the use of CDEs to facilitate broader and more effective use of data. The newly launched portal includes CDE benefits, research articles on CDEs at NINR and NIH, and how CDEs can support data sharing, standardization, and improved data quality.

The following NINR staff news was noted:

- Dr. Nara Gavini has been appointed Chief of NINR’s Office of Extramural Programs.
- Drs. Michelle R.J. Hamlet and Rebecca Roof have joined NINR program staff.
- NINR postdoctoral fellow Dr. Kristin Filler Dickinson received a Pathway to Independence Award for her project, “Cancer-Related Fatigue and the Adaptive Response to Oxidative Stress.”
- Ms. Onyinyenchi Ozoji of NINR’s Biobehavioral Branch was awarded first place at the Eastern Nursing Research Society 2016 Annual Meeting for her BS School Selected Student Poster

entitled, “Determinants of Quality of Life in Patients with Chronic Abdominal Pain.” Ms. Ozoji is part of the NIH postbaccalaureate Intramural Research Training Award program.

Training Opportunities—The 2016 NINR Summer Genetics Institute is set for June 1–29; over 350 students have graduated from this program to date. July 25–29, the intense one-week NINR Methodologies Boot Camp will focus on the theme of “Precision Health: from ‘Omics’ to Data Science.”

Selected NINR funding opportunity announcements are available at

<http://www.ninr.nih.gov/ResearchAndFunding/DEA/OEP/FundingOpportunities/>.

III. FUTURE RESEARCH PRIORITIES FOR CARDIOPULMONARY, BLOOD, AND SLEEP RESEARCH—Dr. Gary H. Gibbons, Director, National Heart, Lung, and Blood Institute (NHLBI)

Dr. Gibbons described NHLBI’s strategic visioning approaches. NHLBI’s strategies for the future are founded upon these enduring principles: recognizing the value of investigator-initiated fundamental discovery science; maintaining a balanced, cross-disciplinary portfolio; training a diverse new generation of scientific leaders; supporting implementation science that improves the health of the nation; and employing innovation toward the evidence-based elimination of health inequities in our nation and around the world.

As part of the Institute’s strategic visioning process, NHLBI used crowdsourcing technology to expand inclusiveness and diversity of perspectives as it examined the most compelling questions and challenges that could inform the Institute’s research agenda for the next 5–10 years as well as potential advances to achieve in the next decade. Challenges include understanding normal biological function as a means to understand and promote resilience and healthy aging as well as preempting disease by intervening before symptoms become debilitating and by enhancing prognostication with next-generation biomarkers that signal the transition from normal to disease state.

In keeping with the principle of supporting investigator-initiated research, NHLBI has made funding of R01s a priority and has increased the success rate from the 10th to the 14th percentile in FY 2015, and it perhaps may rise even higher in FY 2016.

Current NHLBI efforts to nurture the next generation of scientific leaders have focused on expanding diversity—through the Building Infrastructure Leading to Diversity (BUILD) initiative, Programs to Increase Diversity Among Individuals Engaged in Health-Related Research (PRIDE), diversity supplements, and diversity K awards—and on career development with increased success rates for K Awards and Early Stage Investigator R01s and greater investment in the loan repayment program. New NHLBI funding mechanisms focus on helping K awardees obtain preliminary data for their transition from K to R awards and an R35 category for emerging investigators who struggle mid-career.

Dr. Gibbons noted that, despite the 70 percent drop in heart disease deaths in the U.S. over the last 50 years, aggregate benefit has not been achieved in every community across the nation. Systems approaches that employ multidimensional data, multidisciplinary teams, predictive modeling, and high-output assays show great promise for addressing the complex, multilevel problem of health inequities.

Dr. Gibbons pointed to opportunities for collaborations with NINR that can have a strong, positive impact on patients. A patient-centered approach that leverages the entire care team, including those embedded within the community, would create an environment that helps patients self-manage, promotes health, and offers increased opportunities to enhance implementation science. Dr. Gibbons described several clinical efficacy trials that had major implications for transforming practice. For example, NHLBI partnered with the Patient-Centered Outcomes Research Institute (PCORI) to look at intervention strategies that might improve blood pressure control in particularly high-risk groups (e.g., minority, low socioeconomic status, and rural populations). These efforts aim to establish efficacy of interventions and then implement and disseminate new evidence-based care in a way that all Americans would benefit.

Dr. Gibbons pointed to the high incidence of certain diseases and conditions among specific population groups—chronic kidney disease and end-stage renal failure among African Americans and asthma as the reason for the disproportionate number of emergency room visits for African-American and Latino children. He described studies that attempt to understand why certain ancestral groups are predisposed to these conditions and to discover why one well-known mutation leads some individuals to have strokes and others to have kidney disease. Uncovering the pathways that drive development of disease in certain populations could improve risk prediction, influence treatment strategies, and reveal targets for new therapies.

Noting that symptoms and self-management play a large part in the NINR research agenda, Dr. Gibbons outlined potential areas for collaboration between NINR and NHLBI. For example, patient-centric asthma

prevention and treatment studies that examine the interplay of genes, behavior, and environment might identify exposure as a critical factor that could be modified as the means to control asthma. Digital applications are becoming available that calculate air quality of the environment, collect real-time individual data, and notify the person to take control medication. He concluded by describing approaches that integrate patient data (e.g., characterizing built environment of the patient, nutrition, physical activity, and engagement in the healthcare system) with imaging and omics to enrich understanding of health and disease in the entire human family and determine how best to intervene. This work might serve as a platform on which NINR and NHLBI can interact and collaborate.

IV. NINR’S CARDIOPULMONARY RESEARCH PORTFOLIO—Dr. Karen Huss, Program Director, Office of Extramural Programs, Self-Management Branch, NINR

Dr. Huss presented a broad overview of NINR’s cardiopulmonary research portfolio and remarked on the impressive productivity of NINR investigators. Her presentation focused on NINR grants for 2010–2015 in five programmatic areas: self-management (improving quality of life for those with chronic illness; symptom science and genetics (promoting personalized health strategies); wellness (promoting health and preventing illness); end-of-life and palliative care (the science of compassion); and technology and training.

Self-Management

NINR-supported cardiopulmonary research in the area of self-management includes projects on adherence to medications, self-management strategies for controlling hypertension and reducing risks for heart failure (HF) and myocardial infarction, reducing burden for informal caregivers, and maintaining asthma control. For example, a pilot study examined the effectiveness of a carefully designed educational intervention on reducing dietary sodium intake of heart failure patients compared with controls. Dietary sodium intake was significantly reduced in the intervention group at the six-month study endpoint. Attitudes toward following a low-sodium diet also improved. Findings indicated that individualized in-home instruction with well-organized, specific teaching strategies can produce dietary changes and diet adherence among patients newly diagnosed with longstanding HF.

Another study adapted and validated a patented, noninvasive device to assess asthma symptoms among teens. Participants wore the device 24 hours a day for a 7-day period. The device, which captures coughing sounds, was well-received by participants. Investigators concluded that the device has potential

for automating daily symptom monitoring with minimal intrusiveness and maximum accuracy and holds promise for increasing teens' awareness through real-time assessment of symptoms and feedback.

Symptom Science

NINR-supported cardiopulmonary research in the area of symptom science includes projects on cognitive impairment, cardiac symptoms, sleep disorders, fatigue, pain, and dyspnea. One study examined whether prescription of evidence-based HF medications is associated with impaired cognitive function in a rural population. Over 600 patients participated in study, which found that age, education, and comorbidity were significant predictors of cognitive impairment. Furthermore, investigators concluded that none of the four commonly prescribed heart failure medications were significant predictors of global cognitive impairment in rural patients.

Another project attempted to identify novel genetic markers for predicting symptomatic response to inhaled corticosteroids (ICS). A genome-wide association study (GWAS) identified 100 single-nucleotide polymorphisms (SNPs) with potential associations with asthma symptoms in response to ICSs. Replication studies revealed three SNPs that had significant association with symptom scores in two pediatric cohorts; however, these associations were not replicated among adults. These findings identified a potential genetic mechanism regulating symptom response in children that does not carry over to adults.

Wellness

Cardiopulmonary research includes projects on risk perception, health disparities, cultural adaptation, and health literacy. One study examined the effectiveness of several intervention combinations for chronic obstructive pulmonary disease (COPD) patients. Interventions included upper body resistance training, a self-efficacy enhancing intervention, a health education intervention, and gentle chair exercises. Participants in the combined upper body resistance/self-efficacy group and those in the combined upper body resistance/health education intervention group showed a significant increase in strength compared with those in the chair exercises/health education group. Investigators concluded that resistance training is well tolerated by people with COPD and can be added to a menu of rehabilitation options.

End-of-Life and Palliative Care

Cardiopulmonary research in end-of-life and palliative care includes quality of life (QOL) in patients and caregivers, advanced care planning, enhancing decision making, and use of patient navigators. One study evaluated the safety, clinical, and cost impact of discontinuing statin medications for patients in

palliative care settings. Investigators found that survival was similar between the statin and non-statin groups; patient-reported outcomes on QOL measures improved in the patients who discontinued statins, and cost savings attributable to statin therapy discontinuation equaled about \$716 per patient. Investigators concluded that discontinuing statin treatment in patients with advanced illness is safe and may be associated with other benefits.

Technology and Training

NINR-supported cardiopulmonary research includes projects on the relationship between physical activity and cognitive change, exercise in HF patients, and interventions for swallowing disorders. In one study, NINR-funded researchers tested whether a wearable device called AliveCor™ could detect silent atrial fibrillation (AF). Findings showed that the device picked up irregular electrocardiogram (ECG) tracings and matched the patient's symptoms; cardiac monitoring in the emergency room (ER) confirmed these findings.

Another study examined the efficacy of smartphone ECG technology to detect and self-manage AF. Early detection of recurrent AF allows for more timely treatment. Investigators concluded that the tool can promote self-management, increased patient-provider communication, and adherence to treatment.

V. ANNOUNCEMENT OF VISITORS

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

VI. BUILDING A PROGRAM OF BIOBEHAVIORAL RESEARCH IN HEART FAILURE—

Dr. Christopher Lee, Carol A. Lindeman Distinguished Professor, Oregon Health & Science University (OHSU)

Dr. Lee described the trajectory of his extensive, externally funded program of research that centers on heart failure, the fastest growing cardiovascular disorder in the U.S. and number-one reason adults are admitted into hospitals. He described his NINR-funded study designed to link HF self-care management and outcomes. Findings indicated that better self-care management produced lower levels of heart stress and inflammation. Patients who were able to identify and respond more quickly to HF symptoms had better survival rates compared with symptom-free HF patients.

Dr. Lee uncovered the first evidence that patients who are able to recognize and respond to heart failure symptoms more quickly actually have lower levels of biomarkers that are used to guide treatment. His work was recognized by the American Heart Association for the innovativeness of this truly integrative biobehavioral research.

Having observed that successful nurse scientists have both content and methodological expertise, Dr. Lee elected to do his postdoctoral work in a college of pharmacy, a setting that fostered academic and industry partnerships. He described this as one of the best career decisions he ever made. In addition to concentrated coursework, Dr. Lee focused on economic modeling and meta analytics, learned how to apply those techniques, and gained an extensive analytical armamentarium. He described an example of work that stemmed from these experiences—identifying common patterns of comorbid conditions among adults admitted to hospitals with HF and their potential for differentiating patient outcomes. He and his colleagues identified four distinct, highly differentiated, naturally occurring patterns of comorbid conditions linked to length of stay and cost. The work required Dr. Lee to work with a highly complex sample and design using sophisticated analytical skills acquired during his postdoctoral training.

When he transitioned to OHSU, Dr. Lee received a K12 award that allowed him to integrate gender-based elements and symptom biology with his program of research in biobehavioral care, specifically in HF. Dr. Lee found a direct relationship between ventricle dilation and level of physical symptomology and that this relationship diverges by gender (i.e., larger ventricles are associated with worse symptoms in men, and narrow ventricles are associated with worse symptoms in women). Working with a large cohort of men and women enabled investigators to look at very detailed clinical information useful for prognostication and guidance of clinical care. Dr. Lee observed that symptoms and objective information rarely coalesce; symptoms often are markedly worse or better than might be expected based solely on clinical information. Thus, clinicians must follow the numbers (i.e., the objective information) and the symptoms.

Shortly after his move to OHSU, Dr. Lee began looking for other grant mechanisms he could hold at the same time as having a K12. He obtained a Beginning Grant-in-Aid (BGIA) from the American Heart Association to generate a prospective cohort of HF patients with the goal of linking self-care management to changes in QOL. For HF patients who improve their ability to recognize and respond to symptoms when they occur, QOL improves markedly in statistical and clinically meaningful ways. There is no QOL improvement for HF patients whose ability to recognize and respond to symptoms worsens.

Also during his first year at OHSU, Dr. Lee applied for an R01 and received funding from NINR on the first round. The study focuses on patient response to a mechanical pump, a therapy that is used commonly for advanced HF. Dr. Lee's symptom biology investigation has linked changes in biomarkers of HF pathogens to symptom changes; these changes occur almost in perfect parallel. Because QOL can be difficult to characterize and hard for clinicians, patients, and their families to comprehend, Lee and his colleagues also measure robust metrics of physical, affective, and even social health at the symptom level. It is easier to discuss changes in level of shortness of breath or changes in mental health of a cohort of patients receiving these devices. Dr. Lee described how investigators have been able to quantify associations between changes in symptoms and changes in biomarkers of HF pathogenesis. He noted findings from the Prevention of Recurrences of Myocardial Infarction and Stroke (PREMISE) study, which is looking at biotypologies of response to mechanical circulatory support. Patients described as "super-responders"—those who feel so much better and are discharged early after receiving the pump—exhibit the classic picture of advanced HF: a stretched heart and cachexia. Nonresponders have a more complex picture of advanced HF: a stretched heart, systemic inflammation, endothelial dysfunction, and myocardial injury.

Dr. Lee briefly outlined future directions of his research. He is looking at metrics of accelerated aging, including a biomarker with potential for differentiating between people who are about to get worse versus those with similar characteristics who are living in the community and doing well. In addition, Dr. Lee's group is working to advance dyadic science in HF; they have been able to show that a patient's QOL worsens if the caregiver is bearing greater burden than the patient.

Noting that he has benefited from early support from NINR and early success with the R01, Dr. Lee has sponsored four F31s in a short period of time. He continues to need mentoring even as he spends a great deal of time mentoring others.

VII. 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 very deliberate process that involves identifying gaps in the portfolio, emerging problems, and opportunities for innovation. Five concepts are being presented to the Council today.

VIII. CONCEPT PRESENTATION AND DISCUSSION—Dr. Yvonne Bryan, Deputy Director,
Division of Extramural Science Programs, NINR

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

Concept 1: Palliative Care Needs of Adults with Rare, Advanced Diseases and Their Family Caregivers

The proposed concept aims to determine the unique needs of adults with serious, advanced, rare diseases and their caregivers; design and test interventions or models of care; identify triggers that result in a change in palliative care needs and develop evidence-based interventions/models of care support during these critical times; and foster new research. A condition is considered “rare” if it affects fewer than 200,000 persons in a disease group; however, collectively these conditions are quite common. There is a paucity of research on palliative care among individuals with rare diseases. The concept addresses the NINR Strategic Plan area of advancing the science of palliative and end-of-life care and follows a recent NINR-NIH Office of Rare Diseases Research (ORDR) workshop on palliative care for serious, advanced, rare diseases. Council noted the opportunity to take advantage of data sets and use of networks to leverage individual data/data bases; may open doors. A suggestion was made to include pediatric populations.

Concept 2: Use of Technology to Enhance Patient Outcomes

This concept supports the NINR Strategic Plan areas of Technology, Self-Management, and Wellness and is designed to promote research that develops or utilizes cutting-edge technologies with an explicit focus on patient outcomes. Technology is very broadly defined, covering telehealth, robotics, and web-based decision support tools. The use of technology in healthcare is growing but has not been fully studied. Council recommended incorporating the term “prevention” in the title with linkage to patient outcomes. A suggestion was also made to include objectives that tailor to patient populations and to integrate theoretical underpinnings for this type of research concept; validation markers that support the usefulness and efficacy of eHealth as it pertains to self-management of health; consider what we have not yet measured, how technology can affect basic processes (e.g. sleep, fatigue).

Concept 3: Self-Management Interventions and Technologies to Sustain Health and Quality of Life and Optimize Functional Capabilities

The purpose of this initiative is to stimulate interventions to reduce disability and improve functional status, and it addresses the NINR Strategic Plan area of advancing QOL through Self-Management. It represents an importance piece of the work NINR is doing. This is an important concept, but disability needs to be defined more specifically, and cultural characteristics also should be considered.

Concept 4: Improving Individual and Family Outcomes by Reducing Transitions at the End of Life and Improving Continuity of Care in Hospice

This concept supports the NINR Strategic Plan area of Palliative and End-of-Life Care and relates to innovative questions identified for NINR. The proposal focuses on exploring whether negative individual and family outcomes related to unwanted transitions at end of life can be reduced. There has been little research to date on the effect of these transitions. NINR has had success in nursing research on transitions of care in other settings, so this offers an opportunity to draw on what has been learned. Council recommended adding “improving coordination and continuity of care in hospice” to the title and changing term to “coordination of care” or “care coordination.”

Concept 5: Addressing Unmet Needs in Persons with Dementia to Decrease Behavioral Symptoms and Improve Quality of Life

This concept supports the NINR Strategic Plan areas of Symptom Management and Self-Management. The goal is to increase understanding of the association between unmet needs and behavioral and psychological symptoms of dementia. Problem behaviors result from unmet needs (e.g., unalleviated pain, discomfort, loneliness, and boredom) and increased inability to express these needs. More research is needed to understand underlying causes, environmental factors, and mechanisms and to develop targeted interventions. This research could reduce symptoms in persons with dementia and improve QOL of patients and their caregivers. Council recommended broadening, beyond caregivers and other family members.

Dr. Grady thanked Council members for their thoughtful discussion. NINR staff will review comments and try to rework the concepts in response to that feedback.

Dr. Grady thanked participants and attendees for their participation. She adjourned the open session of the meeting at 4:40 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 153 research and training grant applications on which NINR was the primary Institute; these applications requested a total of \$45,222,911 (direct costs year 01). The Council also considered 357 applications on which another Institute/Center was primary and NINR was secondary. These applications requested a total of \$104,539,748 (direct costs year 01). The Council concurred with the IRG recommendations on these 510 applications.

ADJOURNMENT

The 89th meeting of the NACNR was adjourned at 5:00 p.m. on May 25, 2016.

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.
Executive Secretary
National Advisory Council for Nursing Research

COUNCIL MEMBERS PRESENT

Dr. Patricia A. Grady, Chair
Dr. Marguerite Kearney, Executive Secretary
Dr. Cynthia Barnes-Boyd

Dr. James Corbett
Dr. George Demiris
Dr. Donna Hathaway
Dr. Jillian Inouye
Dr. Deborah Koniak-Griffin
Dr. Bernadette Mazurek Melnyk
Dr. Rita Pickler
Dr. Nancy Redeker
Colonel Michael L. Schlicher, Ex Officio
Dr. Alexa Stuijbergen
Dr. Marjana Tomic-Canic

MEMBERS OF THE PUBLIC PRESENT

Dr. Bilgay Izci Balsarak, University of Illinois, Chicago College of Nursing
Dr. Deborah Chyun, NYU Rory Meyers College of Nursing
Ms. Leeza Constantoulakis, American Association of Colleges of Nursing
Dr. Susan Dorsey, University of Maryland, Baltimore
Dr. Anne M. Fink, University of Illinois, Chicago
Ms. Marie Griffiven, University of Delaware
Dr. Mariann R. Piano, University of Illinois, Chicago
Dr. Cynthia Renn, University of Maryland
Ms. Kathy Sedgwick, NOVA Research Company
Dr. Sherrie Lessans, University of Maryland, Baltimore
Dr. Karen Wickersham, University of Maryland, Baltimore
Mr. Hants Williams, Duke University

FEDERAL EMPLOYEES PRESENT

Dr. Lynn Adams, NINR/NIH
Dr. David Banks, NINR/NIH
Ms. Melissa Barrett
Dr. Yvonne Bryan, NINR/NIH
Dr. Ann Cashion, NINR/NIH
Ms. Comerleta Cooks, NINR/NIH
Dr. Augusto Diana, NINR/NIH
Dr. Cynthia Dougherty, NINR/NIH
Dr. Matt Eliseo, NINR/NIH
Ms. Ana Ferreira, NINR/NIH
Ms. Diana Finegold, NINR/NIH
Dr. Nara Gavini, NINR/NIH
Dr. John Grason, NINR/NIH
Dr. Chris Hafner-Eaton, NINR/NIH
Dr. Michelle Hamlet, NINR/NIH
Dr. Martha Hare, Center for Scientific Review
Dr. Jennifer Hatzfeld, Uniformed Services University of the Health Sciences
Dr. Rebecca Henry, NINR/NIH
Dr. Karen Huss, NINR/NIH
Mrs. Deborah Jennings, NINR/NIH
Dr. Karen Kehl, NINR/NIH
Ms. Mary A. Kelly, NINR/NIH

Ms. Jo-Ann Kriebel, NINR/NIH
Ms. Diane Kuszewski, NINR/NIH
Dr. Christopher Lee, NINR/NIH
Dr. Weiqun Li, NINR/NIH
Dr. Yujing Lui, NINR/NIH
Dr. Martha Matocha, NINR/NIH
Dr. Jessica McIlvane, NINR/NIH
Dr. Jeri Miller, NINR/NIH
Ms. Karyn Onyeneho, NINR/NIH
Dr. Ananya Paria, NINR/NIH
Dr. Mario Rinaudo, NINR/NIH
Dr. Mary C. Roary, NINR/NIH
Dr. Becky Roof, NINDS/NIH
Mr. Federico Rosales, NINR/NIH
Mr. Chip Rose, NINR/NIH
Ms. Regina Sheffield-Wright, NINR/NIH
Dr. Pamela Tamez, NINR/NIH
Dr. Lois Tully, NINR/NIH
Mr. Kevin G. Wilson, NINR/NIH
Dr. Sue Wingate, NINR/NIH
Dr. Ping Wu, Center for Scientific Review
Mr. Ajay K. Yadava, NINR/NIH
Dr. Sung Sug “Sarah” Yoon, Center for Scientific Review
Dr. Guo Feng Xu, Center for Scientific Review