Eunice Kennedy Shriver National Institute of Child Health and Human Development

NATIONAL ADVISORY CHILD HEALTH AND HUMAN DEVELOPMENT COUNCIL

MINUTES OF MEETING

September 18, 2014

DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
***EUNICE KENNEDY SHRIVER* NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT**
NATIONAL ADVISORY CHILD HEALTH AND HUMAN DEVELOPMENT COUNCIL
SUMMARY MINUTES
September 18, 2014[1]

The National Advisory Child Health and Human Development (NACHHD) Council convened its 154th meeting at 8:00 a.m., Thursday, September 18, 2014, in Building 31, Conference Room 6, of the National Institutes of Health (NIH) in Bethesda, Maryland. The meeting was open to the public from 8:00 a.m. to 12:00 p.m. As provided in Sections 552b(c)(4) and 552b(c)(6), Title 5, U.S.C., and Section 10(d) of Public Law 92-463, for the review, discussion, and evaluation of grant applications and related information, the meeting was closed to the public from 1:00 p.m. until 4:10 p.m.

Dr. Alan Guttmacher, Chair, NACHHD Council, and Director, *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD), presided.

Council members present:

Dr. Jere R. Behrman
Dr. Diana Bianchi
Dr. Bonnie Duran (virtual)
Dr. Patricia Flynn
Dr. Walter Frontera
Dr. Richard Greenwald
Dr. Frances Jensen
Dr. Renée Jenkins
Dr. Gregory Kopf
Ms. Wendy Lazarus
Dr. Ruth Lehmann
Dr. Kimberly Leslie (virtual)
Dr. Ken Muneoka
Dr. Stephen Petrill
Dr. Piero Rinaldo (virtual)
Dr. Paul Wise
Ms. Sheila Zimmet
Dr. Carmen Greene (NABMRR Liaison Member

Pending Member
Dr. George Saade

Council Roster (attached)

Ex officio members present:
Dr. Patricia Dorn, Department of Veterans Affairs

Ex officio members absent:

[1] Members absent themselves from the meeting when the Council discusses applications from their own institutions or when a conflict of interest might occur. The procedure applies only to individual applications discussed, not to *en bloc* actions.

Dr. Jay D. Kerecman, Uniformed Services University of the Health Sciences, Department of Defense
Dr. Michael Lu, Maternal and Child Health Bureau, Health Resources and Services Administration, Department of Health and Human Services

Invited guests:
Dr. J. Patrick Mastin, Deputy Director, Division of Extramural Research and Training (DERT), National Institute of Environmental Health Sciences (NIEHS)
Liz McNair, Staff Assistant, DERT, NIEHS
Joseph Laakso, The Endocrine Society

Others present:
Members of Staff, NICHD
Other Members of Staff, NIH

I. CALL TO ORDER AND INTRODUCTORY REMARKS

Dr. Guttmacher welcomed Council members and staff. He announced that the meeting would be open to the public for the morning portion and closed to the public in the afternoon for the consideration of grant applications. The public portion was videocast.

New members who introduced themselves were Dr. Patricia Flynn, Director of Clinical Research, Department of Infectious Diseases, St. Jude Children's Research Hospital, Memphis, Tennessee and Ms. Sheila Zimmet, Senior Associate Vice President, Office of Regulatory Affairs, Georgetown University Medical Center, Washington, D.C.

Review of Confidentiality and Conflict of Interest

Dr. Catherine Spong, Deputy Director, NICHD, reminded Council members that material furnished for review and discussion during the closed portion of the meeting is considered privileged information. Advisors and consultants serving as members of a public health advisory committee may not participate in situations in which any violation of conflict of interest laws and regulations might occur. The responsible staff ensures that a Council member does not perform duties or render advice that might have a direct and predictable effect on the interests of an organization or institution in which he or she has a financial interest. In particular, Council members should not participate in the evaluation of grant applications for federal support that will affect the interests of such organizations or institutions. Dr. Spong reminded Council members that at the end of the closed session of the meeting, all members were required to certify that they had not been involved in any conflict of interest situations during the review of grant applications.

Council Minutes—June 5, 2014 Meeting

Dr. Spong moved to approve the *Summary Minutes of Meeting* for the June 2014 session of Council. The *Minutes* document was approved unanimously, as written.

Future Meeting Dates

The Council agreed to the following future meeting dates, including a change in the date for September 2016:

January 22, 2015	(Thursday)
June 4, 2015	(Thursday)
September 17, 2015	(Thursday)
January 21, 2016	(Thursday)
June 9, 2016	(Thursday)
September 21, 2016	(Wednesday)

II. NICHD DIRECTOR'S REPORT AND DISCUSSION

News from NIH

Dr. Story Landis, Director, National Institute of Neurological Disorders and Stroke, will retire in September. Deputy Director Dr. Walter J. Koroshetz will serve as interim director until a permanent replacement is hired.

Mr. Pat White, Associate Director for Legislative Policy and Analysis, has retired from the NIH. He will start a new lobbying firm to advocate on behalf of the NIH budget.

The NIH has established a new Program on Biosecurity and Biosafety Policy and has appointed Dr. Amy Patterson as its director. She will lead NIH participation in such areas as dual use research and the growing problem of antibiotic resistance.

After smallpox was found to have been stored at a Food and Drug Administration lab on the NIH campus, there was a comprehensive search of all NIH labs for any additional infectious agents or toxins. The search resulted in a limited number of additional items. The NIH is reviewing biosafety and biosecurity policies, training, and practices and is conducting inventories of infectious agents and toxins.

The new genomic data sharing policy will go into effect on January 25 and applies to all NIH-funded research. The policy promotes data sharing while protecting patient privacy. There is more detail on the policy on the NIH website at http://gds.nih.gov/

PubMed Commons now hosts a comment section to allow for moderated discussion of journal articles. Anyone who has ever had a publication in PubMed can become a member and join the discussion. This format will allow for real-time discussion and has the potential to involve more than one author and one commentator. The discussion forum has existed for a while but has only recently been publicized.

The NIH has established a Multi-Council Working Group to guide NIH efforts on the President's Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative. The initiative will attempt to diagram the brain's wiring at the micro- and macro-levels and aims to discover how individual brain cells and complex neural circuits interact. The initiative is led by

the NIH and was budgeted for $110 million in its first year. Other partners include the National Science Foundation, the Defense Advanced Research Projects Agency, and private organizations. Council member Dr. Frances Jensen will represent the NICHD on the Working Group. Dr. Jensen said that the Working Group will review research concepts and ensure the requests for applications (RFAs) can be implemented. The Working Group held its first meeting on August 25 and reviewed research proposals, including some that will study brain development.

Dr. Guttmacher was among NIH leadership who met with number of African leaders—including the presidents of Tanzania, the Republic of the Congo, and Mali; the vice president of Zambia; and the Kenyan secretary for health—when they visited the NIH in August. The effort to combat Ebola was a topic of particular concern. Much of the U.S. response to the Ebola virus will be through the military, which can respond under trying situations. The National Institute of Allergy and Infectious Diseases (NIAID) Vaccine Research Center has intensified the effort to develop a vaccine, which is now in Phase I trials.

News from NICHD

After a nationwide search, Dr. Spong was named the NICHD Deputy Director. A search to fill Dr. Spong's previous position of Associate Director for Extramural Research and Director of the Division of Extramural Research (DER) is underway. The Council was asked to send candidate names to Dr. Spong. Dr. Caroline Signore will serve in an acting role for theses dual positions until the search concludes.

The NICHD is recruiting for a variety of other positions. Interviews are continuing for the position of the Director of the National Center for Medical Rehabilitation Research. The search for a new Chief of the Maternal and Pediatric Infectious Disease Branch will soon be concluded. The deadline for applications for the Chief of the Public Information and Communications Branch has just closed.

The Safe to Sleep campaign is marking its 20th anniversary. During that time, the U.S. sudden infant death syndrome (SIDS) rate has declined by 50 percent, and the rate of back sleeping among infants has increased by 300 percent.

Three researchers currently funded by the NICHD have been elected to the National Academy of Sciences: Dr. Richard Harland, Dr. Kathleen Mullan Harris, and Dr. Martin Matzuk.

The National Academies has completed its assessment of the National Children's Study (NCS). The Academies outlined concerns about the design of the main study. NIH Director Dr. Francis Collins has placed the study on hold and formed a working group of the Advisory Committee to the Director (ACD) to determine whether it is feasible to move forward with the study in the face of budget constraints. The study was first designed 15 years ago, and science and technology have advanced in the interim. If the working group recommends going forward, there will be further discussion about whether a new approach is needed. If the working group recommends that it is best to stop the study, there will be discussion about other ways to answer some of the key scientific questions the NCS had posed. The ACD working group will report back during the ACD's December meeting.

Appropriations Update

The U.S. House of Representatives passed a continuing resolution on the budget that will extend through December 11. The U.S. Senate had not taken up the resolution at the time of the Council meeting, but a shutdown currently appears unlikely.

The Association of American Medical Colleges will hold a briefing for Congressional staff on September 23, "Inside NICUs: How Investments in NIH Advance Cutting-Edge Research and Treatments at Academic Medical Centers Nationwide." Dr. Guttmacher will present the NIH perspective, including the types of NIH-funded research related to neonatal intensive care units (NICUs) and pressing areas of research related to high-risk newborns.

The National Institute on Disability, Independent Living, and Rehabilitation Research is moving from the Department of Education to the Department of Health and Human Services (HHS). The "Independent Living" portion of its name is new. The Interagency Committee on Disability Research (on which the NICHD represents the NIH) moves to the Office of the HHS Secretary. This may affect the types and number of funding applications the NIH receives.

The Autism Collaboration, Accountability, Research, Education and Support Act requires the HHS Secretary to appoint an official to oversee autism efforts. Multiple government agencies fund autism research, but the autism "czar" will coordinate the efforts.

III. Division of Extramural Research (DER) PRESENTATIONS

Report of the Director, DER

Dr. Caroline Signore, Deputy Director, DER, presented updates on the Human Placenta Project (HPP), a contraceptive research review, and policy and building updates.

Human Placenta Project. The first meeting of the HPP was held at the end of May. The major task since then has been to develop the roadmap. The HPP Project Lead, Dr. David Weinberg, will present the concepts for the first two funding opportunity announcements (FOAs) during the concept clearance portion of the meeting.

Articles on the HPP have recently appeared in *Science* and *Chemical and Engineering News*. The project received a prominent mention in the *New York Times*. One of the HPP's goals is to get engineers and biotechnology experts interested in imaging the placenta in real time. The next HPP meeting will take place April 27–28, 2015, in the Natcher Conference Center. Dr. Signore invited those interested to attend.

Contraceptive Research Review. The NICHD Contraceptive Research Review panel has been appointed and is co-chaired by Council member Dr. Gregory Kopf, Global Health, Population and Nutrition, Contraceptive Technologies Innovation, Durham, North Carolina and Dr. Melissa Gilliam, Department of Obstetrics, Gynecology and Pediatrics, University of Chicago, Illinois. The panel has worked through the summer, and is collecting information on NICHD research

programs. The panel report will be issued in January 2015. The panel will identify contributions that NICHD-supported research has made to the field, the gaps that exist, and what resources the NICHD would need to fill the gaps.

Extramural Policy Updates. A new grant mechanism, the R35, has been proposed. This type of grant would fund people, not projects. There will be more discussion regarding the proposed R35 later in the meeting.

Office of Extramural Research Policy. The office issued a policy announcement clarifying that when NIH Institutes and Centers' (ICs') advisory councils are considering funding applications, the councilors must receive a description of the proposed research, summary statements, and images of applications if a council member requests them.

Building Update. The building at 6100 Executive Boulevard was evacuated in May, displacing 350 NICHD staff members. Most staff worked from home until they were allowed to reoccupy the building on July 7. The NICHD will move the staff to a new building at 6710 Rockledge Drive when the building is ready, probably by Fall 2015. The building complies with the new General Services Administration (GSA) workspace standards and provides a smaller footprint for each employee. There will be fewer offices and more collaborative and meeting spaces.

The Critical Role of the NICHD in Pediatric HIV Prevention and Treatment

Dr. Guttmacher introduced Dr. Lynne M. Mofenson, Chief, Maternal and Pediatric Infectious Disease Branch (MPIDB). He played a clip from CSPAN of U.S. Rep. Marsha Blackburn (R-Tenn.) on the House floor praising Dr. Mofenson's work. The work of Dr. Mofenson and the Branch has greatly reduced the number of infants and children infected with HIV. Dr. Mofenson, who will retire from the NICHD soon, was asked to sketch the arc of the MPIDB's work to prevent mother-to-child transmission of HIV/AIDS and to treat children who become HIV-infected.

Dr. Mofenson said that the first case of perinatal transmission of AIDS was reported in 1982. In those early days of the epidemic, 25 percent of children with perinatal HIV died by 2 years of age. In 1987, the antiretroviral drug AZT was available for clinical trials, but the trials focused mainly on adults.

The NICHD formed the Pediatric AIDS Branch in 1987. The Branch tested intravenous immunoglobulin therapy and found it reduced the number of serious bacterial infections and hospitalizations among HIV-infected children with low CD4 counts. During this time, scientists learned more about the natural history of HIV in children.

When Dr. Mofenson joined the NICHD in 1989, the Institute had trial sites and patients, but no antiretroviral drugs. The NIAID had access to AZT, but not to children. The NICHD and the NIAID merged their efforts to conduct clinical trials for children who were or might become infected.

At that time, 25 percent of HIV-infected mothers transmitted the infection to their children. The timing of the transmission was unclear, and it was not known how to prevent it. One trial, the AIDS Clinical Trial Group 076, gave AZT to pregnant women. This trial was controversial at

the time because of AZT's potential toxicity, but it proved successful and was stopped early when results showed a remarkable 67 percent reduction in mother-to-child transmission.

The results were published in 1994, and prophylactic AZT treatment was rapidly adopted. Further NICHD/NIAID-supported trials led to the development of many new anti-AIDS drugs for infants and children. Within 10 years, there was a 90 percent reduction in the number of children who developed the infection perinatally in the United States and dramatic increases in the survival rates of those infected.

In 1995, the Pediatric AIDS Clinical Trial Group (PACTG) was formed. In 1998 and 1999, PACTG expanded to the international arena, beginning in Brazil, Thailand, and South Africa. PACTG studies led to rapid advances in pediatric AIDS treatment, including finding that triple-drug therapy was most effective when treatment began before 3 months of age. Global efforts expanded, and successful strategies to prevent transmission in utero, during birth, and via mothers' breast milk were developed. NICHD-funded investigators made strong contributions to the science that led to these health improvements.

There has been a substantial global decline in mother-to-child transmission since then. Among pregnant HIV-infected women, 68 percent now receive therapy. While the campaign to prevent mother-to-child transmission has been successful, there is now a need to evaluate the toxicity of early and long-term exposure to antiretroviral drugs. Some complications among these children in later years have been noted, and studies are underway to learn how to treat the complications.

New research questions include how and where the latent reservoir of HIV is established perinatally, whether researchers can measure the latent reservoir, and whether the establishment of the reservoir can be prevented.

HIV acquisition in adolescence remains a problem. AIDS is the second-leading cause of death among adolescents worldwide, and young women in sub-Saharan Africa are much more likely than men to contract HIV. NICHD is poised to continue its collaborative work in the beginning of the final phase to eliminate AIDS.

Dr. Renée Jenkins asked what accounted for the difference in prevalence between young men and young women in sub-Saharan Africa. Dr. Mofenson said that it may be that young girls have sex with older men to survive economically. Also, the vaginal tissue is thinner in young women, and this may allow the virus into the body more easily.

Dr. George Saade said that he gives the PACTG 076 trial as an example of how a clinical trial can have a great impact on health.

Dr. Guttmacher said this research is an example of how NICHD science changes the lives of people in the United States and around the globe. He also said that, although Dr. Mofenson is leaving the NICHD, she will continue to work in the pediatric HIV/AIDS field.

IV. DIVISION OF INTRAMURAL RESEARCH (DIR) PRESENTATIONS

Report of the Scientific Director, DIR (Annual Review)

Dr. Constantine Stratakis, Scientific Director, DIR, said that the DIR had another very productive year in spite of the government shutdown at the start of the year and budget sequestration. He thanked all the DIR staff for all their accomplishments in 2013-2014 and then went on to summarize the year from an administrative perspective. He explained that the scientific accomplishments of the DIR this year will be represented by two DIR scientists, Dr. Joan Marini, Chief, Bone and Extracellular Matrix Branch and Dr. Todd Macfarlan, Unit on Mammalian Epigenome Reprogramming, who would present their research as part of his report.

Dr. Stratakis noted that Dr. Jerome F. Strauss III, Dean, Virginia Commonwealth University School of Medicine, will serve as the new chair of the Board of Scientific Counselors (BSC). He replaced retiring chair Dr. Louis J. Muglia. In addition, pending ethics review and clearance, the Board will have two new members: Dr. Yoel Sadovsky of Magee-Women's Institute and Dr. Susan S. Taylor of the University of California, San Diego.

Dr. Stratakis went on to present an outline of DIR's restructuring along the lines of the recommendations of last year's report from a blue ribbon panel (BRP). The staff adopted most of the recommendations of the BRP and has drafted proposals for a new administrative structure and function, including site visits, evaluation metrics, mission statement, recruitment, and translational research working groups. In October, the DIR will begin to reorganize the clinical program, also along the lines of the BRP's recommendations, which have also been reviewed by the BSC. Indeed, the BRP recommended greater collaboration among the DIR's programs. As a result, the programs are forming research affinity groups and will develop ways to evaluate how well this new approach works. Laboratories will relocate to facilitate the affinity group structure. By the end of 2016, more than 80 percent of the DIR staff will be in new or newly renovated lab space. The panel recommended that the DIR provide funding to incentivize collaboration among the investigators. In response to this recommendation the DIR set aside this year funds for a 2-year competitive award to be judged by external review panels, a "first" among NIH DIR programs. Thirty-three DIR investigators applied for $1.5 million for collaborative projects, and 15 applications were funded. In addition, $200,000 was awarded to entice DIR investigators to participate in the Human Placenta Project (HPP), and two new projects were funded with that money. Dr. Stratakis said that he hopes he can do this again in the years to come.

The NICHD has also participated in the trans-NIH review of the intramural research program, which included the following recommendations:

- Major investment in pediatric research facilities
- Greater involvement in research that includes high-capacity computing facilities
- Continuation of funding for high risk/high impact research
- Greater engagement in team science and more shared resources such as the zebrafish facility

Dr. Stratakis mentioned the DIR's strong commitment to training physician scientists and the strengthening of basic-clinical science collaborations across the DIR, along the lines of BRP's

recommendations. The NICHD DIR is a strong supporter of the NIH Medical Research Scholars Program, and aims at continuing the Assistant Clinical Investigator (ACI) program.

Finally, another one of DIR's strong commitments is that of training scientists in presenting plainly their science to the public. In another "first" across NIH DIRs, the NICHD DIR started a Three-minute Talks (TmT) competition for videotaped talks in which early-career investigators presented their research in plain language. There were three winners, whose videotaped talks were shown at the meeting.

Council member Dr. Diana Bianchi asked about the status of the intramural/extramural partnerships that Dr. Stratakis announced last year. Dr. Stratakis said that the first two collaborations have been up and running for a few months, and he will give an update at a future Council meeting. The NICHD also hopes to fund another two applications this year.

The presentations by the TmT winners and the two DIR scientists followed:

Osteogenesis Imperfecta: Basic Science Sheds New Light on Diagnosis and Treatment

Dr. Marini said that the rare disease osteogenesis imperfecta (OI, also known as brittle bone disease) is an inherited disorder that makes an individual susceptible to fractures, growth deficiency, and bone deformity. It is a collagen-related disorder caused by defects in the collagen genes. Work on OI has revealed much about basic bone biology and disease mechanisms.

Dr. Marini detailed research on OI that has identified two novel genes involved in two different types of OI, type V and type VI. Both of the genes were involved in bone mineralization. The genes affect secretion of pigment epithelium-derived factor (PEDF), a potent anti-angiogenesis factor. Type V increases PEDF, while type VI eliminates PEDF.

The mineralization defects seen in OI are not amenable to treatment with bisphosphonates and will require a novel approach to treatment.

Ancient Retroviruses and Their Impact on Mammalian Development and Evolution

Dr. Macfarlan discussed his research on how retroviruses have affected mammalian evolution and development. Ten percent of the human genome comes from retroviruses that have integrated their DNA into our genome. These retroviral bits are called endogenous retroviruses (ERVs).

A number of mammalian genes are derived from retroviral proteins. But the downside is that the DNA from the retroviruses can jump within genes and activate oncogenes that can cause cancer. The ERVs are repressed, usually by epigenetic mechanisms that involve zinc finger proteins (ZFPs). Dr. Macfarlan explained the links between the ZFPs and ERV silencing and showed their connection to a variant known as H3 and pediatric glioblastoma.

V. OUTSTANDING INVESTIGATOR AWARD (R35) DISCUSSION

Dr. Eugene G. Hayunga, Director, Office of Extramural Policy, presented information about a new grant award mechanism that the NIH is considering. The award, the R35, would provide funding to the person, not the project. Dr. Hayunga said that his purpose in explaining the R35 is to invite comments from Council members about whether NICHD should use this award mechanism and, if so, how to structure the award to meet NICHD goals. Each NIH Institute/Center (IC) will have the flexibility to develop the award in a way that meets IC goals with some basic characteristics that will be standardized across all participating ICs.

The R35 would provide support to the investigator for up to $750,000 per year for up to 8 years. Providing this long-term funding would allow the principal investigator (PI) to conduct more high-risk/high-reward research that would not typically be proposed for R01 funding. PIs who receive the award would be required to devote at least 50 percent of their time to the research.

The R35 would be similar to the R37 MERIT award, in that both provide long-term stable support to investigators whose research competence and productivity are distinctly superior and who are likely to continue to perform in an outstanding manner. Investigators with funded R01 awards are nominated for the R37 by NICHD staff, whereas investigators would need to apply for the R35 award. Dr. Hayunga asked the Council whether the NICHD should participate in the R35 program and, if so, what size the budget should be, how long the award should run for, and whether there should be special eligibility requirements.

Council members expressed the following opinions and comments.

Council liaison member Dr. Carmen Green said that she has concerns about the proposal because of perceived bias that exists within the NIH grant review process. She asked whether funding the person, not the project, might disadvantage people from groups that are already underrepresented. She also said that she could be convinced about the merits of the R35 if there were data to show that everybody would have an equal opportunity.

Pending Council member Dr. George Saade said that he is strongly in favor of the R35.

Dr. Piero Rinaldo said that one thing that troubles him about the award is that it may attract applications from those with large egos. He preferred that others nominate investigators for the award. He also said that the award should be reserved for those earlier in their careers, not established investigators. Dr. Guttmacher said the NICHD staff has discussed the R35 as a possible way to level the playing field for early investigators, because it is so difficult for PIs to obtain a second R01.

Dr. Ruth Lehmann said she supports the R35 concept and is interested in focusing the award towards early-career investigators.

Dr. Frances Jensen said that investigators who were finalists for the NIH Director's Pioneer Award would be good candidates for the R35. The Pioneer Award candidates are nominated by others. She added that the R35 should not be a duplicate of the pioneer award, however.

Dr. Diana Bianchi suggested that the award could be structured as a partnership grant between a senior investigator at one institution and a junior investigator from another institution.

Dr. Stephen Petrill asked whether this award might not be too much of a "blank check." Would mid-career and early-career investigators who received the award be able to compete in the regular environment after the award had ended?

Dr. Spong said that if the NICHD decides to use the R35, they would have to establish eligibility criteria. Each IC established its own criteria.

Dr. Guttmacher said that it would be difficult to come to consensus on this proposal at the Council meeting. One possibility is to put together a working group that would meet electronically between now and the next Council meeting in January.

Dr. Richard Greenwald said that it would be helpful to compile the comments from all the IC councils regarding the proposed R35. He said this grant started out as an idea for a PI's final NIH award. There are many possibilities for how the award could be used.

Dr. Hayunga said that four ICs have decided to move forward with the R35, and nine will bring it to their councils. The National Cancer Institute (NCI) has issued an R35 Funding Opportunity Announcement (PAR-14-267): it would provide up to $600,000 for 7 years; applicants must have received NCI funding for at least 5 years, and there is an expectation of continuing institutional commitment to the PI of at least 20 percent salary support.

Dr. Walter Frontera said that he is concerned about the proposed duration of 8 years. It would be important to establish a way to evaluate the PI's progress in order to avoid the "blank check" problem.

Dr. Flynn said that she would be concerned about the proposal made earlier to have the R35 be a partnership between a senior and junior investigator, because of the difficulty of determining the contribution of each investigator. She also expressed reservations about giving such a sizable award for such a long period to an investigator who has had only one previous R01.

Dr. Guttmacher said that the staff will email council members to ascertain whether they are interested in serving on the R35 working group. The NICHD has not committed to going forward, so the working group would be exploratory. He also said the NICHD will not abandon their traditional model of funding projects, rather than people.

VI. CONCEPT CLEARANCE REVIEW AND DISCUSSION

NICHD staff presented eight concept clearance reviews, all of which were approved unanimously:

- Dr. Louis DePaolo presented a proposed RFA entitled "National Centers for Translational Research in Reproduction and Infertility," which will use the Specialized Research Center (P50) award mechanism. The purpose of the RFA is to announce the recompetition of the National Centers for Translational Research in Reproduction and Infertility (NCTRI), formerly known as the Specialized Cooperative Centers Program in Reproduction and Infertility Research. The NCTRI will support specialized reproduction and infertility research programs and facilitate interdisciplinary interactions between

basic and translational scientists. There are no substantial changes in the existing program, but the funding mechanism will be changed from a U54 to a P50.

- Dr. Anne Zajicek presented a proposed RFA entitled "Postdoctoral Training in Pediatric Clinical Pharmacology." The RFA would use the T32 training program with set-asides in pediatric and developmental pharmacology. This RFA is the first recompete of a program that already supports three sites and 20 fellows. The goal is to develop clinician-scientists who will be leaders in the field of pediatric clinical and developmental pharmacology research.

- Dr. John Ilekis presented a proposed RFA using a cooperative agreement mechanism to recompete the clinical sites of the Maternal and Fetal Medicine Units Network (MFMU). The MFMU has 14 sites that aim to foster multicenter clinical trials in obstetrics. The centers collaborate to develop common network protocols.

- Dr. Tonse Raju presented a proposed RFA using the Small Business Technology Transfer (STTR) R41 mechanism to develop a lab-on-a-chip for monitoring biochemical products in the NICU. This funding is designed to stimulate engineering and biomedical scientists to work together to develop a product that would minimize the number of blood draws from newborns in the NICU. The program announcement also will allow universities to combine the award with larger R01s. Dr. Rinaldo cautioned about privacy concerns when collecting blood from infants. Any sample can become a source of DNA and requires oversight of the institutional review board (IRB). Dr. Raju said that the NICHD does have the investigators go through the IRB. Dr. Greenwald said that one question that is important to answer up front is who will pay for the testing. Dr. Raju said that the business plan is on the application.

- Dr. Raju presented an RFA to use the cooperative agreement mechanism to recompete the clinical sites of the Neonatal Research Network. The objective of this concept is to foster multicenter clinical trials in the neonatal population. The work of the network has already improved clinical care for neonates.

- Dr. Estella Parrott presented two RFAs using the cooperative agreement mechanism with set-asides for the Pelvic Floor Disorders Network, one for the clinical sites and one for the data coordinating center. The NICHD established the Pelvic Floor Disorders Network in 2001 to support a multicenter network in response to the growing public health need for clinical trials in this area. The objective is to expand the network of academic centers that can study the required numbers of patients with pelvic floor disorders under rigorous common protocols. The data coordinating center is critical for design and analysis of these studies. The network will include at least six, and possibly as many as nine, clinical sites.

- Dr. Weinberg presented two concepts related to the HPP. The first would use the R01/R21/R03 grant mechanism with set-aside to develop tools for safe, noninvasive or minimally invasive assessment of the placenta in vivo during pregnancy. The second concept would use the U24 cooperative agreement mechanism with set-aside to support

planning activities and the initial stages of development for new or next-generation in vivo placental imaging and assessment technologies and methods.

VII. DIVISION OF INTRAMURAL RESEARCH REVIEW

In closed session, Dr. Stratakis presented the findings and recommendations of the BSC based on their review of specific DIR laboratories and units during 2014. The Council discussed the reports of the Board and accepted them.

VIII. REVIEW OF APPLICATIONS

A total of 1,267 applications were initially assigned to the Institute. Applications that were transferred out, withdrawn, non-competitive, unscored, or were not recommended for further consideration by the initial review groups were not considered by the Council. The Council reviewed 620 applications requesting $246,862,452 in total costs. Council favorably recommended 620 new, renewal, and supplemental research and training grant applications with requested total costs of $246,862,452.

IX. ADJOURNMENT

There being no further business, the meeting adjourned at 4:10 p.m. on Thursday, September 18, 2014. The next meeting is scheduled for January 22, 2015.

Attachment: Council Roster

I hereby certify that, to the best of my knowledge, the foregoing minutes and attachments are accurate and complete.[2]

/s/ 12/18/2014

Alan E. Guttmacher, M.D. Date
Chair, National Advisory Child Health and Human Development Council
Director, *Eunice Kennedy Shriver* National Institute of Child Health and Human Development

Mary Plummer
Committee Management Officer, NICHD

[2] These minutes will be formally considered by the Council at its next meeting, and any corrections or notations will be incorporated in the minutes of that meeting.

DEPARTMENT OF HEALTH AND HUMAN SERVICES
NATIONAL INSTITUTES OF HEALTH
NATIONAL ADVISORY CHILD HEALTH AND HUMAN DEVELOPMENT COUNCIL
ROSTER (ALL TERMS END 11/30)

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