

NIH Eunice Kennedy Shriver National Institute of Child Health and Human Development

# NATIONAL ADVISORY CHILD HEALTH AND HUMAN DEVELOPMENT COUNCIL

# MINUTES OF MEETING

January 22, 2015

#### 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 January 22, 2015<sup>1</sup>

The National Advisory Child Health and Human Development (NACHHD) Council convened its 155th meeting at 8:00 a.m., Thursday, January 22, 2015, 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 12:45 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 12:45 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.

<sup>&</sup>lt;sup>1</sup> 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.

#### **Council members present:**

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

# **Council Roster (attached)**

# Ex officio members present:

Dr. Patricia Dorn, Department of Veterans Affairs Dr. Jay D. Kerecman, Uniformed Services University of the Health Sciences, Department of Defense

#### Ex officio member absent:

Dr. Michael Lu, Maternal and Child Health Bureau, Health Resources and Services Administration, Department of Health and Human Services (HHS)

# Pending members present;

Dr. Anne Case Ms. Barbara Collura Dr. Melissa Gilliam Dr. Jane Nisbet Dr. Frederick Rivara

# **Invited guests:**

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

# I. CALL TO ORDER AND INTRODUCTORY REMARKS

NICHD Director Dr. Alan E. 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.

# Review of Confidentiality and Conflict of Interest

NICHD Deputy Director Dr. Catherine Y. Spong 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-Meeting of September 18, 2014

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

#### **Future Meeting Dates**

The Council agreed to the following future meeting dates:

June 4, 2015	(Thursday)
August 27, 2015 (virtual)	(Thursday)
September 17, 2015	(Thursday)
January 21, 2016	(Thursday)
June 9, 2016	(Thursday)
September 21, 2016	(Wednesday)

# II. INTRODUCTION OF NEW MEMBERS

Dr. Guttmacher said that five Council members would complete their terms at the close of the meeting. The Council is a remarkable group of people whose opinions are valued and who help shape the direction of the NICHD. Retiring council members would be asked to say a few words at the end of the meeting.

Dr. Guttmacher welcomed the pending new members, who could not vote but were asked to participate in the discussions. The pending new members introduced themselves. They were:

- Dr. Anne Case, Professor of Economics and Public Affairs, Princeton University
- Ms. Barbara Collura, President and Chief Executive Officer, RESOLVE: The National Infertility Association
- Dr. Melissa Gilliam, Professor of Obstetrics/Gynecology and Pediatrics and Chief of Family Planning, University of Chicago
- Dr. Jane Nisbet, Senior Vice Provost for Research, University of New Hampshire
- Dr. Frederick Rivara, Professor of Pediatrics, University of Washington

# III. NICHD DIRECTOR'S REPORT AND DISCUSSION

# News from NIH

National Library of Medicine (NLM) Director Dr. Don Lindberg will retire in March. NIH Director Dr. Francis Collins formed a working group of the Advisory Committee to the Director to formulate a new vision for the NLM and seek a person to fulfill the vision. The NLM will take the lead on how to amass and disseminate large data sets. Dr. Guttmacher asked council members to encourage qualified individuals to apply.

As of December 17, the National Center for Complementary and Alternative Medicine became the National Center for Complementary and Integrative Health. Congress mandated this name change.

Dr. Eric Betzig, a winner of the 2014 Nobel Prize in Chemistry, conducted a key experiment that led to the Nobel in Dr. Jennifer Lippincott-Schwartz's lab at the NICHD. This is an example of high-risk, high-reward research and demonstrates the value of the NICHD Intramural Research Program.

President Barack Obama visited the NIH in December to thank scientists who worked to develop an Ebola vaccine and Ebola treatment. The President also emphasized that scientific research has a role to play in resolving global health problems.

The President highlighted the new Precision Medicine Initiative during his State of the Union address on January 20. The NIH will play a lead role in this initiative. More details will come out about this initiative in the coming months.

There is a request for public comment on the use of a single institutional review board (IRB) for domestic multisite studies funded by the NIH. The goal is to streamline the review process. The comments, due by January 29, will be considered as the NIH formulates the policy.

The NIH will close out the National Children's Study (NCS). Dr. David Murray, director of the NIH's Office of Disease Prevention, will oversee the closure. The NCS would be discussed more fully later in the meeting.

Dr. Kimberly Leslie was appointed to the NIH Council of Councils, which is made up of members of the advisory councils of each of the NIH Institutes and Centers (ICs).

# News from NICHD

Dr. Alison Cernich was selected as Director of the NICHD's National Center for Medical Rehabilitation Research. She is a neuropsychologist who comes from the Department of Defense.

Dr. Rohan Hazra has been named chief of the Maternal and Pediatric Infectious Disease Branch (MPIDB).

Mr. Paul Williams was named communications director and chief of the Public Communications Branch. He comes to the NICHD from the National Institute of Allergy and Infectious Diseases.

Ms. Mona Rowe, Associate Director of the Office of Science Policy, Analysis, and Communications, has retired.

# Budget and Legislative Update

The NIH received \$30.1 billion for fiscal year 2015, a one-half of 1 percent increase from last year. The NICHD received a \$4 million increase this year, with \$3 million directed to the Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative.

The Gabriella Miller Kids First Research Act will provide the NIH \$12.6 million annually for 10 years. The money, which comes through the NIH Common Fund, is earmarked for pediatric research. The NICHD will make recommendations to the Council of Councils about how the money should be spent.

Congress has issued a report saying it expects the NIH Rehabilitation Coordinating Committee to

- Host a trans-NIH State of the Science Conference on Medical Rehabilitation Research,
- Develop a trans-NIH plan for medical rehabilitation science,
- Coordinate grants to adhere to the definition of rehabilitation research recommended by the Blue Ribbon Panel on Medical Rehabilitation Research, and
- Assess whether the proposals being implemented are having a positive impact on rehabilitation science at the NIH.

The NICHD and NIH directors will hold a briefing to discuss progress in rehabilitation research across the NIH. Congress expects that experts in the field will evaluate the funding of research.

Congress has also asked for updates on a variety of areas of interest, many of which are related to the work of the NICHD. The NICHD is waiting for further guidance on how to provide those updates.

The President signed a reauthorization of the Paul D. Wellstone Muscular Dystrophy Community Assistance, Research, and Education Amendments. The legislation reauthorizes and amends the muscular dystrophy research program at the NIH. The program will now cover all forms of muscular dystrophy. Dr. Guttmacher chairs the inter-agency Muscular Dystrophy Coordinating Committee that coordinates muscular dystrophy research. The committee is developing a new strategic plan, which will be discussed at its next meeting.

The Traumatic Brain Injury (TBI) Reauthorization Act requires the HHS Secretary to improve coordination of federal activities related to TBI and develop a coordination plan within 1 year. The Act also requires the Centers for Disease Control and Prevention and NIH directors to identify ongoing and new areas of brain research.

The Newborn Screening Saves Lives Reauthorization Act of 2014 amends and reauthorizes agency authorities relating to newborn screening, including the NICHD's Hunter Kelly Newborn

Screening program. Federally funded research on newborn dried blood spots will now require informed consent, which cannot be waived by IRBs. The NICHD is convening a meeting of patient advocates, ethicists, professional groups, and others to discuss how to obtain informed consent in a way that will protect newborns while allowing research.

# Discussion

Dr. Piero Rinaldo said that this change in newborn screening is a roadblock to research. The Act required his laboratory to destroy 10 years of anonymized data. Dr. Guttmacher said that the NICHD wants to make researchers aware of the law and to find the best way allow research to go forward. The NICHD will convene a meeting for that purpose.

Dr. Renée Jenkins asked what would be the best way to spend the Gabriella Miller money for this fiscal year. Dr. Guttmacher said the NICHD is working on a plan. The NIH is also working to develop a spending plan for money that may be available following the NCS closure. Council members can help by spreading word about the available funding to their communities and by providing their own recommendations for how to use the funding.

Dr. Patricia Dorn asked about the single IRB proposal. Dr. Guttmacher said that there are some existing models of single IRBs that the NICHD can use, including a large-scale model at the Veterans Administration.

# IV. REPORT OF THE DIVISION OF EXTRAMURAL RESEARCH (DER)

# Report of the Acting Director, DER

Acting DER Director Dr. Caroline Signore presented the DER updates.

Dr. Signore introduced two new staff members: University of Miami obstetrician/gynecologist Dr. Nahida Chakhtoura, who has joined the MPIDB; and obstetrician/gynecologist Dr. Menachem Miodovnik, who has joined the Pregnancy and Perinatology Branch.

The first request for applications (RFA) for the Human Placenta Project has been issued, and applications are due on February 19. The RFA will fund projects to develop novel tools to assess placental structure and function during gestation. The NICHD will hold its second meeting on the project on April 27 and 28 at the Natcher Conference Center. All are welcome to attend.

There is a review currently taking place of the NICHD contraceptive research programs.

The NICHD is reviewing its support for training programs, including current goals and whether a new direction is needed.

In its reauthorization of the Small Business Innovative Research (SBIR) and Small Business Technology Transfer (STTR) grants, Congress asked that the NIH decrease the delay between the time of application and distribution of funding. To do this, the Council will have an additional meeting on August 27 to review applications. The August meeting will be a virtual meeting, and members can vote via their computers. If there is additional pressing business, it may be included in the August meeting.

#### Gynecologic Health and Disease Branch (GHDB) Update

GHDB Branch Chief Dr. Lisa Halvorson gave an overview of the Branch, which was established as part of the NICHD visioning process.

There is significant morbidity associated with gynecological disorders beyond their effects on fertility. The GHDB portfolio has begun with projects from other branches, including the Fertility and Infertility Branch (FI) and the Contraceptive Discovery and Development Branch.

The GHDB's mission is to promote basic science research, translational studies, and clinical trials in order to improve prevention, diagnosis, and treatment of gynecologic disorders throughout the reproductive lifespan. Some of the areas the Branch investigates include pelvic floor disorders, uterine fibroids, endometriosis, abnormal menstrual cycles, chronic pelvic pain, and the socioeconomic, racial, and ethic disparities that impact the severity of these disorders.

Dr. Halvorson, Dr. Susie Meikle, and Dr. Estella Parrott are the GHDB staff members. Dr. Meikle is the project scientist for the Pelvic Floor Disorders Network (PFDN). Dr. Parrott is the program officer for the Women's Reproductive Health Research (WRHR) program.

The WRHR is a mentored career development program to support junior obstetrical/gynecological faculty at 17 sites. Since the program started, they have trained 200 scholars using the K mechanism. There will be a new round of funding in the summer.

The PFDN was started because the prevalence of PFDs has been rapidly increasing and is expected to affect more than 40 million women by 2050. PFDs include pelvic organ prolapse, urinary incontinence, and fecal incontinence. The program runs at eight sites and includes a focus on treatment. The third funding cycle ends in June.

The GHDB has a strong emphasis on training, including the R32 and the T mechanisms. The Branch also works on the Building Interdisciplinary Research Careers in Women's Health (BIRCWH) program within the Office of Research on Women's Health. The NICHD manages the BIRCWH grant. BIRCWH is a mentored career development program that focuses on sex differences across a range of specialties, not just obstetrics and gynecology.

Future activities include a strategic planning workshop, a program announcement for multidisciplinary research in gynecologic disorders, and an RFA to expand the basic science component of the portfolio to include genomics and epigenomics. The Branch will also hold small business forums and will increase outreach to professional and advocacy groups.

#### **Discussion**

A Council member asked about opportunities for partnering in work on uterine cancer. Dr. Halvorson said that cancers, including gynecological cancers, are likely to remain with the National Cancer Institute. A Council member asked which Branch would be responsible for pre-pregnancy activities. That work with take place within the FI. There are gray areas, and those will provide opportunities for the two Branches to collaborate. Dr. Spong noted that the NICHD has tried to remove silos and encourage communication between Branches.

Dr. Carmen Green raised the possibility that the NICHD could help develop a national pain strategy. There is such a strategy being worked on at HHS, and the NIH also has a working group on pain. Dr. Green said it is also important to consider the issue of pain and people with disabilities. Dr. Halvorson agreed, saying that new screening and treatments will be important for those populations.

# V. CONTRACEPTIVE RESEARCH REVIEW

Dr. Guttmacher introduced this presentation and discussion, saying that the private sector has abandoned this area of research. The NICHD is one of the few organizations that continue to research in this area. This program review drew together people with different expertise and perspectives to assess how the NICHD is doing and to make suggestions for ways to do it better.

# Report of the Panel

The leaders of the 10-member panel that reviewed the contraceptive research program were Council member Dr. Gregory Kopf and incoming member Dr. Melissa Gilliam. Dr. Kopf and Dr. Gilliam summarized the work of the 10-member review panel, which is also available in a written report. Drs. Kopf and Gilliam said that the panel's charge was to

- Assess NICHD contraception research, including the current status of contraceptive research and development activities at the NICHD and
- Identify areas for improvement and innovation, making specific recommendations for increasing the likelihood of future success

Contraception development is critically important, and the panel strongly supports the NICHD in continuing these efforts. But the panel found that the NICHD should adopt a more coherent and strategic response to the lack of private sector engagement in the field and take a greater leadership role in contraception research and development. The panel also said that the NICHD must promote cutting-edge scientific discovery, product development, and studies of end user needs and their acceptance of contraceptive products.

The panel made the following recommendations:

- 1. Improve communication between Branches, with NICHD leadership, and with the outside scientific community, private industry, and nonprofit organizations.
- 2. Restructure the application and peer review process. This includes having more specific language in the RFAs to communicate the goals of the research. Ensure review panels have the necessary clinical expertise to pick the applications that are clinically important. Develop dedicated contraceptive development review panels to ensure the reviewer expertise is aligned with the proposal.

- 3. Foster closer and more productive interactions with industry as a way to reinvigorate industry interest. Use the SBIR/STTR mechanisms to bring in more industry. Explore product indemnification using a model similar to the one used for vaccine development.
- 4. Foster training relevant to contraceptive development. Increase support of clinical training salaries. Continue to increase funding of training programs for family planning.
- 5. Improve monitoring and evaluation of NICHD activity. Ensure the data needed to assess progress is aggregated and available.
- 6. Increase the diversity of those who work in the field of contraception by providing more minority supplements for career development. This diversity is needed to understand the end user who may be from a vulnerable or underrepresented group.
- 7. Include global populations. The majority of the NICHD work will be domestic, but it is important to keep in mind the global population may have different needs.
- 8. Pursue innovative devices. The NICHD should become a leader in bringing new drug delivery technologies and platforms to market.
- 9. Improve the early development pipeline. Increase emphasis on target identification by creating very specific RFAs. Monitor the FI portfolio and mine data from existing databases to identify new contraceptive targets. Use different types of funding mechanisms. If a project does not meet milestones, targets, and go/no-go criteria, discontinue the work.
- 10. Strengthen target selection and validation processes. Pursue targets that have a promising mechanism of action that is a good drug target. Ion channels are one promising area of focus. Evaluate methods in which pharmacologic modulation of function would lead to a contraceptive effect.
- 11. Target areas of focus for early stage drug development programs. Develop male hormonal methods as well as non-hormonal targets. Develop new female hormonal methods or reformulate existing ones for specific populations (obese women, adolescents, women who have infrequent sex, etc.). Develop multipurpose contraception and products that provide a non-contraceptive health advantage, such as against bone loss.
- 12. Use the Contraceptive Clinical Trials Network (CCTN) to train and cultivate expertise in contraceptive development. Establish a central IRB to serve all CCTN sites and move studies more quickly to approval. Engage with industry so that CCTN sites will be used for industry-sponsored trials.
- 13. Integrate behavioral research into contraception development. Consider the end user to develop contraceptive methods that people will use. Consider the role that men play and what will work within diverse populations. Focus on the systems and policies that affect use. Mine existing data to continue behavioral research and train others how to use the data.

Drs. Gilliam and Kopf concluded that

- The NICHD's contraceptive programs serve a critical research and training role in product development in the field of family planning.
- The NICHD must be a leader in the development of new and innovative contraceptives to fill the void left by industry.
- The NICHD must evolve and adapt its current approaches to meet the dynamic changes and challenges in this field.

#### Discussion

Dr. Diana Bianchi said that there is a loan repayment program in contraception research that should be better advertised to potential investigators, including medical students. Dr. Gilliam said that loan repayment programs are a good way to attract more investigators to the field.

Dr. Nisbet asked for more information about the exodus of the pharmaceutical industry from contraception development. Dr. Kopf said that the industry has less interest because there are already many effective contraceptive products available, and developing new products is expensive. Some products are over-the-counter, which reduces profitability. The problem with current contraceptives is that they are not being used. Many hormonal contraceptives have side effects and some health risks. There is a need to develop non-hormonal products and other products with fewer side effects. If the NICHD could develop a potential contraceptive that would solve these problems, industry might complete development and take it to market.

Dr. Richard Greenwald said that the recommendations made during this presentation could be used NIH-wide and across many research areas. Dr. Kopf said that the National Center for Advancing Translational Sciences is focused on this model of early drug development that the industry picks up in the later stages.

Dr. Gilliam said that, while there is basic science value to this work, it may be necessary to take a more product-oriented approach in which the project stops when a project does not meet milestones.

Dr. Guttmacher said that NICHD staff will discuss the report and come back to the Council with suggestions. The NICHD believes that investment in contraception will have a positive effect on men and women and their families.

# VI. NICHD DATA/SPECIMEN REPOSITORY

Dr. Hazra gave an update on the NICHD Data and Specimen Hub (N-DASH).

N-DASH will be an online system that will enable sharing of data and specimens from completed NICHD-supported studies. N-DASH will have searchable content and will house 8–10 studies when it is launched in June 2015. The NICHD has established a governance structure and will manage and adjust operations in accordance with NICHD post-study data archive policy. N-DASH was developed in consultation with the NIH Big Data to Knowledge (BD2K) project.

The N-DASH team had a non-technical group and a technical group that worked together. The non-technical group developed the archiving policies and selected the studies to include in the archive. The technical team developed the website.

In the past year, the N-DASH team has developed a variety of policy documents, including data submission requirements and data use agreements. N-DASH will have a governance and oversight committee, a core working group, and an advisory committee to maintain best practices.

Dr. Hazra showed a mockup of the N-DASH website on which researchers can browse studies and request and submit data. Researchers can search by topic or browse studies. Researchers can request data only with the right documentation and approval. The archive committee must approve the request before data is released. The requestor will be required to destroy the data at the end of the use agreement. There will be a similar procedure for a principal investigator (PI) to submit data to N-DASH.

N-DASH will establish connectivity to the NICHD Biorepository so that investigators can request both data and specimens.

# VII. INCLUSION OF WOMEN AND MINORITIES IN CLINICAL STUDIES

Dr. Eugene G. Hayunga, Director of the NICHD Office of Extramural Policy, said that the law requires the inclusion of women and minorities in clinical studies. Advisory councils of the NIH ICs must report how they have assured inclusion of women and minorities.

The NICHD has revisited how the inclusion mandate is implemented and is looking at new software to track this. The new software will allow investigators to input their own data into the database. All the ICs will use a new, uniform report form.

There was a motion to approve Dr. Hayunga's report. The motion was seconded and unanimously approved.

# VIII. OUTSTANDING INVESTIGATOR AWARD (R35) WORKGROUP DISCUSSION

Dr. Hayunga said that the R35 grant mechanism would focus on people, not projects. A working group comprised of Council members and NICHD staff has been discussing whether the NICHD should adopt the R35 grant.

The working group recommends that the NICHD adopt use of the grant, but as a pilot study. The working group also recommends that the R35 should not replace the merit awards.

The working group also recommends that the R35 extend for up to 8 years and up to \$750,000 a year. The PI effort must be at least 50 percent. The R35 would support PIs to generate new ideas and would require community service and mentorship of the PI. The R35 should also require institutional commitment.

Some unanswered questions remain:

- How many R35 awards should the NICHD make?
- What will the R35 program cost, and how will cost affect the research project grant payline?
- Will the R35 displace other types of awards?
- Can a PI have both an R01 and an R35?
- What is the most appropriate career stage for an R35?

Dr. Jenkins said that an important question to add is how the R35 would impact the diversity of those who get funding. Dr. Guttmacher agreed.

Dr. Frances Jensen asked what would happen with the rest of the PI's grant portfolio after receiving an R35. Dr. Hayunga acknowledged that this is an important question. Dr. Jensen said that some investigators are required to fund their entire salaries through grants.

Dr. Rinaldo said it would take a certain amount of ego to apply for an R35. Perhaps it should be application by invitation. That would also allow the NICHD to apply other criteria, such as whether the investigator is up for renewal on other grants and where they are in their career trajectory. Dr. Jensen suggested the award could be by nomination, perhaps by the nominee's institutional leadership, which would agree to pick up a portion of the nominee's salary.

Dr. Dorn asked whether the R35 could be used to promote important scientific areas. Dr. Hayunga said the working group discussed it, but was unable to reach agreement on what areas would be most important.

Dr. George Saade asked whether the application would be reviewed by a study section. He would not want to limit the awards to certain topic areas, but instead would prefer having wider criteria. Dr. Hayunga said the plan is to compete the R35 in the same pool as the R01s. Once R01s are awarded, the NICHD staff would nominate the most meritorious for the R35.

Dr. Green said she is concerned about the role of bias in the awarding of R35s. Dr. Guttmacher said that there is also the possibility that early stage investigators will be disadvantaged. He does not want to add to any inequity to the grant award system.

Dr. Greenwald asked whether candidates would have to describe a specific project. Dr. Hayunga said the applicant would be required to describe the general direction he or she is going in. Dr. Greenwald asked how an applicant could make a general description. It is hard to see how that would work.

Dr. Guttmacher said the R35 was modeled on the Howard Hughes Medical Institute (HHMI), which funds individuals. HHMI requires some information about the work, but without the fine level of detail.

Dr. Guttmacher called for a straw poll on whether the R35 should include specific criteria such as diversity guidelines. The majority of Councilors did not favor adding specific criteria to the R35.

Dr. Bianchi said the Council had strayed from the "person not the project" model and should go back to reserving the award for the best people doing research within the NICHD. The NICHD should establish criteria that would evaluate people at every career level.

Dr. Jensen said that there are gaps in funding junior investigators and underrepresented groups and she questioned whether the NICHD could address those gaps with the R35. She also said that the advantage of the R35 is that it can stabilize a lab's funding and allow the investigator to be a more productive researcher.

Dr. Leslie asked what problem the R35 seeks to solve. She questioned the wisdom of giving an 8-year grant to a junior investigator. The advantage of applying for grants is that it forces investigators to step back and think through their science.

Dr. Rinaldo said that one problem is how to define "outstanding." Dr. Guttmacher said that the philosophy is that some people, if loosened from the rigorous requirements of the project, would be liberated to do better science. The award comes in response to criticism that the R01 review is too conservative and that high-risk research is unlikely to receive an R01. The R35 would encourage more high-risk proposals.

Dr. Gilliam said it sounds exciting, but there are problems with the proposal. It is not really clear that this mechanism would bring in more innovative projects. Working with people who have existing labs is antithetical to innovation.

Dr. Guttmacher thanked the Council for the discussion. He asked whether the Council would want to drop the proposal or come back in June with a final up-or-down discussion.

The sense of the Council, with a show of hands, was to come back in June for a final discussion.

# IX. ADVISORY COMMITTEE TO THE DIRECTOR, NIH, WORKGROUP REPORT ON THE NATIONAL CHILDREN'S STUDY

Dr. Guttmacher gave a brief history of the NCS, which was conceived 14 years ago. The Institute of Medicine issued a report in June 2014 praising some aspects of the study, but questioning other aspects.

Dr. Collins put the NCS main study on hold while a working group from the Advisory Committee to the Director (ACD) examined whether the study was scientifically feasible and, if so, what changes would be necessary to allow the study to go forward.

The working group met six times, explored a range of stakeholder perspectives, examined study protocols, spoke to experts, sought public comment, and considered the strengths and weaknesses of the NCS.

The group found that the NCS is not scientifically feasible as currently outlined. They recommended that both the main study and the Vanguard Study, a smaller pilot study, should be closed. The Vanguard data would be archived and made available to researchers.

The ACD endorsed the working group recommendations. Dr. Collins accepted the recommendations and stopped the study.

Dr. Murray will oversee the study closure. Dr. Steven Hirschfeld will return to his position of NICHD Associate Director for Clinical Research. Dr. Jack Moye was named NCS Acting Director. The NCS staff will be reassigned to duties within the NIH.

Closure activities are now in progress. Contractors are ending their activities and arranging to turn over work products. More than 5,000 children have been involved in the Vanguard study. The NIH has notified the Vanguard participants. The NICHD will maintain their data and biospecimens.

There is \$100 million available to pursue the original goals of the NCS, but one challenge is that it is fiscal year 2015 money. The NIH is evaluating how the remaining funding for this fiscal year can best be spent on research that carries out the original goals of the NCS.

Dr. Guttmacher praised the work of the staff on the NCS and said that the study closed through no fault of their own.

# Discussion

Dr. Jenkins said that the study's original goals are still important. There are investigators who have been working on the study who could use the continued funding that is available. The study's problem was in controlling the messages about the study.

Dr. Saade said that part of the blame belongs to the scientific community; the focus of the study kept changing. The collection of the data and biospecimens was an important accomplishment. As a result of this study, the first dictionary of obstetrical conditions has been developed.

Dr. Guttmacher agreed, saying that a number of work products and papers came out of the Vanguard study. The American Academy of Pediatrics and others have recommended that this fund be extended to fund similar projects of interest.

Dr. Kopf asked how the NICHD will maintain the data and specimens. Dr. Guttmacher said that Dr. Hazra's N-DASH proposal will be part of that. The NICHD continues to examine the best way to handle the data and specimens.

# X. CONCEPT CLEARANCE REVIEW AND DISCUSSION

Dr. Spong introduced the concept clearance section of the meeting by saying that the presenters would describe broad areas of investigation, but would not go into detail to avoid any potential conflict of interest. The Council heard short summaries of each of the nine areas of investigation and unanimously endorsed each of them.

Dr. Hazra of the MPIDB presented a proposed RFA entitled "Transition of HIV-Infected Adolescents from the Pediatric Care Setting to the Adult Care Setting." The RFA would use the R01 and R21 grant mechanisms. This initiative is to solicit investigator-initiated research in the assessment of the transitioning of HIV-infected adolescents to the adult health care setting. This area of investigation is neglected, understudied, and of high importance.

Dr. Sonia Lee of the MPIDB presented a proposed RFA entitled "Innovative Development/Use of Technology to Increase HIV Testing and Linkage to Care Efforts in Adolescent Populations." The RFA would use the R41/R42 and R43/R44 small business grant mechanisms. This initiative will provide support for research focused on the development of innovative methods, through the use of technology, to promote and provide access to HIV testing for adolescents.

Dr. Lee presented an RFA entitled "Neurodevelopmental Assessment of Infants and Children in Resource-Limited Settings." The RFA would use the R41/R42 and R43/R44 grant mechanisms. The initiative will provide support for research focused on the development of tools and/or materials for the neurodevelopmental assessment of cognitive functioning of infants and children in resource-limited settings.

Dr. Valerie Maholmes of the Pediatric Trauma and Critical Illness Branch presented a proposed RFA entitled "CAPSTONE Centers for Multidisciplinary Research and Training in Child Abuse and Neglect." The RFA uses the P50 grant mechanism. This funding opportunity calls for multidisciplinary centers to examine best practices for early identification and treatment of specific types of abuse and neglect, to decrease morbidity and mortality, and to identify potential comorbidities.

Dr. Lisa Freund of the Child Development and Behavior Branch (CDBB) presented a proposed RFA entitled "Multidisciplinary Approaches for Developmental Research with Individuals with Disorders of Sex Development (DSD)." The RFA would use the R01, R03, and R21 grant mechanisms. This initiative will stimulate research in four areas: improving the diagnosis of DSD; genitosurgery/gender assignment outcomes; psychosocial and functional impacts on development with DSD; and improving clinical management of DSD.

Dr. Brett Miller and Dr. Kathy Mann Koepke of the CDBB presented an RFA entitled "Learning Disabilities Innovation Hubs." The RFA would use either the R24 or P2C grant mechanisms. The proposed RFA would tackle historically challenging and under-researched topics that would advance understanding and treatment for individuals at-risk for or diagnosed with mathematics learning disability, reading disability, and writing disability.

Dr. Layla Esposito of the CDBB presented an RFA entitled "Animal-Assisted Interventions in Special Populations." The proposed RFA will solicit R03 and R21 applications for research to examine the efficacy of the inclusion of animals in therapy and rehabilitation for children and individuals with disabilities; neurological conditions; behavioral, emotional, and mental health issues; and related health outcomes.

Dr. Lorette C. Javois of the Developmental Biology and Structural Variation Branch presented a proposed RFA entitled "Developmental Mechanisms of Human Structural Birth Defects." The RFA would use the P01 Program Project grant mechanism. The objective is to support innovative, multidisciplinary, interactive, and synergistic P01s that integrate basic, translational, and/or clinical approaches to understanding the developmental biology and genetic basis of structural birth defects.

Dr. Halvorson of the GHDB presented an RFA entitled "Collaborative Research in Genomics, Epigenomics, and Bioinformatics in Gynecologic Health and Disease." The RFA would use the R01, R03, and R21 grant mechanisms. The scope of this RFA will be the application of genomics, epigenomics, and/or bioinformatics approaches to the study of four common gynecologic disorders with substantial morbidity and associated health care costs: endometriosis, adenomyosis, fibroids, and pelvic organ prolapse.

# XI. COMMENTS OF RETIRING MEMBERS

Dr. Guttmacher presented the retiring members of the NACHHD with certificates and letters of appreciation for serving on the Council. He invited each member to provide remarks.

Dr. Leslie said that her term on the Council had been a wonderful several years. This is an important time in NICHD history, and she is excited about new areas that the NICHD aims to support.

Dr. Jenkins thanked the staff and scientists at the NICHD for their work. She also expressed optimism that good things will come out of the NCS.

Dr. Greenwald said he has been pleased at how much more small businesses and new technologies are being integrated into the work of the NICHD. He urged that to continue.

Dr. Jere Behrman said his time on the Council has been both interesting and rewarding. As the NICHD moves forward, he expressed the hope that research will continue to delve into the behavioral and biomedical sides of health.

Dr. Jensen said that it has been an honor and privilege to serve on the Council and to see neuroscience cross-cut so much of what the NICHD does. The NICHD has a wide-ranging portfolio that is very relevant to society, and being on the Council has been a learning experience for her.

# XII. REVIEW OF APPLICATIONS

# XIII. ADJOURNMENT

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

Attachment: Council Roster

I hereby certify that, to the best of my knowledge, the foregoing minutes and attachments are accurate and complete.<sup>2</sup>

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

Mary Plummer Committee Management Officer, NICHD

 $<sup>^{2}</sup>$  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.