

**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 19–20, 2004

The 53rd meeting of the National Advisory Council for Nursing Research (NACNR) was convened on Wednesday, May 19, 2004, at 1:15 p.m. in Conference Room 6, Building 31, National Institutes of Health (NIH), Bethesda, Maryland. The first day of the meeting was adjourned at approximately 5:15 p.m., at which time the open session also was adjourned. The closed session of the meeting, which included consideration of grant applications, continued the next day, May 20, 2004, at 9:00 a.m., until adjournment at 1:00 pm on the same day. Dr. Patricia A. Grady, Chair of the NACNR, presided over both sessions.

OPEN SESSION

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

Dr. Grady called the 53rd meeting of the NACNR to order, welcoming all Council members, visitors, and staff. Dr. Grady also introduced and welcomed five new Council members:

Dr. Joan Austin, Dr. Kathleen Dracup, Dr. Sandra Millon-Underwood, Dr. Gary Morrow, and Dr. Anna Alt-White (*ex officio* member and Veterans Affairs representative).

Conflict of Interest and Confidentiality Statement

Dr. Claudette Varricchio, NACNR Executive Secretary Assistant Director, NINR, 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 Council should be referred to National Institute of Nursing Research (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. Varricchio also reminded NACNR members of their status as special Federal employees while serving on the Council, they may not engage in nay lobbying activities while receiving pay from the federal government.. Specific policies and procedures were reviewed in more detail at the beginning of the closed session and were available in the Council notebooks.

Minutes of Previous Meeting

Council members received a copy of the minutes of the January 27! 28, 2004, Council meeting by electronic mail. No changes or corrections to the minutes of the January 27! 28, 2004, meeting were suggested during the May meeting. Comments, corrections, and changes

identified after the current meeting should be forwarded to Dr. Grady or Dr. Varricchio. The minutes of each quarterly NACNR meeting are posted on the NINR Web Site (<http://ninr.nih.gov/ninr/>).

Dates of Future Council Meetings

Dates of meetings in 2004 through 2006 have been approved and confirmed. Council members should contact Dr. Grady or Dr. Varricchio regarding any conflicts or expected absences. Staff is looking into dates for 2007.

2004

- September 14–15 (Tuesday–Wednesday)

2005

- January 25–26 (Tuesday–Wednesday)
- May 17–18 (Tuesday–Wednesday)
- September 13–14 (Tuesday–Wednesday)

2006

- January 24–25 (Tuesday–Wednesday)
- May 24–25 (Wednesday–Thursday)

- September 26–27 (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 related to the budget, NIH, and NINR.

Budget—The final FY2004 Congressional Conference Budget Bill was signed into law on January 23, 2004. It included \$134,724 million for NINR, which was a 3.2 percent increase over the prior year's budget. The increase was commensurate with those for most other Institutes and Centers (ICs), and it was greater than the 2.8 percent increase in the overall NIH budget.

Approximately 75 percent of the NINR FY2004 budget funded extramural research project grants (RPGs); other research (e.g., K awards) comprised 3 percent; and the Centers programs received 5 percent. Research training was 8 percent, which is more than twice the rate that most other ICs allocate for similar training.

The President's proposed FY2005 budget includes increases comparable to the FY2004 budget, with a 3.1 percent increase to NINR and a 2.6 percent overall increase to the NIH. The total proposed allocation to NINR in FY2005 is \$138,865 million.

NIH Blue Ribbon Panel—NIH Director Dr. Elias Zerhouni established a Blue Ribbon Panel on Conflict of Interest in January 2004 to review existing NIH regulations and policies regarding (a) compensation or financial benefit from outside sources, including consulting arrangements and

outside awards; and (b) requirements for the reporting of NIH staff's financial interests. The Panel's final report, which includes 17 recommendations, was submitted to the Advisory Committee to the NIH Director on May 6. The complete report is available at http://www.nih.gov/about/ethics_COI_panelreport.htm. NINR also is reviewing conflict of interest issues, policies, and requirements within the Institute.

The NIH Roadmap—An NIH-wide initiative launched by Dr. Zerhouni is *The NIH Roadmap*, which provides a framework of the priorities the NIH must address to optimize its entire research portfolio (<http://nihroadmap.nih.gov>). The Roadmap is designed to transform the Nation's medical research capabilities and speed the movement of research discoveries from the bench to the bedside, and also from the bedside to the bench. The three main themes of the NIH Roadmap are: New Pathways to Discovery, Research Teams of the Future, and Re-Engineering the Clinical Research Enterprise. Associated with each theme is a series of working groups to address specific issues related to that theme. The Interdisciplinary Research Working Group (under New Pathways to Discovery), co-chaired by Dr. Grady, Dr. Ken Olden (National Institute of Environmental Health Sciences [NIEHS]), and Dr. Larry Tabak (National Institute of Dental and Craniofacial Research), has made significant progress and has already begun reviewing research application submissions.

NINR is actively engaged in NIH-wide Roadmap activities as well as in parallel activities focused on the nursing institute, under the guidance of Dr. Lauren Aaronson, NINR Senior Advisor for the Roadmap. A report of the NINR Roadmap Implementation Group may be found at NINR's Web Site (www.nih.gov/ninr). Approximately 200 people contributed to the

identification and development of NINR Roadmap themes through a series of workshops and meetings held more than 1 year ago. The NINR themes interface with the NIH Roadmap themes and are broad-based concepts reflected in NINR's research portfolios.

NIH Public Trust Initiative—Another new NIH initiative is the NIH Public Trust Initiative, whose goal is to improve the public health by promoting public trust in biomedical and behavioral research. The initiative is co-chaired by Dr. Grady and Dr. Yvonne Maddox, Deputy Director, National Institute of Child Health and Human Development (NICHD). It interfaces with and extends beyond the NIH Roadmap. The NIH Public Trust Initiative includes two frameworks to house this trust: A research spectrum framework and an NIH Roadmap framework. The research spectrum framework involves the process of scientific research and the public interface with the research process and spans discovery, communication, dissemination, and translation of research results. The NIH Roadmap framework interfaces with and addresses themes where the public trust can be emphasized and addressed. The initial steps of the initiative include obtaining a baseline, which involves taking an inventory of current NIH activities and conducting a national survey of the public's awareness of and "trust in" the biomedical research enterprise to discern key issues of interest and concern. Future steps include using inventory and survey results to identify best practices and needs.

National Nursing Research Roundtable—The National Nursing Research Roundtable (NNRR) comprises constituent organizations with significant research agendas and investments in the nursing research enterprise. The Roundtable meets annually to promote communication about nursing research across multiple audiences using multiple strategies, encourage incorporation of

mechanisms in the organizations' strategic plans, and provide a forum for dialog with the NINR Director and staff about issues related to advancing nursing science. The group represents a critical interface between research, practice, and policy. The NNRR met on March 18th 19, 2004, and the agenda included the role of the NIH Roadmap in the larger nursing community, potential NINR strategies to enhance the future direction of the NIH Roadmap, and strategies to enhance interdisciplinary and translational research.

NINR Staff Updates and Transitions—Dr. Grady reported on staff changes within NINR. Mr. Daniel O'Neal, who served as Chief of the Office of Science Policy and Public Liaison, left NINR after a long tenure with the Institute to take a position with the Veterans Administration in Tampa, Florida. Recent additions to the NINR staff include Mr. Kevin Laser, Budget Officer, and Mr. Lanny Newman, Public Affairs Specialist. Dr. Varricchio is the newly appointed Assistant Director for Extramural Affairs; in addition to other responsibilities, she will oversee the review of extramural grants activities and extramural research portfolios.

NINR Awards and Recognition—At an NIH wide ceremony, NINR received an Honorable Mention Award for its newsletter at the Plain Language Awards reception. In addition, three staff members in NINR's Office of Grants and Contracts Management received awards from the NIH Grants Management Vision Steering Committee. Ms. Cindy McDermott and Ms. Cindy Drew received Special Recognition Awards, and Ms. Tara Mowery received a Letter of Appreciation.

NINR Outreach—NINR has been engaged in a number of outreach activities since the last Council meeting, including regional nursing research conferences, presenting at the NIH

Director's Council of Public Representatives (COPR), co-sponsoring the NINR/NICHHD/SIDS initiative, and AACN meetings. Staff also have participated in and contributed to the Working Group on Optimizing Pregnancy Outcomes in Minority Populations and the Workshop on Moving the Research Agenda Forward for Children With Cancer; publications summarizing results of these meetings are in press, and executive summaries of the meetings may be found at the NINR Web Site. Dr. Grady reported on the National Research Council's (NRC's) Monitoring the Changing Needs for Biomedical and Behavioral Research Personnel Nursing Panel, which met on August 5, 2003, at which she provided testimony. The Nursing Panel is convened every 2 to 4 years and focuses primarily on training issues and needs. Recommendations generated by the Panel generally are implemented following consideration and approval by the NIH Director, the ICs, and Congress. One question raised by last year's Nursing Panel was to consider changing the name of NINR to recognize an area of science (e.g., the National Institute of Nursing and Biobehavioral Research). As Dr. Grady noted, NINR is the only IC on campus that is discipline specific, which, in turn, creates some unique challenges for the Institute. She has solicited comments from a range of organizations and continues to seek comment and feedback by raising the proposed name change at national, regional, and local nursing research meetings.

Upcoming NINR Events—Upcoming events include: The State of the Science Congress on Nursing Science: Working Toward a Healthier Nation on October 7-8, 2004; Friends of the NINR (FNINR) events and NightinGala on October 6, 2004, with keynote speaker Dr. Zerhouni, who will speak on “Nursing Research: the Profession's Commitment to Public Trust;” and the Summer Genetics Institute from June 7- July 30, 2004. NINR will participate in several

upcoming conferences and workshops, including a Cost Effectiveness Analysis Workshop on August 4th 6, 2004; State of the Science Conference on Improving End-of-Life Care on December 6th 8, 2004; and a Biobehavioral Research Workshop.

III. NIH UPDATE: NATIONAL CENTER FOR RESEARCH RESOURCES (NCRR)

(Dr. Elaine Collier, Assistant Director, Clinical Research Resources, NCRR)

The General Clinical Research Centers (GCRCs) are a national network of 79 centers that provide clinical research infrastructure for investigators to conduct safe, controlled, state-of-the-art clinical studies. They also provide infrastructure and resources that support career development opportunities in clinical research and training. A new component of the GCRC program involves expansion of training of non-M.D./non-Ph.D. members of the research team, including nurses, technicians, and biostatisticians.

The GCRC network spans the full range of patients that may be included in clinical trials: the program supports Adult GCRCs, Pediatric GCRCs, and Adult/Pediatric GCRCs. Minority researchers are supported through the GCRC's Research Infrastructure Program, and the NCRR has ongoing efforts focused on integrating minority scientists into all GCRC investigator activities. Two historically black academic institutions, Howard University and Morehouse University, have a full-fledged GCRC and an RCMI clinical center, respectively. As part of the NCRR, the GCRC is a well-funded program with a budget of approximately \$280 million in FY2003; total allocation for the GCRC network is expected to top \$300 million in FY2005. Each Center runs on an annual budget of \$3 to \$5 million.

Research performed in conjunction with GCRCs is supported by the NIH, foundations, industry, and other organizations or institutions. The GCRC *per se* does not fund the conduct of research studies beyond a limited range of pilot studies. Rather, the GCRC funds or provides exam rooms; inpatient beds; research nursing services, including some specialized services; equipment; core laboratories for analytical assays; specimen processes; and similar resources in support of a clinical trial. Investigators interested in using GCRC resources have access to biostatistical support, informatics support, nutritional support, and sleep and circadian rhythms rooms/studies/state-of-the-art equipment. The GCRC pays for its staff time, equipment, analyses, and other standard resources that are part of that Center; the Principal Investigator (PI), in turn, pays for “extras” that are not ordinarily offered through the GCRC (e.g., a laboratory test for which GCRC requires special training).

Individual GCRCs also may support clinical studies that require specialized tests, instruments, or equipment, such as DEXA scans, plethysmography, exercise physiology, and calorimetry. Additional resources available at selected GCRC sties include genotyping, mass spectroscopy, EKG, ultrasound, neuroimaging (MRI, PET), pharmacogenomics, endocrinology, and gene therapy. A unique feature of all GCRCs is the Research Subject Advocate, who assists investigators in developing a data and safety monitoring plan, serves as a liaison with the Institutional Review Board (IRB), and educates all members of the research team on subject safety issues and policies. In brief, the Research Subject Advocate ensures that human research protections are a priority in all investigations.

Proposals submitted to the GCRC are assigned a priority by a GCRC Advisory Committee (GAC). Dr. Collier noted that each GCRC has its own GAC, and most approved proposals except those for very large studies are funded. The GAC also advises the GCRC PI and the Program Director regarding overall center priorities and direction. GCRC grants are competitively reviewed every 3 to 5 years, and each review cycle includes a site visit.

Other resources available through NCRR include the Mutant Mouse Repository, Rare Diseases Clinical Research Network, Islet Cell Resource Centers for clinical studies of diabetes, National Gene Vector Laboratories, Human Embryonic Stem Cell Resource Centers to facilitate the distribution of approved embryonic stem cell lines, Biomedical Informatics Research Network that links Federal databases and supercomputer technologies through collaborations with various agencies, and the National Disease Research Interchange. Additional information on the NCRR and GCRCs may be found at <http://www.ncrr.nih.gov>; a directory of all resources by state is available at <http://www.ncrr.nih.gov/ncrrprog/clindir/crdirectory.asp>.

IV. THE USE OF GCRCs IN SUPPORT OF NURSING RESEARCH (Dr. Kathy Parker, School of Nursing, Emory University)

Dr. Parker described examples of nursing research studies conducted using GCRC funds and resources at the main and satellite campuses of Emory University. The first study conducted in the Emory GCRC assessed extremes of diet and exercise in obese coronary patients; the trial ran in 1992 and 1993, and the PI was Dr. Sandra Dunbar. The GCRC provided outpatient admission for the parent study, which involved testing two levels of exercise intensity; nutritional services;

ambulatory blood pressure monitoring of an ancillary study, and collection of psychosocial and quality-of-life data. A subsequent 4-year study on the effect of a family-focused intervention on self-management behaviors in heart failure accessed many of the same GCRC resources and services as the prior study (e.g., nutritional services, outpatient admission of heart patients, laboratory processing and analysis).

A range of GCRC services and resources have been accessed in Dr. Parker's investigations of the contribution of the circadian rhythm for temperature on sleep state in hemodialysis (HD) patients. Dr. Parker explained that body temperature increases after dialysis and that this increase persists for a considerable amount of time because vasoconstriction in HD patients keeps them from dissipating heat efficiently and in a timely manner. Increases in body temperature persist in these patients, and when dialysis is scheduled later in the day (vs. early in the day), sleep patterns are adversely affected at least in part because of poor body temperature control. Results of Dr. Parker's studies support the hypothesis that HD has adverse effects on polysomnographic measures of nocturnal sleep (e.g., REM latency, sleep fragmentation, total sleep time, sleep efficiency). Manipulation of body temperature (i.e., providing a thermoneutral treatment) may address and correct some of these changes. A three-phase protocol to test this intervention has been proposed and approved. GCRC contributions to these studies include proposal development and design consultation; inpatient admission and observation in a controlled environment; data collection, monitoring, and analysis; and transport of subjects.

A current study on which Dr. Parker is the PI is examining the effects of cool dialysate on inflammatory markers, including C-reactive protein, interleukin (IL)-1 β , IL-2, and tumor

necrosis factor-", as related to cardiovascular disease, which is the most common cause of death in dialysis patients. This clinical trial is funded by NINR; GCRC staff are preparing samples and conducting analyses. One future study approved by the GCRC will examine various mechanisms underlying sleep disturbances in patients with chronic kidney disease. Another project under review by the NIH is a collaborative effort between Emory University and Morehouse School of Medicine titled "Emory-Morehouse Partnership To Reduce CV Disparities"; the project focuses on CV minority health and the metabolic syndrome, and a subsample of minority participants will go to the GCRC for an array of clinical measures of glucose and CV status.

In closing, Dr. Parker described how the GCRC has contributed to the mission of the NINR P20 Center and to Emory's School of Nursing:

- Enhanced interdisciplinary communication
- Access to scientific expertise and consultation
- Access to equipment and sophisticated measures of variables not often seen in nursing research
- Cost effectiveness of shared inpatient and outpatient resources
- Facilitation of research effects from proposal development to data collection and analysis
- Increased productivity and funding
- Education of undergraduate and graduate students (at the M.S.N., doctoral, and postdoctoral levels)
- Increased voice of nursing within Emory University and the Health Sciences Center scientific communities.

Emory School of Nursing researchers, in turn, have contributed to the mission of the Emory GCRC by:

- Adding to the overall interdisciplinary perspective, supporting the GCRC grant applications, and increasing scientific productivity
- Participating in the GCRC Advisory Board
- Making presentations at GCRC seminars
- Providing input regarding how the GCRC can further support interdisciplinary research.

V. UPDATE ON NIH ROADMAP ACTIVITIES (Dr. Lauren Aaronson, NINR Roadmap Coordinator/Senior Advisor)

The NIH Roadmap is a framework of priorities for the NIH to address to optimize its entire research portfolio; a vision for a more efficient, innovative, and productive system of biomedical and behavioral research; and a set of initiatives that are central to extending the quality of healthy life for persons in this country and around the world. The Roadmap goals are designed to accelerate basic research discoveries, speed translation of those discoveries into clinical practice, and address roadblocks that slow the pace of this translation. One primary goal of the Roadmap is to promote and support collaborative research on issues that cannot be addressed by a single IC.

FY2004 funding of the Roadmap totals \$128.3 million, with one-half allocated to the New Pathways to Discovery theme, approximately \$38 million to Re-Engineering the Clinical Research Enterprise, and \$27 million to Research Teams of the Future. Over the next 5 years, the Roadmap budget is slated to increase nearly four-fold. The projected FY2009 budget will total approximately \$508 million, with an estimated \$227 million allocated to clinical research, \$188 million to pathways, and \$93 million to research teams. Thus, as the Roadmap infrastructure is established, funds will shift toward research projects. Dr. Aaronson noted that Roadmap funding represents a very small proportion of the total NIH budget, that is, less than 1 percent in FY2004 and less than 2 percent in FY2005.

Within the three Roadmap themes are subtopic-driven Implementation Groups and Working Groups that oversee a range of activities, including research portfolios. An extensive array of grants and funding opportunities already have been announced and include Broad Agency Announcements (BAAs), Requests for Applications (RFAs), Requests for Proposals (RFPs), and Requests for Information (RFIs). Among the grants and awards announced is a series of training and career development opportunities, several of which focus on interdisciplinary research, including curriculum development in this area. Details about these opportunities may be found at <http://nihroadmap.nih.gov/grants/index.asp>.

Among the novel components of the Roadmap is the NIH Director's Pioneer Award (<http://nihroadmap.nih.gov/highrisk/initiatives/pioneer/index.aspx>), a highly competitive award designed to encourage innovation and risk taking and support individuals with untested, potentially groundbreaking ideas. The Pioneer Award provides \$500,000/year for 5 years.

Response to this announcement (which is currently closed) has been significant; approximately 1,300 applications were received, and between 5 and 10 awards are expected to be made. Other current and proposed Roadmap initiatives and activities include harmonization of clinical processes; increased linking of clinical research networks, including NECTAR; and the establishment of a national clinical research-associated training and certification program, a collaborative group of investigators to improve measures of patient-reported outcomes across studies, and translational research centers.

As part of her presentation, Dr. Aaronson also explained her role as the NINR Roadmap IC Liaison. In this position, she and other IC liaisons speak on behalf of their designated IC Director, inform IC staff and IC research and advocacy communities, serve as the IC Roadmap point of contact for the extramural community, and serve as the point of contact for lead ICs for administrative aspects of the Roadmap.

VI. OVERVIEW OF THE NIH OFFICE OF EXTRAMURAL RESEARCH

ACTIVITIES (Dr. Norka Ruiz Bravo, Deputy Director for Extramural Research, NIH)

The NIH Office of Extramural Research (OER) is the nexus for NIH policy, NIH ICs, DHHS, the medical research community, advocacy and interest groups, Congress, the White House, and other groups and agencies. The Office strives to balance these competing and complex issues and groups with the directive to allow the NIH to fulfill its goals and missions. In this mix are evolving public health challenges, research approaches, research workforce issues, and policy and operations challenges. With the NIH budget doubling completed and annual budget

increases reduced to 2 to 3 percent, the ability to address these challenges is constrained further by limited funding.

In response to evolving challenges, Congressional mandates, and the NIH Roadmap, which Dr. Bravo noted has served as a catalyst for the NIH to “think outside the box,” OER is developing new procedural and policy rules to improve cooperation and collaborations across ICs and to streamline operations at all levels. Changes in policy have been approved or are under consideration across the NIH with respect to allocation of consortium costs (i.e., they are no longer included in the direct or capped costs of grants); the status of co-investigators; improved collaborations among government, academia, and industry; and the standardization of certain Federal-wide policies.

OER also has been focused on developing and implementing guidelines and procedures for comprehensive Electronic Research Administration (eRA) of grants (<http://era.nih.gov/>). eRA is NIH’s infrastructure for conducting interactive electronic transactions for the receipt, review, monitoring, and administration of NIH grant awards to biomedical investigators nationally and around the world. eRA integrates the external system (NIH eRA Commons) and the internal system (IMPAC II). NIH eRA Commons enables communication with NIH’s partners in the research community; NIH staff uses IMPAC II. The overall goals of eRA are to have completely paperless grant processing from beginning to end; reduce the time from submission to award; develop knowledge management tools; and within privacy and confidentiality constraints, make information and analysis tools accessible to the extramural community.

The primary aim of NIH eRA Commons is to enable grantees to conduct business with the NIH electronically. Currently, financial status reports are submitted, and the status of summary statements and scores are tracked on an ongoing basis. The Commons system has achieved a 97 percent registration rate among grantee institutions, but system use by PIs is limited. Dr. Bravo noted that OER continues to work on privacy and confidentiality issues to reach consensus across ICs and within departments. A primary goal of the eRA project is to complete electronic submissions of modular R01 grant applications beginning in February 2005. Extensive pilot testing of these systems and processes has been underway and will continue as necessary.

Following this presentation, Dr. Grady thanked participants and attendees for their time, interest, and contributions, 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, US 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 176 research and training grant applications requesting \$37,064,034 in total costs. The Council recommended 52 applications with a total cost of \$12,856,713 (Source QVR on 4/7/2004).

OTHER ITEMS FOR CLOSED SESSION: EXECUTIVE SESSION

ADJOURNMENT

The 53rd meeting of the NACNR was adjourned at 1:00 pm on May 20, 2004.

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

Claudette Varricchio, D.S.N., R.N., F.A.A.N.
Executive Secretary
National Advisory Council for Nursing
Research

MEMBERS PRESENT

Dr. Patricia A. Grady, Chair
Dr. Claudette Varricchio, Executive Secretary
Dr. Joan Austin
Dr. Peter Buerhaus
Dr. Louis Burgio
Mrs. Rosemary Crisp
Dr. Kathleen Dracup
Dr. Jacqueline Dunbar-Jacob
Dr. Gary Morrow
Dr. Frances Munet-Vilaro
Dr. Mary Naylor
Dr. Dolores Sands
Dr. Joan Shaver
Dr. Sandra Millon-Underwood
Dr. Anna Alt-White, *Ex Officio*
Dr. Catherine Schempp, *Ex Officio*

MEMBERS OF THE PUBLIC PRESENT

Ms. Mary Cerny, SCG, Inc.
Dr. Kathleen Parker, Emory University
Dr. Rachel Schiffman, University of Wisconsin

FEDERAL EMPLOYEES PRESENT

Dr. Lauren Aaronson, NINR/NIH
Dr. Nell Armstrong, NINR/NIH
Dr. Alexis Bakos, NINR/NIH
Mr. Ray Bingham, NINR/NIH
Dr. Norka Ruiz Bravo, OD/NIH
Dr. Yvonne Bryan, NINR/NIH
Dr. Anthony Carter, NIGMS/NIH
Dr. Jeffrey Chernak, NINR/NIH
Dr. Elaine Collier, NCRR/NIH
Ms. Janet Craigie, NEI/NIH
Ms. Genevieve deAlmeida-Morris, NINR/NIH
Ms. Diane Drew, NINR/NIH
Ms. Ana Ferreira, NINR/NIH
Mr. Lawrence Haller, NINR/NIH
Dr. Karin Helmers, CSR/NIH
Dr. Karen Huss, NINR/NIH
Ms. Samantha Jarvis, NINR/NIH
Dr. Kathy Mann Koepke, NINR/NIH
Ms. Teresa Marquette, NINR/NIH

Ms. Cindy McDermott, NINR/NIH
Dr. Gertrude McFarland, CSR/NIH
Ms. Tara Mowery, NINR/NIH
Mr. Lanny Newman, NINR/NIH
Dr. Janice Phillips, NINR/NIH
Dr. Bonnie Raingruber, NICHD/NIH
Ms. Arlene Simmons, NINR/NIH
Ms. Allisen Stewart, NINR/NIH
Dr. Mindy Tinkle, NINR/NIH
Mr. Mark Waldo, NINR/NIH
Ms. Renee Walker, NINR/NIH