

**DEPARTMENT OF HEALTH AND HUMAN SERVICES  
NATIONAL INSTITUTES OF HEALTH  
NATIONAL CENTER FOR COMPLEMENTARY  
AND INTEGRATIVE HEALTH**

**NATIONAL ADVISORY COUNCIL FOR COMPLEMENTARY  
AND INTEGRATIVE HEALTH  
MINUTES OF THE SIXTY-FIRST MEETING  
February 3, 2017**

**NACCIH Members Present**

Dr. Martin Blaser, New York, NY  
Dr. Donald Brater, Indianapolis, IN  
Dr. Alice Clark, University, MS<sup>1</sup>  
Dr. Lynn DeBar, Portland, OR  
Dr. Tracy Gaudet, Washington, DC<sup>1</sup>  
Dr. Steven George, Durham, NC  
Dr. Christine Goertz, Davenport, IA  
Dr. Joel Greenspan, Baltimore, MD  
Dr. Bin He, Minneapolis, MN<sup>1</sup>  
Dr. Patricia Herman, Santa Monica, CA  
Dr. Steven Hersch, Charlestown, MA  
Dr. Susmita Kashikar-Zuck, Cincinnati, OH  
Dr. Janice Kiecolt-Glaser, Columbus, OH  
Dr. Jean King, Worcester, MA  
Dr. Helene Langevin, Boston, MA  
Dr. Cynthia Price, Seattle, WA  
Dr. Eric Schoomaker, Bethesda, MD  
Dr. Reed Tuckson, Sandy Springs, GA<sup>1</sup>

<sup>1</sup>Telephone

**SPEAKERS**

Dr. Eric Schoomaker, Bethesda, MD  
Dr. Ralph Snyderman, Durham, NC<sup>2</sup>  
Dr. Janet Kahn, Burlington, VT  
John Burklow, Bethesda, MD

<sup>2</sup>Videoconference

**NACCIH Members Not Present**

Dr. Richard Niemtow, Alexandria, VA

## **Federal Staff Present**

Julia Berhanskaya, NIH, NIDA

Samarth Chandra, NIH, NIMH

Donna Crews, NIH, OD

Heather Rusch, NIH, NINR

## **I. Closed Session**

The first portion of the sixty-first meeting of the National Advisory Council for Complementary and Integrative Health (NACCIH) was closed to the public, in accordance with the provisions set forth in Sections 552b(c)(4) and 552b(c)(6), Title 5, U.S.C., and Section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. Appendix 2).

A total of 96 applications had primary institute or center (IC) assignment to NACCIH. Applications that were rated by study sections as noncompetitive, not discussed, or not recommended for further consideration were not considered by Council. Council agreed with staff recommendations on 50 applications, which were requesting \$15,192,179 in total costs.

## **II. Open Session—Call to Order**

The open session convened at 9:45 a.m. Dr. Partap Khalsa, NACCIH Executive Secretary, called the meeting to order. The minutes of the October 2016 NACCIH meeting were approved unanimously.

## **III. NACCIH Director's Welcome and Report to Council**

NACCIH Director Dr. Josephine Briggs welcomed the new Council members. She led her staffing update by recognizing Dr. Martin Goldrosen, Director of the Division of Extramural Activities and Executive Secretary of the Council for many years, who would retire in the upcoming weeks. New staff appointments included Dr. Partap Khalsa as Director of the Division of Extramural Activities, Dr. Craig Hopp as Deputy Director of the Division of Extramural Research, and Dr. Wen Chen as Acting Chief of the Division's Basic and Mechanistic Research Branch. Ms. Mary Beth Kester, formerly a health policy analyst at the National Institute of Arthritis and Musculoskeletal and Skin Diseases, is the new Director of the NACCIH Office of Policy, Planning, and Evaluation. Dr. Merav Sabri will start in April 2017 as a health scientist administrator.

Dr. Briggs presented the budget mechanism table and a chart on spending categories. The total NACCIH appropriation in Fiscal Year (FY) 2016 was \$129.7 million, and in the president's budget for FY 2017 is \$129.9 million. Congress enacted a continuing resolution to fund the Government through April 28, 2017, and it is uncertain whether there will be an actual appropriation for the rest of the fiscal year. The level of the continuing resolution is one-half percent lower than FY 2016's appropriation. In her legislative update, Dr. Briggs described the 21st Century Cures Act, or Public Law 114-255, which was enacted December 13, 2016, and provides funding separate from appropriations for several projects important to NIH—such as the Beau Biden Cancer Moonshot, NIH Innovation Project Fund, Precision Medicine Initiative, Next Generation Researchers Initiative, Brain Research Through Advancing Neurotechnologies (BRAIN) Initiative, and EUREKA Prize Competitions. Among its other provisions,

the Act relieves a number of administrative burdens for NIH staff and grantees, fosters inclusion of populations in human subjects research, and supports some activities related to data access and privacy. Dr. Briggs also gave an overview of funding and progress in the BRAIN Initiative and several examples of related discoveries.

NCCIH has made pain research in military and veteran populations a priority. In 2014, the Center partnered with the National Institute on Drug Abuse and the U.S. Department of Veterans Affairs (VA) to fund 13 grants to research military and veterans' health with a focus on nonpharmacologic approaches for pain. Dr. Briggs discussed how this effort, being led by Dr. Eve Reider, a program director in the Division of Extramural Research, has been expanded to include the Department of Defense (DoD) and five additional NIH agencies. The work entered a new phase with the release of two NIH-DoD-VA Pain Management Collaboratory Funding Opportunity Announcements in December 2016, RFA-AT-17-001 and RFA-AT-17-002. The NIH Health Care Systems Research Collaboratory is the model in many respects. Dr. Briggs commented that given the huge challenges involved in this research topic and the status of the work at present, some thought needs to be given to how the Center can have maximal, meaningful impact. Interest in these opportunities appears substantial.

Dr. Briggs shared examples of recently published impactful NCCIH-supported research, such as a study on severe pain in veterans in *The Journal of Pain* by Dr. Richard Nahin, NCCIH lead epidemiologist, and a study by NCCIH grantee Dr. Daniel Cherkin and colleagues in *JAMA* on mindfulness-based stress reduction for chronic low-back pain. NCCIH developed a set of articles on nonpharmacologic pain management for the Winter 2017 issue of *MedlinePlus* magazine. Dr. Briggs presented several tables of data on recent media stories mentioning NCCIH or its sponsored research, including the top 10 health conditions and complementary modalities discussed in those articles. She showed data from public Google searches showing that use of the term "integrative health" has increased, while use of "alternative health" has decreased.

**Discussion.** In response to a query from Dr. Schoemaker, Dr. Briggs explained that she did not think NCCIH is hampered in various spending categories by being under a continuing resolution. He and Dr. Gaudet lauded the Center's work with the DoD and VA and described it as having ripple and stimulus effects across the Nation. Dr. Gaudet also mentioned challenges related to redesigning health care, including to support patients in self-care and in enhancing their lives. Dr. Langevin encouraged attention to the concepts of what happens to patients over time (e.g., spontaneous remissions) and examining the ways that people get better without medications.

#### **IV. NCCIH Training and Career Development Portfolio**

Dr. Lanay Mudd, a program director in the Division of Extramural Research, presented a broad, data-based overview of the NCCIH training and career development portfolio. Dr. Briggs asked members to help advise staff, including to maximize use of resource dollars. Dr. Mudd set the stage with the Center's 2016 strategic plan, in which one of the major objectives is to enhance the research workforce, and, under that objective, to foster interdisciplinary collaborations and partnerships. A second major source was a report by a working group of Council that, in late 2016 and early 2017, discussed and reported on challenges in development of the clinician-scientist workforce.

In the current portfolio on this topic area, the main types of grants are individual awards (F30, F31, and F32 mechanisms), institutional awards (T32 and T35 mechanisms), career development awards (K01, K08, K23, K99/R00, and K24 mechanisms), and administrative supplements (which support diversity of the research workforce; reentry after a career interruption; or mentored research experiences for complementary health practitioners). Dr. Mudd presented various analyses of data from FY 2007 through FY 2016 on funding levels and characteristics of this portfolio. NCCIH total funding for training and career development awards was about \$4 million in FY 2016, a slight decline since FY 2009. NCCIH's funding levels, when compared with NIH-wide levels, were on par with the NIH average for training, higher than the NIH average for career development, and higher for overall investment in both areas. Under the T32 mechanism, which is for awards to institutions, NCCIH has been training about twice as many predoctoral trainees and seven times as many postdoctoral trainees as it has under individual awards. Dr. Mudd noted that the most advantageous ratio of institutional to individual training awards is being discussed across NIH. Distribution of subject areas of grants (i.e., natural products, mind and body research, or both) was discussed, as were training backgrounds of awardees—e.g., complementary health degrees and certifications were represented across all NCCIH training and career development awards. Dr. Mudd described the paths of six NCCIH training or career development awardees who have become successful principal investigators (PIs) on NIH grants. A challenge is that not all mechanisms in the portfolio can be documented with data, such as postdoctoral fellows on an existing R01 grant.

The success of the Center's portfolio in this area was addressed using several metrics: Pathway to Independence (an NIH measure in which "independence" is defined as the average number of years from a training/career development award to receiving the first R01 grant as a PI), the number of grantees who published articles on their award (in terms of articles explicitly mentioning the funding source), the publication count per award, and subsequent NIH application rates and success rates (again, with respect to receipt of an R01 as a PI—in which NCCIH F fellows have been more successful than T trainees, at both the predoctoral and postdoctoral levels). These metrics were examined from FY 1999 through FY 2011. Regarding the administrative supplements for research experience for complementary health practitioners (a relatively young funding opportunity), Dr. Mudd said that although the number of trainees has been small, staff consider the mechanism to have been successful. However, the Center would like to see success rates encouraged and increased, especially in terms of subsequent NIH applications.

Dr. Mudd offered a short list of takeaway points. The Center's evaluation criteria in this topic area are consistent with those of NIH. NCCIH's individual and institutional training awards are doing well, although subsequent success rates are higher for F fellows than for T trainees; this pattern is seen across NIH. Improvements are needed to increase subsequent application rates for F and T recipients and administrative supplement trainees. NCCIH's career development awards are doing well; most grantees receiving these awards have gone on to apply for R01 grants as PIs, and more than 45 percent of recipients have received R01 grants as PIs. The training paths for the Center's portfolio are quite diverse, and this finding should be kept in mind when considering next steps.

Dr. Mudd suggested several more topics for consideration. First, there is a need for more metrics to define and measure success and capture a more comprehensive postaward picture. Subsequent success rates as a PI and publication links to NIH grants do not, for example, capture team science or non-PI involvement in research. A new NIH-wide committee, of which Dr. Mudd is a member, is working on

this area of need. Another topic was to determine optimal balance in the portfolio—e.g., NCCIH supports the training and career development categories at approximately equal funding levels, totaling about 7.5 percent of the NCCIH budget, as compared with an NIH average of about 6 percent. The third topic was supporting the pipeline for NCCIH researchers. Data suggest that early-stage trainees may need help to get to the next level, given their low rates of application for subsequent grants. The Center might consider offering more resources and strategies (targeting an array of audiences) on its training and career development opportunities—such as “how-to” workshops, video conferences, videos, Webinars, conference presentations, and “success stories” as in blogs. NCCIH wants to continue to support cross-training for NCCIH research by leveraging opportunities across NIH and highlighting successful team science.

**Discussion.** Dr. Kashikar-Zuck expressed a request to be able to document data on types of fellows/trainees for which it is not possible at present, such as fellows on an existing R01, and she compared R01s to T32s. Dr. Mudd said that she and her trans-NIH committee agree with this concern, and thus are looking not only at alternative measures of success but alternative experiences of training. Dr. Goertz suggested that seeing success rates and awards over the last 3 years would be informative and asked whether the NIH average is the appropriate benchmark given the broad NCCIH portfolio and target audience. Dr. Briggs responded that NCCIH can provide data on success rates, and she and Dr. Mudd commented further on the NIH benchmark and the NCCIH-NIH data. Dr. Goertz also commented that she had not seen among the presentation’s recommendations how more could be done to get complementary health professionals and institutions more involved in this process. Dr. Briggs responded that this an important issue and she had hoped to continue that conversation with Drs. Goertz, Herman, and Price separately, but decided that it was important to have all Council members see the data first. In response to a comment from Dr. George about the NCCIH budget and number of trainees compared with other ICs, Dr. Briggs commented that the Center’s budget is the second smallest among the ICs, the Center is responsible for a broad range of topics, and it is likely one of the most prominent NIH components for study of clinical pain research (versus basic research on that topic).

Dr. Schoemaker mentioned the discordance in success between individual and institutional training grantees, and asked whether those two groups are demographically equivalent and whether data could be obtained on non-NIH support that they may receive later. Dr. Briggs said that the two groups are quite different (which has been seen in other portfolios at the Center as well), provided additional details, and commented that if NCCIH were to move more toward individual awards, there would be tradeoffs, e.g., less of a focus on strengthening programs at institutions. Dr. George asked about the balance between the number of trainees who are clinical investigators versus those in basic science. Dr. Briggs invited Council’s input on this question, discussed the aims of each major group of mechanisms, noted that the Center has given some preference to having clinical experience, and described the NCCIH portfolio as tilted toward human subjects research.

Dr. Langevin asked whether Dr. Mudd’s trans-NIH group is looking at qualitative, not just quantitative, measures of success. Dr. Mudd responded that the group has mentioned potential use of focus groups and interviews with successful trainees, but no specifics have been decided yet. Dr. Langevin noted that how to evaluate whether an investment is successful is a problem in many fields, not just science, and her institution is looking at connectivity, not just quantitative measures. Dr. Briggs commented that some interesting new tools are being developed to assess connectivity. Dr. King said that her group is looking at longevity measures to track their trainees for how long they stay in science versus leaving the

field. In addition, as codirector of a summer program, she has found that career development must be a focus. She noted that her young participants must be present rather than sequestered full-time in a laboratory and that they need to see a path, for example, from F31 to F32, as well as success stories. She suggested the Center and/or NIH consider an immersive program for 3 or 4 weeks for young people. Dr. Briggs supported the idea of encouraging and informing young people, since at present the field cannot fully do so through mentors and institutions.

Dr. George suggested that there may be some institutions that have undertaken this kind of work as part of their tenure and promotion processes. Dr. Herman supported the point on connectivity and noted that a way to track teams would be desirable. Dr. Tuckson expressed hope that as the work Dr. Mudd described continues, it could be drilled down by ethnicities and contribute to the work being led, for example, by Dr. Hannah Valentine at NIH. Dr. Briggs commented that she is on the Working Group on Diversity in the Biomedical Research Workforce of the Advisory Committee to the NIH Director, which is working to ensure that these issues get addressed. Although there has been progress, there is still a long way to go.

## **V. Update on Communications Strategies and Tools to Enhance Scientific Literacy**

Ms. Shawn Stout, technical writer in the Office of Communications and Public Liaison (OCPL), provided a brief overview of the Center's initiative on communications strategies and tools to enhance scientific literacy. The initiative is intended to explain complex scientific concepts that relate to health research to provide consumers with tools to critically evaluate evidence, so that they can make well-informed decisions about their health. Examples of topics include risk, levels of evidence, causation versus correlation, individual studies versus systematic reviews, conflicting results, and a myth that "natural is always better and safer." The office is producing related content in a variety of formats, including short videos, podcasts, infographics, and interactive modules. Staff have conducted informational interviews with health literacy experts at NIH; performed an environmental scan of science literacy topics; formed a strategic working group on science communications with Drs. Tuckson, Clark, and Powell; discussed potential topics for content; sought feedback on materials in development; and repurposed existing materials, as well as developed new content. A new Web portal, "Know the Science," underwent a soft launch on the Center's Web site in April 2016. The next steps for the initiative are to develop new content items for the "Know the Science" initiative using a dynamic range of formats, e.g., an interactive quiz on some important terms, an infographic on levels of evidence, and case studies. Quantitative and qualitative evaluation will be performed, revisions made, and a full launch performed. Ms. Stout encouraged Council members to review the materials available to date and provide their feedback.

**Discussion.** Dr. Tuckson commented that the Center's value lies not only in research but in providing information about research to assist consumer decisionmaking, and there is a real need for the initiative's information. Another member asked whether other ICs are doing anything in parallel to this effort, and Dr. Briggs responded with several comments. In contacts with other ICs' communications offices, Center staff found little available on this topic.

## **VI. Council Operating Procedures**

Dr. Khalsa reviewed Council operating procedures, including processes for NCCIH reports to

Council, secondary review of grant applications, concepts for research initiatives, and appeals. Council unanimously passed a motion approving the operating procedures as presented.

## **VII. Symposium: Current Directions in Integrative Medicine and Integrative Health**

Dr. Briggs introduced a panel discussion featuring Dr. Ralph Snyderman, Chancellor Emeritus and James B. Duke Professor of Medicine at Duke University (participating by videoconference), Dr. Janet Kahn, Research Assistant Professor at The University of Vermont's College of Medicine, and Dr. Schoomaker.

Dr. Briggs observed that in light of NCCIH's name change in December 2014, it seemed timely to discuss what the Center means by "integrative health." She pointed out that integrative health care is part of an active public dialogue about health care, including the need for greater patient centeredness and participant engagement. NCCIH may be able to further this dialogue through its research investments.

Dr. Snyderman said that with its current integrative focus, NCCIH could become involved in issues critical to health care in this country. The chronic diseases that are today's most important health challenges develop slowly and are subclinical during most of their evolution. For most of these diseases, risk is heavily dependent on the individual's behavior, so a patient-centered, integrative approach to care would be very appropriate. The other ICs at NIH are not focusing on this type of approach to health, so NCCIH could make unique contributions. Dr. Snyderman suggested the following possible areas of research focus: metrics for quantification of health engagement, methods to enhance awareness and engagement, identification of the best approaches to maintain engagement and adherence, and identification of the best complementary approaches to support therapeutic and wellness plans.

Dr. Kahn urged that NCCIH claim its territory on the continuum between illness and wellness and said that more attention needs to be paid to the wellness end of the continuum. She explained that at some level, there has always been "integration" in health care, with the patient doing the integrating by bringing information from one provider to another. As medicine moves toward a more truly integrated team approach, it's important to consider (1) the values that drive integration as well as the tools that enable it and (2) how to develop teams and work effectively in teams. Priority issues for the coming years include addiction to opioid analgesics, deaths from medical errors, and the high levels of stress and burnout experienced by health care providers. Dr. Kahn discussed a project she is involved with that uses an app to help military personnel and their partners learn mind and body practices that may help with postdeployment adjustment; electronic tools like this one may enable some types of patient-driven care to be provided inexpensively.

Dr. Schoomaker discussed chronic pain and comorbid conditions, especially as experienced by military personnel and veterans. The stresses that service members face are not just physical; they include psychological stresses such as those resulting from the loss of fellows and separation from their families. Multiple health problems—chronic pain, post-traumatic stress disorder, and traumatic brain injury—typically occur together in military personnel and veterans. Dr. Schoomaker noted that Federal agencies have supported multiple initiatives related to pain management, with the first steps coming from the VA, with its Pain Program Office, and the DoD, with its Pain Management Task Force. He also stated that work is still needed on all of the four central features in the Samueli Institute's model for improvement in outcomes in chronic pain: integrative care delivery, patient self-efficacy, operations that support improved outcomes, and a sustainable business model.

## **Discussion**

Dr. Gaudet explained that the recently passed Comprehensive Addiction and Recovery Act enables the VA to develop 15 demonstration sites in FY 2018 to assess the feasibility of an integrative approach to pain management and related health care services. The legislation will allow the VA to capture more consistent metrics and develop a more unified approach to care. Dr. Briggs said that the presentations made here suggest opportunities for pragmatic clinical trials within health care systems.

Dr. DeBar pointed out that participants in trials of integrative approaches are often people who have already had multiple treatment failures. Research may be more productive if patients can be seen earlier. She also explained that primary care providers are enthusiastic about integrative care but need more information about it and support from the health care systems within which they work. Dr. Schoomaker noted that military personnel are often very receptive to complementary approaches because of their exposure to non-Western cultures. However, providers may not have the resources to use these approaches.

Dr. Snyderman said that progress in bringing integrative approaches to the leading edge of health care delivery has been disappointing in most health care systems, but the VA is an exception. The VA, which is self-insured, has been a leader in care redesign. Outside the VA, current approaches to reimbursement can be a major obstacle to the development of holistic, patient-centered approaches to care. Dr. Schoomaker explained that the DoD is particularly concerned about its investment in health care because dollars spent here cannot be spent to help the military achieve other goals and because the ultimate goal of military health care is to keep service members capable of doing their jobs.

Dr. Briggs closed the symposium by thanking the participants and drawing attention to two key takeaways: the value of NCCIH's partnership with the DoD and VA and the importance of measuring engagement.

## **VIII. NIH Office of Communications and Public Liaison**

Mr. John Burklow, Associate Director for Communications and Public Liaison, NIH, presented an overview of the NIH Office of Communications and Public Liaison and the communications work that NIH Director Dr. Francis Collins and his staff do to make the case for biomedical research and the value of NIH. Mr. Burklow led with the major goals of that Office, including supporting the communications efforts of the NIH Director and other NIH leaders; engaging media reporters, editors, and producers, as well as the public; and serving as the liaison with the U.S. Department of Health and Human Services. He then presented five key message concepts: the value of investing in medical research; the health impact of NIH research; the economic impact of NIH research (e.g., in sustaining U.S. competitiveness); the importance of basic, clinical, and translational research; and the footprint or impact of NIH. When Dr. Collins assumed the NIH directorship in August 2009, one of his goals was to make people more aware of NIH and what it does. A key change followed relating to NIH's identity: reducing the use of more than 800 logos across NIH to one, unifying logo.

NIH is in the news every day, although it (or the relevant IC, if applicable) might not be named. Mr. Burklow praised the NCCIH OCPL as one of the more progressive NIH communications offices, especially in its use of social media and related analytics. Dr. Collins's many modes of communication include media interviews, social media (e.g., a blog and a Twitter account),



speeches/presentations/visits, visits to NIH by notable people, commentaries/op-eds/scholarly papers, interactions with Congress, and scientific initiatives. The Office has interest in moving beyond the traditional venues of communication. New communications offerings include an image gallery and a Spanish-language site. The NIH Web sites receive, on average, more than 80 million unique sessions per month, and more than 200 social media channels add reach to millions more individuals. The Discovery Channel has worked for the past 2 years on a documentary on the NIH Clinical Center, with the first episode scheduled to air in mid-May 2017. Mr. Burklow summarized his Office's approach as taking advantage of and trying to create opportunities.

**Discussion.** Dr. Schoomaker asked how Mr. Burklow would handle a spokesperson who is not as comfortable engaging with the media as Dr. Collins. Mr. Burklow responded that he is grateful for others (such as a number of the IC directors) who are willing to engage with the media. He praised Dr. Briggs's willingness to do this. Mr. Burklow added that he appreciates when spokespeople understand that working with the media is "a percentage game." He is also able to draw upon some NIH intramural scientists and a network of public information officers (PIOs) at NIH grantee organizations around the country. Dr. Schoomaker asked whether NIH has a communications development program for its leadership. Mr. Burklow said that this idea was tried several years ago and did not go as far as it should have, but he noted that perhaps it is time to bring it back, and not only for NIH staff but also for the PIO network.

## **IX. Public Comment and Adjournment**

No public comments were offered.

The meeting was adjourned at 3:00 p.m.

We hereby certify that, to the best of our knowledge, the foregoing minutes are accurate and complete.

Partap Khalsa, D.C., Ph.D., D.A.B.C.O.  
Executive Secretary  
National Advisory Council for  
Complementary and Integrative  
Health

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