# NIMH Professional Coalition for Research Progress Meeting March 22, 2005

#### Introduction

The National Institute of Mental Health (NIMH) held its first meeting of the *Coalition for Research Progress* on Tuesday, March 22, 2005 at the Dana Center in Washington D.C. The meeting had two primary goals: (1) to share the latest developments at NIMH with professional constituent organizations and, (2) to foster dialogue on the future path and directions of NIMH funded research. NIMH held a similar meeting with members of patient and family advocacy organizations and has found this size group to be conducive to active dialogue.

### **Speakers**

### Thomas R. Insel, M.D., "Welcome Plenary"



Drs. Insel, Nakamura, and Huerta

Setting the stage for discussion, the NIMH Director Thomas R. Insel, M.D., opened the meeting with a description of present and new directions for NIMH. He identified NIMH's two biggest concerns in the current climate of slow budgetary growth: (1) fostering the careers of new investigators, and (2) promoting innovative research. Presentations followed on the Neuroscience Blueprint, a trans-NIH initiative involving all institutes with a neuroscience investment, and the NIH

Roadmap: a series of progressive initiatives designed to transform biomedical research and accelerate its discoveries. After a lunch discussion, the NIMH division directors highlighted the initiatives, plans, and priorities of their divisions under the recent reorganization of NIMH. A description of the new divisions is available on the NIMH Web site at <a href="http://www.nimh.nih.gov/researchfunding/reorganization.cfm">http://www.nimh.nih.gov/researchfunding/reorganization.cfm</a>.

Managing research priorities in a climate of slowed budgetary growth was a major theme of Dr. Tom Insel's presentation. He indicated that mentoring new investigators and promoting innovative research are NIMH's two biggest concerns in the current budget climate, and that balancing the NIMH investment in the pipeline (training new investigators) with the pay line (funding new grants) is critical to sustaining robust mental health research. Participants agreed that this balance is essential because as NIMH continues to invest in training new investigators it must also help these investigators launch their careers by providing grant opportunities.

Dr. Insel highlighted the realities that make this balance difficult: fewer new dollars, current high levels of commitments, increasing costs of individual grants, increasing numbers of applications, and other financial obligations.

Dr. Insel suggested the following NIMH strategies that may be employed in maintaining this balance: clarify priorities, redirect applicants to other institutes and centers if appropriate, engage the NIMH National Advisory Mental Health Council in research priority setting, and depend on a very active program staff to assist grant applicants. He asked meeting attendees to encourage their members who are seeking grant support to call NIMH program staff for advice and guidance and any questions about their grant applications. Several participants urged NIMH to look carefully at grants already funded and to look at outcomes overall for NIMH in terms of what is missing from the research portfolio.

## Michael Huerta, Ph.D., "The NIH Neuroscience Blueprint"

The NIH Neuroscience Blueprint was developed under the leadership of the NIMH and the National Institute of Neurological Disorders and Stroke to accelerate research and



Drs. Akil, Insel, and Huerta

discovery in neuroscience. The Blueprint is a framework designed to build collaboration and coordinate research discovery and translation by pooling the resources of the 15 NIH institutes and centers that fund neuroscience research. It provides a platform for working together to overcome barriers to translating research to practice and is designed to develop a toolkit for the 21<sup>st</sup> Century neuroscientist. Dr. Michael Huerta said that disorders of the brain and nervous system are a major challenge

because they negatively impact quality of life of patients and their families. Unfortunately scientific advances are not rapid enough for the people who have these disorders because the nature and rate of discovery in neuroscience is limited by the scientific tools and resources available. However, the dissemination and sharing of tools, resources, and data should hasten the process of turning this data into knowledge and insight.

Over a five year period \$150 million of collaborative funding from the institutes and the NIH will be invested in the NIH Neuroscience Blueprint. Information on current Blueprint initiatives such as the neuromouse project is available on the NIH Neuroscience Blueprint Web site at <a href="http://neuroscienceblueprint.nih.gov">http://neuroscienceblueprint.nih.gov</a>.

### Mayada Akil, M.D., "The NIMH Role in the NIH Roadmap"

The NIH Roadmap is a series of progressive initiatives that seek to accelerate discoveries and transform biomedical research, said Dr. Mayada Akil, the NIMH Roadmap Liaison.

NIH consulted stakeholders, scientists, and health care providers on today's scientific challenges and roadblocks to progress; seeking advice on how to overcome these roadblocks. NIH Roadmap initiatives target major opportunities and gaps in biomedical research that no single institute could tackle alone but that the agency as a whole must address to make the biggest impact on the progress of medical research. Three major

themes emerged: New Pathways to Discoveries, Research Teams of the Future, and Re-Engineering the Clinical Research Enterprise. All Roadmap initiatives are open for competition to researchers from all fields – the initiatives are not disease focused.

The New Pathways to Discoveries Roadmap theme encompasses several basic initiatives important to all of biomedicine. NIMH shares the lead with the National Human Genome Research Institute on one such initiative: Molecular Libraries. This effort is designed to hasten the discovery process for new molecular tools, drugs, imaging probes, and scientific breakthroughs. Detailed information on the Molecular Libraries Initiative is available at <a href="http://nihroadmap.nih.gov/molecularlibraries/index.asp">http://nihroadmap.nih.gov/molecularlibraries/index.asp</a>. Dr. Akil described other Roadmap initiatives including the National Electronics Clinical Trials and Research Network (NECTAR), a part of Re-Engineering of the Clinical Research Enterprise.



Drs. Santiago-Rivera, Savage, and Gonzales converse during a break

This initiative aims to develop informatics tools that can link existing and new research networks so that clinical studies can be conducted more effectively and with more power, and will facilitate the translation of clinical research to practice. Another part of the roadmap – the NIH Director's Pioneer Award – is intended to support individuals with novel ideas that are potentially groundbreaking and might otherwise be considered too risky to fund. More information on the Pioneer Awards is available at Dr. Akil encouraged participants to inform members

http://nihroadmap.nih.gov/pioneer/. Dr. Akil encouraged participants to inform members of their organizations about the NIH Roadmap and the funding opportunities it offers by checking the NIH Roadmap Web site at <a href="http://nihroadmap.nih.gov/">http://nihroadmap.nih.gov/</a>.

#### Presentations of NIMH Division Directors

Following the lunch discussion and networking breaks, the NIMH division directors described some of the initiatives, plans and priorities of their respective divisions under the reorganization. A comprehensive description of the new divisions is available on the NIMH Web site at http://www.nimh.nih.gov/researchfunding/reorganization.cfm.

Increasing collaboration across the five new NIMH divisions is a priority for NIMH, said Dr. Insel. For example, the Institute has a series of cross-divisional workgroups designed to increase collaboration in areas such as prevention and scientific technology.

Dr. Wayne S. Fenton, Director of the Division of Adult Translational Research and Treatment Development (DATR) focused his talk on the following broad priority areas of his division: developing and testing more effective treatments for mental illnesses; evaluating existing treatments; and finding biological markers for mental illnesses. He also shared a "wish list" of scientific discoveries that fall under these priority areas such as: (1) finding a new therapy to address the cognitive deficits of schizophrenia, (2) finding a successful, new treatment to lengthen remission of symptoms in bipolar disorder, (3) finding a test to predict risk of schizophrenia in an adolescent who has become withdrawn and whose grades have dropped in the 11<sup>th</sup> grade, and (4) finding a

test that would predict after one dose an individual patient's response to an SSRI (selective serotonin reuptake inhibitor) at 12 weeks.

Dr. Fenton described other priority areas within adult translational research such as developing the following: diagnostic tests for specific mental illnesses; models to predict who will develop side effects of psychotropic medications; and methods to prevent or lessen these side effects. A full description of DATR's mission, areas of high priority, and research interests is available at <a href="http://www.nimh.nih.gov/datr/datr.cfm">http://www.nimh.nih.gov/datr/datr.cfm</a>.

Dr. Susan Swedo, Director of the Division of Pediatric Translational Research and Treatment Development (DPTR), described her division as "truly translational between basic and applied clinical research." She asked Coalition participants to encourage their members to contact her program staff with questions about their grant applications and also recommended participants use the NIMH Web site as a resource to locate the program officer most relevant to their research interests.

Developing new therapies for serious mental disorders (such as eating disorders, anxiety disorders, post traumatic stress disorder in children, and childhood depression) is one high priority area for DPTR, said Dr. Swedo. She also shared two urgent public health issues for children and adolescents: suicide and autism. A full description of DPTR supported research and areas of high priority are available at <a href="http://www.nimh.nih.gov/dptr/dptr.cfm">http://www.nimh.nih.gov/dptr/dptr.cfm</a>.

Dr. Michael Huerta, Associate Director of the Division of Neuroscience and Basic Behavioral Science (DNBBS) spoke on behalf of the Division Director. DNBBS has the responsibility – in cooperation with other components of the Institute and the research community – to ensure that relevant basic science knowledge is utilized to create improved diagnosis, treatment, and prevention of mental and behavioral disorders. Developing neurobiological models and tools to understand changes in mood and thinking that occur during life transition periods such as pregnancy, adolescence, menopause, and aging is one high priority area for DNBBS. Understanding the mechanisms (biological, genetic, and behavioral) of complex social behavior is another priority area. DNBBS is committed to training scientists to work across disciplines and to provide an integrated view of the brain and behavior. A comprehensive summary of research priority areas supported by DNBBS is available on the NIMH Website at <a href="http://www.nimh.nih.gov/dnbbs/dnbbs.cfm">http://www.nimh.nih.gov/dnbbs/dnbbs.cfm</a>.

Dr. Ellen L. Stover, Director of the Division of AIDS and Health and Behavior Research (DAHBR) highlighted several high priority areas within her division including: (1) supporting innovative HIV prevention research aimed at improving adherence to prevention behaviors, (2) identifying behavioral and social processes in stigma and discrimination associated with mental illness, and (3) developing effective programs and approaches to reduce or eliminate stigma. A more detailed description of research activities supported by DAHBR is available on the NIMH Website at <a href="http://www.nimh.nih.gov/dahbr/dahbr.cfm">http://www.nimh.nih.gov/dahbr/dahbr.cfm</a>.

Dr. Junius J. Gonzales, Acting Director of the Division of Services and Intervention Research (DSIR) succinctly described his division's mission as science for practice and science for the public. Testing the effectiveness of interventions in community and practice settings; conducting dissemination and implementation research; supporting research in diverse mental health settings; and improving the detection, assessment, interventions, and services for suicidality in all age groups are examples of high priority areas for DSIR. Dr. Gonzales outlined some of the challenges to implementing evidence-based practice in real world settings: stigma, access to services, trust, and organizational structure. He also gave examples of how NIMH funded evidence-based practice is addressing these challenges. A complete description of DSIR's research priorities is available at <a href="http://www.nimh.nih.gov/dsir/dsir.cfm">http://www.nimh.nih.gov/dsir/dsir.cfm</a>.

### **Discussion**



**NIMH Coalition for Research Progress Attendees** 

Topics discussed throughout the day included the following: the next generation of scientists, addressing health disparities, clinical trials recruitment, applying research to real world settings, and evaluating the outcomes of NIH grants. The crisis of ensuring that young people continue to choose careers in science was a major concern among participants. They were distressed to learn that the average age at which an NIH investigator receives his or

her first R01 grant is 43 and that the average age of NIMH funded investigators is 50. Dr. Stephen Heinemann from The Society for Neuroscience said "this really represents a major failure. The idea that our young scientists can't become independent through an R01 grant until 43 years of age when they are past the period when most of us are the most innovative. I remember when I started out, I was in my 30s. I got my first grant when I was 30, and that was true for many of my colleagues at the Salk Institute. I think we need a more radical approach to get that 43 down to somewhere in the early 30s. I'm not sure how to do it."

Dr. Mark Riddle from the American Academy of Child and Adolescent Psychiatry shared his concerns about the difficulty of recruiting children into research studies. Dr. Della Hann, Director of the NIMH Office of Science Policy and Program Planning, suggested that participants encourage members of their societies to conduct grassroots efforts by working with their local communities, schools, churches, and other groups to help educate community leaders about the value of participating in research. Local leaders frequently are primary gatekeepers in terms of recruiting research subjects. Therefore explaining the value of research to them and encouraging people to be part of that research effort is important, and should help recruitment and retention in research.



Dr. Paula Trzepacz and Others

Dr. James Scully, Medical Director of the American Psychiatric Association asked how NIH measures and evaluates outcomes of grants and how these outcomes are defined. Dr. Insel responded that Dr. Zerhouni, the director of NIH, is addressing this question by developing a new office, called OPASI (the Office of Portfolio Analysis and Strategic Initiatives) to evaluate the NIH research portfolio. "We need to get a handle on how much is invested in different areas and

how these investments are tied to the burden of illness. OPASI will develop and utilize a knowledge management approach so that we can find a way to quickly survey the portfolio and the outcomes of NIH and NIMH research," he said.

Dr. Joan Levy Zlotnik, Executive Director of the Institute for the Advancement of Social Work Research, encouraged NIMH staff to include diverse populations in research studies and acknowledged that barriers related to language, literacy, transportation, and other issues make diverse recruitment difficult. She also said it was important to include social workers in NIH Roadmap initiatives. Dr. Insel agreed and added that many people with mental disorders are more difficult to reach because they end up in the criminal justice system, nursing homes, schools, or are homeless.

Dr. James Savage Jr., President of the Association of Black Psychologists announced that the first international Congress on Licensure, Certification, and Proficiency in Black Psychology to be held August 9-14 in Miami Beach, Florida. He invited all Coalition participants to attend. He also asked how the roadmap relates to mental health disparities



Dr. James Savage engages speakers

within the black community. Since the Roadmap does not address individual diseases or health disparities, Dr. Richard Nakamura, Deputy Director of the NIMH, responded by addressing heath disparities for all underrepresented populations: "NIMH has set up a new set of guidelines to ensure that our clinical populations are diverse. We have been working with our Council to try and increase the number of scientists on staff and in our intramural research program. So we are paying attention to this issue

with a specific goal in mind of reducing health disparities."

Dr. Insel ended the meeting by saying "clearly we are in transition; we are changing in ways to try to keep up with the science, and also trying to respond to the changes in our fiscal reality. So this is a moving target, and we're always interested in working with all of you to try to make sure that we serve not only the American public, but the people who you report to in your various organizations." Coalition participants appeared willing to work together to meet some of the challenges that were posed throughout the day.





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