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 22–23, 2007

The 62nd meeting of the National Advisory Council for Nursing Research (NACNR) was convened on Tuesday, May 22, 2007, at 1:05 p.m. in Conference Room 6C, Building 31, National Institutes of Health (NIH), Bethesda, Maryland. The open session of the meeting adjourned at approximately 4:20 p.m. The closed session of the meeting, which included consideration of grant applications, was convened on Wednesday, May 23, 2007, at 9:00 a.m., and continued until adjournment at 10:15 a.m. on the same day. 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. Grady called the 62nd meeting of the NACNR to order, welcoming all Council members, visitors, and staff. She also welcomed and introduced three new Council members: Dr. Jean McSweeney, Professor, College of Nursing, University of Arkansas for Medical Sciences; Dr. King Udall, Clinical Practitioner, Intermountain Healthcare (Salt Lake City) and Assistant Clinical Professor of Family and Community Medicine, University of Utah College of Medicine;

and Dr. Kevin Frick, Associate Professor (Health Economics), Johns Hopkins Bloomberg School of Public Health.

Conflict of Interest and Confidentiality Statement

Dr. Mary Kerr, Executive Secretary, NACNR, reminded attendees that the standard rules of conflict of interest applied throughout the Council meeting. Briefly, all closed session material is privileged, and all communications from investigators to Council members regarding any actions on applications being considered during the Council should be referred to NINR staff. In addition, during either the open or the closed session of the meeting, Council members with a conflict of interest with respect to any topics or any application must excuse themselves from the room and sign a statement attesting to their absence during the discussion of that application. Dr. Kerr also reminded NACNR members of their status as special Federal employees while serving on the Council, and that the law prohibits the use of any funds to pay the salary or expenses of any Federal employee to lobby or otherwise influence State legislatures or Congress. Specific policies and procedures were reviewed in more detail at the beginning of the closed session and were available in Council notebooks.

Minutes of Previous NACNR Meeting

Standing Council members received a copy of the minutes of the January 23-24, 2007, NACNR meeting by electronic mail. No changes or corrections to the minutes of the January 2007 Council meeting were suggested during the May meeting. A motion to accept the minutes of the January 23-24, 2007, Council meeting as circulated was proposed, seconded, and approved

unanimously. Any comments, corrections, and changes to the September meeting minutes identified at a later time should be forwarded to Dr. Grady or Dr. Kerr. The minutes of each quarterly NACNR meeting are posted on the NINR Web Site (www.ninr.nih.gov).

Dates of Future Council Meetings

Dates of future meetings in 2007, 2008, and 2009 have been approved and confirmed. Council members should contact Dr. Grady or Dr. Kerr regarding any conflicts or expected absences.

<u>2007</u>

• September 25-26 (Tuesday-Wednesday)

<u>2008</u>

- January 22-23 (Tuesday-Wednesday)
- May 20-21 (Tuesday-Wednesday)
- September 23-24 (Tuesday-Wednesday)

<u>2009</u>

- January 27-28 (Tuesday-Wednesday)
- May 19-20 (Tuesday-Wednesday)
- September 22-23 (Tuesday-Wednesday)

II. REPORT OF THE DIRECTOR, NINR (Dr. Patricia Grady, Director, NINR;

The Director's report focused on updates since the last Council meeting and on current and impending activities, initiatives, and updates related to the NIH and NINR budgets, NIH, and NINR.

Budget Updates—NIH Director Dr. Elias Zerhouni presented testimony on behalf of NIH to both committees in March, highlighting key components of NIH's core strategic vision: including transforming medicine and health from a curative to a preemptive paradigm, supporting basic research to identify the earliest molecular stages of disease within the context of complex biological systems, accelerating the translation of findings from bench to bedside to community, and providing the evidence and knowledge base for a rational transformation of the health care system.¹ Much of NINR's research and outreach resonates with these themes and goals.

Dr. Grady appeared on May 21, 2007, before the Senate committee in a theme-based hearing titled, "A New Vision for Medical Research." Members of Congress expressed great interest in the science that the NINR is supporting, particularly end-of-life research, prevention programs, and the pressing nursing shortage especially as it relates to faculty needs and training, they expressed an understanding that the research and activities funded by the NINR have a real impact on the health of the American people.

The proportional distribution of NINR funds remains relatively constant from year to year, with the largest amount, 71 percent, supporting research projects grants (e.g., R01s, R03s, R15s,

¹ The full testimony and slides from Dr. Zerhouni's presentation to Congress can be found at http://www.nih.gov/about/director/budgetrequest/index.htm.

R21s, etc.). The Centers Program (P20s and P30s), training, and research management and support (i.e., overhead and operating expenses for salaries, meeting support, supplies, and equipment) each receive 7 percent of NINR funds; research and development programs and other research (e.g., K awards) receive 3 percent each; and intramural programs receive 2 percent. NINR's training allocation is approximately twice that of the NIH average, further underscoring the Institute's commitment to retaining nursing students and investigators in the field throughout the research trajectory of their careers.

The President's proposed FY08 budget requests (in thousands of dollars) are \$137,800 for the NINR and \$28,849,675 for the NIH overall. These requests, presented to Congress on February 5, 2007 as part of the comprehensive Federal Budget, represent an increase of 0.29 percent over NINR's FY07 funding and a 1.3-percent decrease from the FY07 NIH budget. Strategies have been developed to improve application submissions and success rates, attract and retain new investigators, and foster innovative research despite recent funding constraints. The Research Independence for New Investigators Award targets new investigators and the NIH Director's Bridge Award provides continued but limited funding for new and established grantees with modest research programs awaiting renewed funding or needing support between funding cycles (http://grants.nih.gov/grants/guide/notice-files/not-od-07-056.html). The NIH Director's New Innovator Award is designed to attract investigators pursuing cutting-edge science; this award may be considered as a companion to the Pioneer Award, which in practice has tended to cover more mid-career investigators rather than all career stages http://grants.nih.gov/grants/new investigators/innovator award/. The NIH Institute and Center (IC) Directors and budget officers met with Dr. Zerhouni on May 17 for a budget retreat to

continue to discuss and identify strategies to optimize use and allocation of available and anticipated funds.

The dynamics of the NIH budget over the past several years has attracted significant attention. A recent article in *Science* titled "NIH: Boom and Bust" (Couzin and Miller, *Science* 316:5823;356-361,2007) chronicles the impact of the marked changes in levels of available funding on academic institutions and the research enterprise, from the doubling of the NIH budget, which contributed to the building of a national infrastructure to support the promise of science, medicine, and technology, to the potential losses without adequate sustained funding. Four 4 consecutive years of less-than-inflationary increases in the NIH budget, combined with the higher-than-inflationary index driving medical and research costs, have consumed most if not all of the "buffering capacity" upon which universities and other institutions rely.

NIH Update—Since the last Council meeting, the NIH Director, Dr. Elias Zerhouni, announced three new key appointments: (1) Dr. Griffin Rodgers as the new Director of the National Institute of Diabetes and Digestive and Kidney Diseases; (2) Dr. Barbara Alving as the new Director of the National Center for Research Resources; and (3) Dr. Alan Krensky as the first Deputy Director of the Office of Portfolio Analysis and Strategic Initiatives (OPASI). In other news, the NINR joins the NIH working group established to respond to the Institute of Medicine's report and recommendations on career progress and gaps among women in engineering and biomedical science. The group is exploring a range of issues such as salary equity, best practices, and effective strategies for the advancement of women in the sciences; Co-Chairs are Dr. Zerhouni and Dr. Vivian Pinn, Director, NIH Office of Research on Women's

Health (http://orwh.od.nih.gov/careers/careerdev.html). The NINR is a co-sponsor of an NIH Office of Behavioral and Social Sciences Research Summer Research Institute on the Design and Development of Community-Based Participatory Research in Health; the week-long program will be held at the University of Chicago on July 9-13, 2007. Registration is closed, but more information can be found at http://obssr.od.nih.gov/summerinstitute2007/index.html).

Dr. Grady recently served as Co-Chair of the Second Annual Pain Consortium Symposium, "Advances in Pain Research," held on the NIH Campus on May 1; extramural investigators from around the country joined intramural scientists in presenting new and promising findings.² In a brief update on the NIH Roadmap (http://nihroadmap.nih.gov/), Dr. Grady noted that the program has advanced to "Version 1.5" (http://nihroadmap.nih.gov/roadmap15update.asp) and is now integrated into OPASI's Division of Strategic Coordination. One initiative, the Clinical Translational Science Award (CTSA) Program, is designed to reframe clinical research and training to assist institutions in creating a home for improved translation of research findings to the community; letters of intent for the second series of CTSAs are due September 24, 2007, and applications are due by October 24, 2007.³ The T90 training program (FY06) provided for innovative and novel training approaches using existing, emerging, or under-developed interdisciplinary sciences, and it allowed for training of international students. Initial outcomes have been promising, and plans to expand this program to academic institutions are underway. An NIH Roadmap 1.5 Retreat was held on May 18, 2007, to consider developing announcements corresponding to the themes of microbiome, protein capture/proteome tools, phenotyping

² An archived videocast of the conference can be found at http://www.edjassociates.com/pain2007/home.asp; the Pain Consortium home page is http://painconsortium.nih.gov/.

³ http://grants1.nih.gov/grants/guide/rfa-files/RFA-RM-07-007.html; CTSA homepage: www.ctsaweb.org.

services and tools, inflammation as a common mechanism of disease, and epigenetics; initiatives for smaller pilot studies and cross-cutting strategic planning activities also are being considered. Announcements are expected in FY08.

NINR Update—The NINR continues its involvement in outreach activities through staff attendance and participation in regional and national meetings, including the American Association of Colleges of Nursing (AACN) Doctoral Education Conference (January 24, 2007), National Nursing Research Roundtable (March 1, 2007), NIH/American Medical Association Meeting on Pain and Opioid Addiction (March 5-6, 2007), AACN Spring Meeting (March 18, 2007), Pediatric Nursing Research Conference (March 22, 2007), and the Annual Pain Consortium (May 1, 2007). Upcoming NINR activities on Campus include an NINR Retreat for Senior Executive Training, scheduled for June 5-6, 2007, and the 8th Annual Summer Genetics Institute, scheduled for June 3-July 28, 2007.

Subsequent to NINR and Council meetings and discussions with and about the Centers' Program Directors and investigators, Institute staff crafted a developmental timeline for the Centers with respect to milestones and accomplishments for promoting center-based science. In brief, the P20 Exploratory Centers will operate via R03 mechanisms while the P30 Core Centers will support R21s and R01s, and the P01 Program Projects will support R01s. Dr. Grady noted that the P20 and P30 announcements have been published. The P01 intent-to-publish announcement has been released with the plan of releasing a Request for Applications solicit collaborative nursing science and multidisciplinary intervention research in chronic illness (http://grants.nih.gov/grants/guide/notice-files/NOT-NR-07-004.html).

In other news, Dr. Grady announced the appointment of Dr. Sue Marden as a new Program Director within the Office of Extramural Programs; Dr. Marden will manage the portfolios on chronic illness. Dr. Jane Fall-Dickson, Director, Mucosal Injury Unit, NINR, received the 2007 Hasselmeyer Award from the U.S. Public Health Service.

III. NINR and Nursing Science in the News—Mr. Sabatos, Chief of NINR's Office of Science Policy and Public Liaison.

Mr. Sabatos provided highlights of NINR-funded investigators and research in the news since the last Council meeting. NINR's Strategic Plan and the events celebrating the 20th anniversary of the Institute are showcased in an article titled, "Blueprint for the Future," in a recent issue of *Nursing Outlook* (55:55-57,2007). The end-of-life video, "IPACC: Integrating Palliative and Critical Care," has been added to NINR's Web Site and can be accessed at http://ninr.nih.gov/NewsAndInformation/PodCastMultimedia/. This compelling video presents the perspectives of critically ill patients and their family members and national health care experts on integrating palliative care into the intensive care unit (ICU). Recent press releases have announced NINR-supported research on the role of communicating about end-of-life care in the ICU in reducing stress, anxiety, and depression in family members (Lautrette et al., *NEJM* 356:469-478,2007); homeless people's attitudes and concerns about death and end-of-life care (Song et al., *J Gen Intern Med* 22:427-434 and 435-441, 2007); and engaging beauty shop owners and workers to help increase awareness of breast cancer (including screening, detection, and participation in research studies) among African-American women based on concepts

developed by a community advisory group (Principal Investigator: Jane Armer, R01 NR010293-01A2). A special supplement to the *Journal of the Association of Nurses in AIDS Care* that focuses on "Cultural Dynamics in HIV Prevention Among Young People" stemmed from work by Drs. Martha Hare and Antonia Villarruel.

Additional NINR-funded research has been featured in numerous news outlets and popular publications, including *The New York Times*, *Medical News Today*, Reuters, the *Missourian*, and the *Silicon Valley/Sand Jose Business Journal*. Mr. Sabatos encouraged Council members and colleagues to visit NINR's Web Site for additional news and to contact the Institute about disseminating findings via the Web site, the investigators' home institutions, and other appropriate venues. Dr. Grady added that the NINR Web site is one of the sites visited most often by medical journalists.

Further information and updates on NINR training programs and research initiatives, announcements, meetings, and other activities can be found by visiting the NINR home page at www.ninr.nih.gov.

IV. OFFICE OF PORTFOLIO AND STRATEGIC INITIATIVES: UPDATE (Dr. Alan Krensky, Deputy Director, Office of Portfolio Analysis and Strategic Initiatives, NIH)

Among the key provisions of the NIH Reform Act of 2006 was the mandate to establish within the NIH Office of the Director a new OPASI structure, the Division of Program Coordination, Planning, and Strategic Initiatives (DPCPSI) to supersede OPASI. The mission of this new Division will be to: (1) provide NIH ICs with the methods, tools, and information necessary to improve management of the large and complex scientific portfolios; (2) identify, in concert with multiple other inputs, important areas of emerging scientific opportunities or rising public health challenges; (3) help accelerate investments in these areas, focusing on those involving multiple ICs; and (4) coordinate and make more effective use of NIH-wide evaluation processes.

OPASI is a service organization composed and created by and for the ICs that will facilitate and coordinate trans-NIH interactions and collaborations. The OPASI Director reports directly to the NIH Director and works closely with the NIH Steering Committee and a trans-NIH/cross-IC OPASI Working Group. The three interconnected Divisions within OPASI are: (1) the Division of Resource Development and Analysis (DRDA), which oversees the development and use of analytical tools and information (e.g., knowledge management, fingerprinting), especially in relation to how public health needs and burdens can direct research portfolios; (2) the Division of Strategic Coordination, which directs broad strategic coordination of NIH-wide planning and provides "incubator space" for trans-NIH initiatives such as the NIH Roadmap; and (3) the Division of Evaluation and Systematic Assessments, which plans, conducts, coordinates, and supports program evaluations for ICs, trans-NIH initiatives, the Government Performance and Results Act, and the Office of Management and Budget's Program Assessment Rating Tool.

Dr. Krensky explained that approximately 1.7 percent of the Common Fund is allocated for Roadmap initiatives. In January 2007, more than 350 proposals were narrowed to five potential Roadmap topics that are under discussion: (1) the microbiome, (2) development of novel protein capture agents and proteomic tools, (3) standardization of human disease phenotypes, (4)

inflammation as a common mechanism of disease, and (5) epigenetics. Additional cross-cutting (trans-NIH) initiatives include obesity, the neuroscience blueprint, regenerative medicine, informatics, pharmacogenetics, health disparities, and chronic multi-organ diseases within the Children's Health Initiative

V. ACTIVE PROJECT: COGNITIVE TRAINING IN OLDER ADULTS (Dr.

Frederick Unverzagt, Associate Professor, Indiana University)

The Advanced Cognitive Training for Independent Vital Elderly (ACTIVE) Study is a multi-site randomized clinical trial using common interventions focused on improving basic cognitive abilities in well-functioning elders at increased risk for decline. The primary aim of ACTIVE is to determine the effectiveness of three cognitive interventions (as determined from pilot studies) in improving or maintaining cognitively demanding activities of daily living (ADL) and everyday independence. This U01 cooperative agreement was funded jointly by NINR and the National Institute on Aging. Subjects (n=2,802) at least 65 years old were randomized to a control group or intervention involving training via computer interface in short-term memory, reasoning and problem solving, or speed of processing information. Subjects were tested at baseline, immediately post-test, and annually for 5 years. The following conclusions of the 5year study were noted: (1) cognitive training improves mental function of generally healthy older adults; (2) training is specific to cognitive ability area; (3) training gain was greatest after the initial treatment but was durable to 5 years; (4) improvement in cognitive function can have a positive effect on daily function; and (5) because of the general comparable wellness of subjects across groups, functional benefits were not observed until 5 years after the initial training.

Results of the ACTIVE Trial were published in the lead article in the December 20, 2006, issue of *JAMA*. The study received extensive media coverage and was read/viewed and disseminated widely. The findings of the subanalysis currently are in press (*J Int Neuropsychol Soc*). Next steps include determining if ACTIVE impacts IADL function after 10 years; examining results for effects on health service utilization, driving safety, and quality of life; and determining predictors of response to treatment (e.g., considering variables such as low cognitive function, social engagement, apolipoprotein E genotype, self-efficacy, age, dose/compliance).

VI. SCIENCE OF SYMPTOM MANAGEMENT (Dr. Martha Hare, Program Director, HIV/AIDS and Oncology, Office of Extramural Programs, NINR)

Symptom management is one of the components under the Quality of Life Research Emphasis in NINR's *Strategic Plan for 2006-2010*. The science of symptom management continues to evolve into a multidimensional concept that includes measures that assess systems in terms of timing, intensity and severity, location, distress level, exacerbating and alleviating factors, degree of relief provided by treatment, and impact (Barsevick, *J Pain Sympt Mgt* 2006). "Symptom clusters" occurs when a person reports having three or more concurrent related symptoms (Dodd et al., *ONF* 2001),

Areas for further investigation include delineating causative mechanisms of symptom development; improving recognition of symptoms by patients, caregivers, and health-care professionals; developing effective interventions; designing strategies to improve symptom management over the course of the disease; and improving health-related quality of life. The NINR supports a broad range of initiatives in its symptom management research portfolio, which is divided into three main categories: (1) underlying mechanisms, (2) symptom recognition, and (3) intervention and management. Details regarding funding opportunities available through NINR's Division of Extramural Research can be found at

http://www.ninr.nih.gov/ResearchAndFunding/DEA/OEP/FundingOpportunities/. Selected research studies identified molecular mechanisms underlying wound healing using a derivative of streptolysin O; availability of social support and living positively with HIV as protective factors in risk for depression in HIV-infected women; complex/enriched environments as highly effective in functional recovery after cerebral ischemia in a rat model; and use of a cool dialysate as more effective than warm dialysate in promoting sleep. New and ongoing research studies further demonstrate the breadth and depth of NINR's symptom management research portfolio, which includes several career development and training awards.

Future research emphases related to identification of mechanisms in the development and management of symptoms are expected to include genetic and genomic studies, individual phenotypes, and social and environmental impacts on the development of symptoms. Research to assess and characterize symptoms (i.e., symptom recognition) will focus on technologies to identify and discuss symptoms, methods to assess symptom clusters, and strategies to systemize patient-reported outcomes (e.g., the Patient-Reported Outcomes Measurement System). Research on symptom intervention and management should be focused on improving patients' health and quality of life through development and implementation of technological innovations; inclusion of/outreach to diverse and underserved populations; development of interventions for

multiple symptoms or clusters; use of biobehavioral methods and measures; and translation and dissemination of results and practices to individuals, families, and communities.

Following this presentation, Dr. Grady thanked participants and attendees for their time and interest and adjourned the open session.

CLOSED SESSION

This portion of the meeting was closed to the public in accordance with the determination that this session was concerned with 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

The members of the NACNR considered <u>68</u> research and training grant applications on which NINR was the primary Institute; these applications requested a total of <u>\$12,216,365</u> (direct costs year 01). The Council also considered <u>164</u> applications on which another Institute/Center was primary and NINR was secondary; these applications requested a total of <u>\$35,673,245</u> (direct

costs year 01). The Council concurred with the IRG recommendations on these 232 grant applications.

ADJOURNMENT

The 62nd meeting of the NACNR was adjourned at 10:15 a.m. on May 23, 2007.

CERTIFICATION

Chair

Research

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

F.

A.N

Duca Patricia A. Grady, Ph.D., R.N.,

National Advisory Council for Nursing

Ph.D., R.N., F.A.A.N. Mary Kerr

Executive Secretary National Advisory Council for Nursing Research

MEMBERS PRESENT

Dr. Patricia A. Grady, Chair Dr. Mary E. Kerr, Executive Secretary Dr. Joan Austin Dr. Michael Counte Dr. Kevin Frick Ms. Joan Lancaster Dr. Jean McSweeney Dr. Sandra Millon-Underwood Dr. Gary Morrow Dr. Sharon Tennstedt Dr. King Udall Dr. Clarann Weinert Dr. Anna Alt-White, *Ex Officio* Dr. John Murray, *Ex Officio*

MEMBERS OF THE PUBLIC PRESENT

Ms. Suzanne Begeny, American Association of Colleges of Nursing (AACN)
Ms. Kate Bent, Veterans Administration
Ms. Mary Cerny, Consolidated Solutions and Innovations
Dr. Susan Dorsey, University of Maryland
Mr. Johnnie Holmes, University of Maryland
Dr. Karan Kverno, Johns Hopkins University
Ms. Sherrie Lessans, University of Maryland
Dr. Marie Nolan, Johns Hopkins University
Ms. Liz Parry, American Academy of Nursing (AAN)
Dr. Cynthia Renn, University of Maryland
Dr. Frederick Unverzagt, Indiana University

FEDERAL EMPLOYEES PRESENT

Mr. Brian Albertini, NINR/NIH Dr. Alexis Bakos, NINR/NIH Mr. Ray Bingham, NINR/NIH Dr. Yvonne Bryan, NINR/NIH Dr. Paul Cotton, NINR/NIH Ms. Rebecca Erickson, NINR/NIH Dr. John Grason, OD/NIH Mr. Lawrence Haller, NINR/NIH Dr. Martha Hare, NINR/NIH Dr. Karen Huss, NINR/NIH Ms. Nina Johns, NINR/NIHI Ms. Ellie Johnson, NINR/NIH Dr. Kathy Mann Koepke, NINR/NIH Dr. Alan Krensky, OPASI/NIH OD Ms. Linda Lord, NINR/NIH Ms. Deborah Lynch, NINR/NIH

Dr. Sue Marden, NINR/NIH Ms. Donna Jo McCloskey, NINR/NIH Ms. Mary Miers, NINR/NIH Dr. Jose Ruiz, NINR/NIH Mr. Charles Sabatos, NINR/NIH Ms. Christian Shaw, NINR/NIH Dr. Barbara Smothers, NINR/NIH Ms. Cheryl Stevens, NINR/NIH Ms. Allisen Stewart, NINR/NIH Ms. Tonya Truesdale-Young, NINR/NIH Ms. Renee Walker, NINR/NIH