Department of Health and Human Services
National Institutes of Health
National Institute of Nursing Research
Minutes of the National Advisory Council for Nursing Research

January 22-23, 2008

The 64th meeting of the National Advisory Council for Nursing Research (NACNR) was convened on Tuesday, January 22, 2008, at 1:00 p.m. in Conference Room 6C, 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 approximately 5:05 p.m. The closed session of the meeting, which included consideration of grant applications, was convened on Wednesday, January 23, 2008, at 9:10 a.m. and continued until adjournment at 10:45 am. Dr. Patricia A. Grady, Chair, NACNR, presided over both sessions of the meeting.

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OPEN SESSION

I. CALL TO ORDER, OPENINIG REMARKS, COUNCIL PROCEDURES, AND RELATED MATTERS

Dr. Grady called the 64th meeting of the NACNR to order, welcoming all Council members, visitors (particularly student visitors), and staff. She noted that four Council members were retiring, but their term was extended for one meeting to coincide with the arrival of incoming Council members.

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 National Institute of Nursing Research (NINR) staff. In addition, during either the open of 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 September 25-26, 2007, NACNR meeting by electronic mail. No changes or corrections to the minutes of the September 2007 Council meeting were suggested during the January meeting. A motion to accept the minutes of the September 25-26, 2007, Council meeting as circulated was proposed, seconded, and approved unanimously. Any comments, corrections, and changes to the September 2007 meeting minutes identified at a later time should be forwarded to Drs. Grady or Kerr. The

approved minutes of each quarterly NACNR meeting become part of the Institute's permanent record and are posted on the NINR Web Site (www.ninr.nih.gov).

Dates of Future Council Meetings

Dates of future meetings in 2008 and 2009 have been approved and confirmed. Council members should contact Drs. Grady or Kerr regarding any conflicts or expected absences. The September 2008 meeting dates have been changed to September 16-17; the September meeting will be held at the Bethesda Marriott Hotel.

2008

January 22-23 (Tuesday-Wednesday)

May 20-21 (Tuesday-Wednesday)

September 16-17 (Tuesday-Wednesday)

2009

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; Mr. Douglas Hussey, Chief, Office of Science Policy and Public Liaison, NINR

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

Budget Update—Dr. Grady announced that the NINR budget for fiscal year (FY) 2008 was signed on December 26, 2007 and is flat-lined from FY 2007. The NINR budget categories remain the same as previous years with approximately 70 percent allocated to research program grants (RPGs) (e.g., R01s, R03s, R15s, R21s, etc.). The Centers Program (e.g., P20s, P30s), training, and research management and support each receive 7 percent of the budget. The NINR budget allocates to training twice the amount of the NIH average, thus reflecting the NINR's continued emphasis on training. Other research (e.g., K awards) research and development programs and intramural programs each receive 3 percent of NINR funds, and the NIH Roadmap receives 1 percent.

The NINR makes research awards in competing or renewal (i.e., Types 1 and 2) and noncompeting (i.e., Type 5) categories. Awards are generally made for 4 to 5 years with a turnover occurring at the end of that time period; this means that approximately 75 percent of NINR's funds are committed at the beginning of each fiscal year. Funds available for new research projects come from a combination of turnover funds and new money from Congress. A flatline budget in FY08 means that funds for new NINR projects this year will come solely from

the turnover of Type 5 awards. An estimated 253 training awards were made in FY07 as well as 166 noncompeting and 89 competing research awards out of 403 RPG applications. NINR's success rate for competing RPGs in FY07 was 26 percent, compared to 21 percent for the NIH as a whole.

NIH News—Dr. Grady shared recent NIH events of interest. Two NIH grantees—Dr. Mario R. Capecchi, University of Utah, and Dr. Oliver Smithies, University of North Carolina at Chapel Hill—shared the 2007 Nobel Prize for Medicine. An Emmy was awarded to National Institute on Alcohol Abuse and Alcoholism and National Institute on Drug Abuse for the television production *The Addiction Project*. Dr. Francis Collins, Director, National Human Genome Research Institute, received the Presidential Medal of Freedom for his work in genomics. *The Chronicle of Higher Education* published "Shaking Up the NIH," an online discussion with Dr. Elias Zerhouni, NIH Director, that focused on NIH changes to the peer review process. The NINR and NIH also participated in a nationwide television program entitled "Tomorrow's Medicine Today"; Dr. Grady indicated that she would inform the Council of the broadcast date for the program when it is known. Dr. Michael Leavitt, Secretary, Department of Health and Human Services (DHHS), visited the NIH in the past year. He also attended the eighth annual meeting of the Global Health Security Initiative, which was hosted by the NIH. In addition, the 2008 NIH Director's New Innovator Award Program, which is a pioneer award for new investigators, is accepting applications through March 31, 2008. Applications also have been received in response to the Partners in Research request for applications (RFA); this RFA is intended to communicate the importance and value of the public's role in the research process, serve as a health communication bridge between communities and NIH investigators, and

promote partnerships among the scientific community. The Office of Behavioral and Social Sciences Research is holding its eighth Annual Summer Institute on Randomized Clinical Trials Involving Behavioral Interventions on July 13-25, 2008; the deadline for applications is January 31. Dr. Grady also noted that the NINR participated in several NIH meetings, including the Office of Research on Women's Health's (ORWH) National Leadership Workshop on Mentoring Women in Biomedical Careers on November 27-28, 2007, and an NIH State-of-the-Science Conference seeking to dispel stigma associated with fecal and urinary incontinence, which was held on December 10-12, 2007.

NINR Update—Dr. Yujing Liu has joined NINR's Division of Extramural Activities as Chief of the Office of Review. In addition, two publications covering end-of-life issues were written by extramural investigators. Activities within the intramural community include a significant publication in *The Journal of Pain* describing the effect of modifying the COX-2 gene expression in acute inflammation, and a poster session on collaborative efforts presented by nurse practitioners who gathered from many NIH Institutes. Opportunities in the NINR intramural research program include postdoctoral fellowship positions and an opening for a tenure-track investigator, both in NINR's Intramural Symptom Management Laboratory. The Summer Genetics Institute will be held June 8-August 1, 2008; the deadline for applications is March 3.

Transitions—Dr. Grady thanked Council members who were retiring for their work, including: Dr. Joan Austin, Dr. Kathleen A. Dracup, Dr. Sandra Millon-Underwood, and Dr. Gary R. Morrow. In addition, Council member Colonel John S. Murray will be rotating off of the

Council. The NINR welcomes Mr. Kevin Wilson, Budget Officer, and Ms. Elisa Gladstone, Communications Director.

Issues, Accomplishments, and Milestones—Several events recently have occurred to help address the nursing shortage. An article on "The Association of Registered Nursing Staff Levels and Patient Outcomes" in *Medical Care* (December 2007) links an increase in nurse staffing to improved patient outcomes. A literature review entitled "Nurse Staffing and Patient, Nurse, and Financial Outcomes" in the *American Journal of Nursing* (January 2008) concludes that better nurse staffing improves patient, nurse, and financial outcomes. An American Association of Critical Care Nurses report found a slowdown in the growth of enrollments in U.S. nursing schools; the limited number of faculty teaching in nursing schools is becoming a critical concern. In addition, the Center to Champion Nursing in America reported that, in a landmark event, the Robert Wood Johnson Foundation has provided a $10 million grant to the American Association of Retired Persons Foundation to address the nursing workforce crisis.

Dr. Grady lauded members of the extramural nursing research community for recent awards and accomplishments. Dr. Rachel Jones, Rutgers College of Nursing, is the recipient of the 2007 Nurse Educator Award from *The New York Times* as a tribute to nurses. Dr. William Holzemer, University of California, San Francisco, has received the Commission on Graduates of Foreign Nursing Schools' International Distinguished Leader Award for his work on HIV-AIDS. Dr. Loretta Sweet Jemmott, University of Pennsylvania, received the 2007 Episteme Award from The Baxter International Foundation. Dr. Antonia Villarruel, University of Michigan, has been

elected to the Institute of Medicine. Dr. Michael DeBakey, Baylor College of Medicine, is a recipient of the Congressional Gold Medal.

In other news, the National Coalition of Ethnic Minority Nurse Associations is holding its 10th Anniversary Celebration, focused on "One Voice, Many Faces: Diversity in Unity." The Coalition was formed to provide advice to the NINR and other organizations on research directions to increase the amount of research conducted in health disparities and to increase the number of minority nurse researchers. In addition, Dr. Grady expressed sadness at the deaths of Ms. Rosemary Crisp, R.N., and Dr. Victoria Mock, and noted their respective contributions to the NINR, Council, and the nursing community.

NINR in the News—Mr. Douglas Hussey reported that in October, *Nursing Spectrum* highlighted the need for nurses in its interview, "5 Minutes With Patricia Grady." NINR administrative staff also received NIH Business System Awards. A new NIH factsheet has been published on specialized community interventions, including inner-city males with hypertension, a nurse-home program for mothers at risk of pre-term birth, and education to reduce HIV risk behaviors among youth, among others. A recent NINR news release reported that family members of patients who die in the intensive care unit (ICU) report greater satisfaction with communication and involvement than family members of ICU survivors. Another NINR news release stated that older adults with mild memory impairment still benefit from cognitive training in areas not reliant on memorization.

Dr. Grady was interviewed for the December 2007 issue of *Self*, in which she encouraged women to participate in the research efforts of clinical trials, including cancer and other health issues. The work of NINR researchers has been reported in *Medical News TODAY*, *USA Today*, *American Medical News*, ScienceDaily.com, TopCancerNews.com, and NewsOK.com. 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.

III. IMPLEMENTATION OF THE MULTIPLE PRINCIPAL INVESTIGATOR POLICY—Dr. Norka Ruiz Bravo, Deputy Director for Extramural Research, NIH

Dr. Bravo provided an update on the NIH's Multiple Principal Investigator Initiative. The rationale for the initiative is that principal investigators (PIs) frequently work in teams and that many projects depend on collaboration, including interdisciplinary joint efforts. Team science may be discouraged by the recognition of only one PI. In addition, other Federal agencies have recognized PIs and co-PIs for years. This initiative was recommended by the NIH Bioengineering Consortium Symposium 2003. In 2004, an NIH Roadmap initiative was proposed to stimulate interdisciplinary science. A directive to all Federal research agencies on the subject was issued by Dr. John Marburger, the President's Science Advisor, in January 2005. The initiative emphasizes the involvement of the scientific community based on feedback received from requests for information that were issued by the Office of Science and Technology Policy and the NIH in July 2005.

Since January 1, 2007, nearly all electronic and some paper grant applications can include more than one PI. In 2007, more than 3,000 of applications with multiple PIs were received and more than 90 multiple PI awards were made. The*NIH Guide* Notice published on November 20, 2007 highlighted four core operating principles:

- PIs are PIs—that is, the presence of more than one PI does not diminish the authority, responsibility, or accountability of any PI.
- The multiple PI approach is an option, not a requirement.
- Having multiple PIs on a grant submission does not imply more than one project. The application must include a "Leadership Plan," and the project is reviewed as a single project.
- All PIs are to be recognized in NIH reports.

Dr. Bravo also provided an update on the mandatory public access policy. By April 7, 2008, all articles arising from NIH funds must be submitted to PubMed Central upon acceptance for publication. By May 25, 2008, NIH applications, proposals, and progress reports must include the PubMed Central reference number when citing an article that falls under the policy and is authored or co-authored by the investigator, or arose from the investigator's NIH award. This policy includes applications submitted to the NIH for the May 25, 2008, due date and thereafter. Additional details and answers to frequently asked questions are available on the Web at http://publicaccess.nih.gov/index.htm.

IV. THE STUDY OF WOMEN'S HEALTH ACROSS THE NATION—Dr. MaryFran R. Sowers, John G. Searle Professor of Public Health, and Director, Center for Integrated Approaches to Complex Diseases, School of Public Health, University of Michigan

The Study of Women's Health Across the Nation (SWAN) has two phases. The first phase involved the conduction of 16,000 interviews of eligible women ages 40 to 55 to obtain cross-cultural data on age of menopause. The second phase will be a longitudinal study that will characterize menopause transition in an ethnically diverse cohort. By ethnicity, 47 percent of SWAN participants are Caucasian, 28 percent are African American, 9 percent are Hispanic, 8 percent are Chinese, and 8 percent are Japanese.

SWAN has yielded several lessons about the importance of late perimenopause, body size and composition, the role of ethnicity-genetics, and sex hormone-binding globulin (SHBG). Interventions that are predicated on reaching postmenopause should be rethought and undertaken in an earlier timeframe. This includes treatments addressing cardiovascular disease (CVD) markers and blood pressure, diabetes, bones, arthritis, physical performance and functioning, cognition, and depression. Dr. Sowers commented that many race differences can be explained by differences in genetics, body size and body composition, and socioeconomic status. Specific hormones appear to be the factor most associated with health outcomes in a number of studies suggesting that more hormone studies should be conducted, particularly SHBG.

SWAN IV will examine the transition to aging in terms of reduced tissue/physiological function, increased susceptibility to disease, and decreased resistance to physical and psychological stress.

As aging progresses, there are body composition, metabolic, and hormonal changes, as well as declines in physical and muscle performance and characteristics (sarcopenia). Two objectives of SWAN IV are to: (1) characterize the endocrinology and symptomatology of the post-reproductive period, and (2) ascertain additional health outcomes that are relevant to the early older age that may be affected by factors studied in mid life. A further aim is to understand the relationship between mid-life and the menopausal transition experience of women and subsequent positive and negative health outcomes. Biobehavioral measures in SWAN IV will include: (1) x-rays to measure osteoarthritis of the knee, (2) carotid ultrasonography to assess intimal thickness, (3) the Structural Clinical Interview to describe clinical depression, and (4) performance-based measures of physical functioning (e.g., grip strength and gait assessment).

V. **CLINICALTRIALS.GOV**—Dr. Rebecca Williams, Associate Director, ClinicalTrials.gov

The Web Site www.clinicaltrials.gov was launched in February 2000, per the U.S. Food and Drug Administration's (FDA) Modernization Act 113's mandate for a registry of clinical trials. Clinical trial registration and results reporting were expanded by Public Law 110-85, Section 801 (FDA Amendments Act 801) in 2007 in response to a lack of transparency in clinical research that was noted during the past several years by Maine state law, the State Attorneys General, and journal editors. Since January 200, the number of ClinicalTrials.gov accounts and records have grown steadily and as of mid January 2008, there are 49,647 trials on record; 15 percent (7,602) are observational, and 85 percent (42,021) are interventional (i.e., drug and biologic; surgical procedure; behavioral, gene transfer, and other; and device). One-half of those registered are conducted exclusively in the United States. The trials aggregated by data provider are 33 percent

(16,312) U.S. Federal, including the NIH; 39 percent (19,322) university; and 28 percent (14,013) industry. Trials are registered in a Web-based system, called the Protocol Registration System, through organizational accounts; the trial registration process takes approximately 15 minutes.

Public Law 110-85, Section 801 Expanded Clinical Trial Registry was enacted on September 27, 2007. It encompasses Phase II-IV drugs and device trials for all diseases and includes data elements from ClinicalTrials.gov as well as the World Health Organization (WHO) and the International Committee of Medical Journal Editors. It also adds a results database for FDA-approved drugs and cleared devices that includes baseline characteristics, key outcomes, statistical analyses, and adverse events; and the expansion of results by rulemaking. Important milestones include: (1) new registration requirements and linking to existing results (December 26, 2007); (2) results reporting requirements become effective (September 27, 2008); (3) a public meeting will be held (March 2009); (4) adverse effects requirements become effective (September 27, 2009); and (5) rulemaking is due (September 27, 2010).

Dr. Williams stated that all applicable clinical trials must be registered. These include a) controlled clinical investigations of drugs and biologics (other than Phase I) that are subject to FDA regulation, b) device trials (other than small feasibility studies) that are subject to FDA regulation and c) pediatric postmarket surveillance. The sponsor or PI of the clinical trial is responsible for registering the trial. Required data elements include descriptive, recruitment, location, contact, and administrative information. Primary and secondary outcome measures, the start date, and the target number of subjects are several of the new elements that also must be

included. Of the trials currently registered, 40 percent of NIH-sponsored trials omitted data on the primary outcome measure at the time of registration. The responsible party for an applicable clinical trial must submit required information by December 26, 2007, or 21 days after the first patient is enrolled, whichever occurs later. Trials that are ongoing as of September 27, 2007, that do not involve a serious or life-threatening disease or condition must be submitted by September 27, 2008. Trials that involve a serious or life-threatening disease or condition that were initiated by September 27, 2007, and had a completion date of December 26, 2007, or earlier are not subject to the new requirements. Sources of information to consider are public meetings with stakeholders within the past 1.5 years, the Pilot Quality Control Study jointly sponsored by the FDA and NIH, and the WHO dataset. Council members were referred to http://prsinfo.clinicaltrials.gov/ for more information.

VI. DIVISION OF EXTRAMURAL ACTIVITIES: UPDATE—Dr. Paul Cotton, Program Director, Health Behavior and Minority Health, NINR

Dr. Cotton provided an update on NINR's support of extramural efforts in methodology and technology. Initiatives that address study design and analysis include "Biobehavioral Methods to Improve Outcomes Research" (R01-PA-07-072) and "Mechanisms, Models, Measurement, and Management in Pain Research" (R01/R21-PA-07-282). It also supports the NIH Roadmap initiative on "New Methodologies for Natural Products Chemistry" (R01-RFA-RM-08-004), in addition to the Office of Research on Women's Health (ORWH) initiative on "Advancing Novel Science in Women's Health Research (ANSWHR)" (R21-PAS-07-381). Initiatives on data collection and measurement include "Sharing Data and Tools: Federation Using the BIRN and caBIG Infrastructures" (R01-PAR-07-426) and "Data Ontologies for Biomedical Research"

(R01-PAR-07-425). The NINR also provides support for six technology projects, including two Roadmap initiatives: "Development of New Technologies for Studying the Human Microbiome" (R01/R21-RFA-RM-08-010/011); "Technology Development in Epigenetics" (R01/R21-RFA-RM-08-011/012); "Nanoscience and Nanotechnology in Biology and Medicine" (R01/R21-PA-08-052); "Solicitation of the NIH for Small Business Technology Transfer Grant Applications (SBIR)" (R43/R44-PA-07-280); and "Solicitation of the NIH for Small Business Technology Transfer Grant Applications (STTR)" (R41/R42-PA-07-281).

Dr. Cotton described selected research findings, including work by Dr. Christine Miaskowski, University of California, San Francisco (UCSF), on cancer patient quality of life and Dr. Richard Shields, University of Iowa, on the effect of mathematical modeling on the use of electrical stimulation in injuries. Regarding data collection and measurement, Dr. Nancy McCain, Virginia Commonwealth University, has released findings on a potential biomarker for breast cancer. Recent technology research includes work with: photosensors by Dr. Lora Burke, University of Pittsburgh; home monitoring systems by Dr. Meredeth Rowe, University of Florida; and radio frequency identification by Dr. Sharon Morris.

New and ongoing research in the area of study design/analysis includes heterogeneous treatment effects in social and behavioral sciences by Dr. Yu Xie, University of Michigan (R21); a statistical approach to characterize cardiac autonomic control by Dr. Emilia Bagiella, Columbia University (R21); gene expression-environment link in cerebral ischemia by Dr. Teresita Briones, University of Illinois at Chicago (R01); and HIV communication intervention for Latinos by Dr. Antonia Villarruel, University of Michigan (R01). Current research on data

collection and measurement includes the modeling of multi-level processes in parent-child relations by Dr. Melissa Sturge-Apple, University of Rochester (R21). The NINR also is supporting investigations in technology, such as a wireless monitoring and reward system for asthma inhaler use by Dr. Marc Cohen, Sixty Seven Kilohertz, Inc. (R43); and a simple, self-contained, self-sterilizing bag by Dr. Joel Williams, Genomex (R44).

Training and career awards include study design/analysis research (F31) on heart failure (Dr. John Reilly, Emory University) and Von Willebrand disease type 1 (Mr. James Riddel, UCSF); and data collection and measurement research on postpartum depression (F31) (Dr. Craig Garfield, University of Illinois at Chicago) and insomnia (K01) (Dr. Wil Pigeon, University of Rochester). Training and career awards for technology research include salivary rapid HIV testing (K01) (Dr. Joseph Burrage, University of Indiana) and distant caregiving for advanced cancer patients (F31) (Dr. Daniel Mazanec, Case Western Reserve University).

Dr. Cotton explained that future research in methodology and technology likely will address nanotechnology and health; epigenetics and microarray; improved methods for interventions; biobehavioral methods and measure; and community-based, participatory research.

VII. STRATEGIC PLANNING RETREAT: UPDATE—Dr. Sharon Tennstedt, Director, Institute of Studies on Aging, and Vice President, New England Research Institutes

Council members Dr. Tennstedt and Dr. Millon-Underwood attended NINR's 1-day Strategic Planning Retreat in early December 2007. Dr. Grady presided over the meeting. This retreat

was the beginning of a planning process for the grant award process for 2010, in which "pre-concepts" were considered. Each idea discussed falls under a section of the NINR's strategic plan. The presence of Drs. Tennstedt and Millon-Underwood's provided a means of obtaining Council input during early planning stages. The concepts will be further developed and likely presented to the full Council at its September meeting.

Following this update, Dr. Grady thanked participants and attendees for their time and interested and adjourned the open session of the meeting.

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 85 research and training grant applications on which NINR was the primary Institute; these applications requested a total of $18,468,069 (direct costs

year 01). The Council also considered 331 applications on which another Institute/Center was primary and NINR was secondary; these applications requested a total of $64,850,457 (direct costs year 01). The Council concurred with the IRG recommendations on these 416 applications.

ADJOURNMENT

The 64th meeting of the NACNR was adjourned at 10:45 a.m. on January 23, 2008.

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

Mary E. Kerr, Ph.D., R.N., F.A.A.N.
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. Randall Curtis
Dr. David Dinges
Dr. Kathleen Dracup
Dr. Kevin Frick
Dr. Felicia Hodge
Ms. Joan Lancaster
Mr. James Linn
Dr. Jean McSweeney
Dr. Gary Morrow
Dr. Sharon Tennstedt

Dr. Clarann Weinert
Dr. Anna Alt-White, *Ex Officio*

MEMBERS OF THE PUBLIC PRESENT
Ms. Cheryl Ann Borden, University of Virginia
Ms. Erin Branson
Ms. Carol Brotherton, University of Virginia
Ms. Bethany Coyne, University of Virginia
Ms. Debbie Gleason-Mitchell, University of Virginia
Ms. Laura L. Hayman, University of Massachusetts-Boston
Ms. Mary H. Hill, Howard University
Ms. Emma Mitchell, University of Virginia
Ms. Barbara Parker, University of Virginia
Ms. LaShanda Penn, University of Virginia
Ms. Shannon Riedel, University of Virginia
Ms. Paula Ruffin, University of Virginia
Dr. MaryFran R. Sowers, University of Michigan
Ms. Darlene Summers, Consolidated Solutions and Innovations
Ms. Barbara Speck, University of Louisville
Ms. Maria-Cecilia Venzon, University of Virginia
Ms. Helen Zuelzer, University of Virginia

FEDERAL EMPLOYEES PRESENT
Mr. Brian Albertini, NINR/NIH
Dr. Alexis Bakos, NINR/NIH
Dr. David Banks, NINR/NIH
Mr. Ray Bingham, NINR/NIH
Dr. Norka Ruiz Bravo, OD, NIH
Dr. Yvonne Bryan, NINR/NIH
Ms. Emilia Colon, NINR/NIH
Dr. Paul Cotton, NINR/NIH
Dr. Ray Dionne, NINR/NIH
Ms. Ana Ferreira, NINR/NIH
Ms. Linda Fitzwater, NINR/NIH
Ms. Elisa Gladstone, NINR/NIH
Dr. John Grason, OD/NIH
Dr. Martha Hare, NINR/NIH
Dr. Karen Huss, NINR/NIH
Mr. Douglas Hussey, NINR/NIH
Ms. Deborah Jennings, NINR/NIH
Ms. Ellie Johnson, NINR/NIH
Dr. Kathy Mann Koepke, NINR/NIH
Ms. Emma Kurnat-Thoma, NINR/NIH
Dr. Yujing Liu, NINR/NIH
Ms. Angela Marshall, NINR/NIH
Dr. Gertrude McFarland, CSR/NIH

Mr. Ed Morgans, NINR/NIH
Ms. Mary Murray, NINR/NIH
Mr. Edward Ramsay, NINR/NIH
Dr. Barbara Smothers, NINR/NIH
Ms. Cheryl Stevens, NINR/NIH
Dr. Melinda Tinkle, CSR/NIH
Ms. Tonya Truesdale-Young, NINR/NIH
Ms. Jane Webb, NINR/NIH
Ms. Laura Williams, NINR/NIH
Dr. Rebecca Williams, NLM/NIH
Mr. Kevin Wilson, NINR/NIH