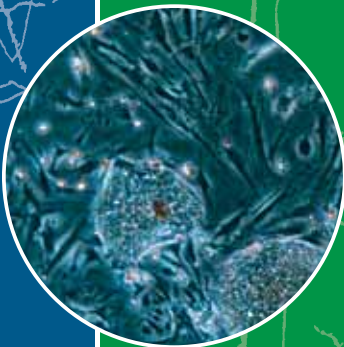


2009 ANNUAL REPORT



FORUM ON NEUROSCIENCE AND NERVOUS SYSTEM DISORDERS

BOARD ON
HEALTH
SCIENCES
POLICY

MESSAGE FROM THE CHAIR

The Institute of Medicine (IOM) established the Forum on Neuroscience and Nervous System Disorders to engage neuroscience leaders from private sector sponsors of biomedical and clinical research, federal agencies sponsoring and regulating basic biomedical and clinical research, private foundations, the academic community, and other consumers.



Alan Leshner

Through its quarterly meetings and public workshops, the Forum has provided a venue where its members, other leaders from the neurosciences, and members of the public can have candid discussions about issues of mutual interest. We believe these discussions enhance understanding of research and clinical issues associated with the nervous system among the scientific community and the general public, and provide a mechanism to foster partnerships among stakeholders. This was exemplified in 2009 when the Forum collaborated with the Uganda National Academy of Sciences to host an international workshop on mental, neurological, and substance use disorders. The workshop, a true collaboration across continents, brought together a wide range of stakeholders to discuss important topics that we hope will move to the fore issues related to these disorders that plague so many individuals in this region.

The Forum undertook a broad set of initiatives in 2009 and, in 2010, the Forum plans to host a variety of activities, including workshops examining a broad range of topics such as:

- Sex differences and implications for translational neuroscience research
- Glutamate-related biomarkers in schizophrenia drug development
- Translational research for clinical neuroscience applications
- International animal law and the neuroscience research enterprise

We look forward to another productive and interesting year for the Forum.

A handwritten signature in black ink, appearing to read 'Alan Leshner', with a long, sweeping horizontal line extending to the right.

Alan Leshner
Chair

REFLECTING BACK FORUM ACTIVITIES IN 2009

Mental, Neurological, and Substance Use Disorders in sub-Saharan Africa

In August, the Forum, in collaboration with the Forum on Health and Nutrition of the Uganda National Academy of Sciences, convened an international workshop in Kampala, Uganda on quality of care issues for mental, neurological, and substance use disorders in sub-Saharan Africa. In light of the economic limitation of most sub-Saharan African countries, the workshop set out to explore areas where policies might improve care, opportunities that could be used to better ensure continuity of care and sustainability within a country's health care system, and resources that are presently available or could be made available to aid in implementation of treatments and prevention projects. Participants emphasized the need for more action, investment, and commitment by all stakeholders, national and international. The summary of the workshop will be released in Spring 2010 and will be found on the Forum's website (www.iom.edu/neuroforum).

2009 SfN Annual Meeting: Social Issues Roundtable

The Forum organized the Social Issues Roundtable at the 2009 meeting of the Society for Neuroscience. The purpose of this discussion was to begin to engage neuroscientists in a dialogue about the ethical and social implications of research findings as the field continues to find the scientific underpinnings of what "makes" us human. For example, new insights into the nature of the brain and mind can have great implications for such concepts as the self, soul, free will, or what it means to be human. Speakers in the roundtable discussed both the nature of those issues, and ways the scientific community can best engage the public, find common ground, and minimize the tension that could arise between the field and the rest of society.

CNS Clinical Trials: Suicidality and Data Collection

The Forum hosted a workshop in June in response to an emerging need to examine a recent Food and Drug Administration policy that requires all clinical protocols for products developed in the Division of Psychiatry Products of the FDA, whatever the indication, to include a prospective assessment for suicidality. Workshop participants examined and discussed the state of currently available data, data analysis methods, and the future of potential partnerships that will be or are being impacted by this announcement. In addition to real-time datasets that are open to academics, industry, and other researchers, participants identified partnering with the proper stakeholders as good first steps. A workshop summary will be available in early 2010 through the Forum's website.

Neuroscience and Animals in Research

In November, the Forum brought together biomedical and veterinary research scientists, legal scholars and practitioners of law regarding the use of animals ("animal law"), and ethicists to engage in meaningful dialogue about the emergence of animal law and practice and its relationship to the medical and life sciences research enterprise. This meeting was co-hosted with the National Research Council's Committee on Science, Technology, and Law. Animal law is a fast-growing area of concentration for many students at leading American law schools. The debate over the legal and social status of non-human animals is not restricted to just the United States, however, as several countries are re-examining the use of animals in research and some are deciding future restrictions for certain animals. The meeting sparked interest in moving beyond United States borders and engaging in a dialogue with international stakeholders in order to understand the impact and future of animal use regulations in Europe and the United States.

LOOKING AHEAD FORUM ACTIVITIES FOR 2010



Sex Differences and Implications for Translational Neuroscience Research

The Forum is hosting a workshop to explore the key principles and strategies used by basic translational researchers and industry in studying sex differences in the neurosciences for the therapy development pathway. Speakers will outline the public health importance of studying sex difference in the nervous system, in health and sickness, including the potential application to healthcare delivery. A large emphasis will be on discussing the scientific principles that should be considered when designing pre-clinical experiments that will examine sex differences, including strategies to bridge between pre-clinical and clinical studies; when and how sex differences should and should not be considered; and the key principles and strategies used by academic clinicians to effectively utilize basic research for pre-clinical and clinical application and study.

Facilitating Translational Research for Clinical Neuroscience Applications

Individuals from pharmaceutical and diagnostic industry, academia, and the National Institutes of Health will join members of the Forum in a meeting on translational research for clinical neuroscience applications. The meeting will stimulate discussions aimed at improving the understanding between what pharmaceutical and diagnostic developers are looking for and how academic researchers can best contribute to the partnership in a meaningful way in order to improve the neuroscience translational research pipeline. Discussions and presentations will also focus on how to bridge the interface between basic and drug/diagnostic development researchers in the neurosciences.

Glutamate-related Biomarkers for Disorders of the Nervous System

Identification of reliable biomarkers reflecting glutamatergic dysfunction may permit selection of patients who will gain greater benefit from glutamate-directed treatments. Present medications, while advanced over the initial compounds, nevertheless provide unsatisfactory treatment for individuals with a range of central nervous system disorders with persistent negative symptoms, significant cognitive deficits, and poor function, characteristics associated with glutamatergic dysfunction by emerging evidence. The goal of the workshop is to gain an enhanced understanding of the role of biomarkers, as well as to identify bottlenecks in biomarker development and implementation, in clinical drug development for schizophrenia.

International Laws Regarding the Use of Animals and the Neuroscience Research Enterprise

The Forum, in conjunction with the National Research Council's Committee on Science, Technology, and Law and the Institute for Laboratory Animal Research, will plan and host a workshop that will bring together representatives from Europe and the United States to examine laws, directives, and policies designed to regulate the use of non-human animals in the medical research enterprise, including a particular focus on the neurosciences. Specifically, participants will identify and discuss current animal use regulations in Europe and the United States; examine the implications of current policies on the research enterprise, including the impact of disparate policies; discuss developments in law school curricula, animal law practice, and activity in the courts that may affect the use of animals in research; explore the reasons for the establishment of specific regulations; and, discuss opportunities for harmonization of regulations across jurisdictions.



CNS Clinical Trials: Suicidality and Data Collection workshop participants, June 2009

WORKING GROUPS

Working groups are established and maintained by interested members and are open to all membership. The Forum’s working groups engage in regular discussions, usually via teleconferences, on topics of interest to that group. Workshop topics often originate from working groups and are organized by an independently appointed workshop planning committee.

Translational Neuroscience

The translational neuroscience working group was established to focus on identifying areas of synergy where public and private sector stakeholders can partner to improve the efficiency and effectiveness of drug discovery and development for neurological and mental disorders. The group is currently developing a workshop aimed at improving the understanding between what pharmaceutical and diagnostic developers are looking for and how academic researchers can best contribute to the partnership in a meaningful way in order to improve the neuroscience translational research pipeline.

Social Issues in Neuroscience

A working group was established to engage neuroscientists in a dialogue about the critical time neuroscience is entering with regard to ethical and social implications of research findings as the field continues to find the scientific underpinnings of what “makes” us human. The group is continuing efforts in this area by hosting roundtable discussions attended by a large number of interested stakeholders, such as at the Society for Neuroscience annual meetings.

Grand Challenges in Neuroscience

This working group continues to follow up on the efforts set out by the workshop on grand challenges in neuroscience. The working group is helping to facilitate a strategic plan for federal research and coordination—engaging the community in identifying and prioritizing the opportunities, evaluating social and ethical impacts, and determining the resources that will be required.



Mental Health Nurse, Budima Health Center, Jinja, Uganda, August 2009



Steve Hyman welcomes participants to the workshop on Mental, Neurological, and Substance Use Disorders in sub-Saharan Africa, August 2009

FORUM SPONSORSHIP

Financial support for the Forum is derived from federal agencies, patient advocacy organizations, industry, and a non-profit membership society.

- Alzheimer’s Association

AstraZeneca Pharmaceuticals

CeNeRx Biopharma

Eli Lilly and Company

GE Healthcare

GlaxoSmithKline

Johnson & Johnson Pharmaceuticals

Lundbeck Research USA, Inc.

Merck Research Laboratories

The Michael J. Fox Foundation for Parkinson’s Research

National Eye Institute

National Institute on Aging
- National Institute on Alcohol Abuse and Alcoholism

National Institute on Drug Abuse

National Institutes of Health Neuroscience Blueprint

National Institute of Mental Health

National Institute of Neurological Disorders and Stroke

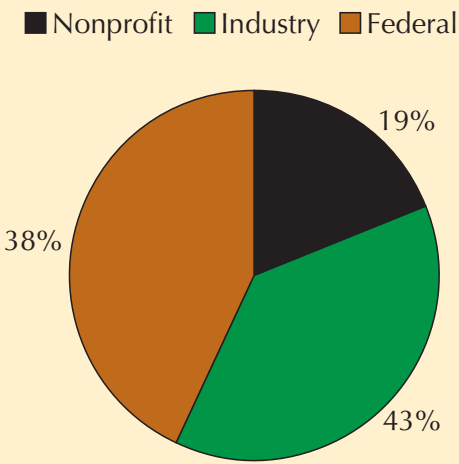
National Multiple Sclerosis Society

National Science Foundation

Society for Neuroscience

Wyeth Research

Neuroscience Forum Funding: 2009



FORUM MEMBERSHIP

(AS OF DECEMBER 2009)

Alan Leshner (Chair)

American Association for the Advancement
of Science

Huda Akil

University of Michigan, Ann Arbor

Marc Barlow

GE Healthcare

Mark Bear

Massachusetts Institute of Technology

Daniel Burch

CeNeRx Biopharma

Dennis Choi

Emory University

Timothy Coetzee

FastForward of the National Multiple
Sclerosis Society

David Cohen

Columbia University, Society for
Neuroscience representative

Richard Frank

GE Healthcare

John Griffin

Johns Hopkins University

Richard Hodes

National Institute on Aging

Katie Hood

The Michael J. Fox Foundation for
Parkinson's Research

Steven Hyman

Harvard University

Thomas Insel

National Institute of Mental Health

Story Landis

National Institute of Neurological Disorders
and Stroke

Husseini Manji

Johnson & Johnson Pharmaceuticals

Eve Marder

Brandeis University

Jonathan Moreno

University of Pennsylvania

Michael Oberdorfer

National Eye Institute, NIH Neuroscience
Blueprint representative

Kathie Olsen

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Atul Pande

GlaxoSmithKline

Menelas Pangalos

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Alzheimer's Association

Nora Volkow

National Institute on Drug Abuse

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Alcoholism

Frank Yocca

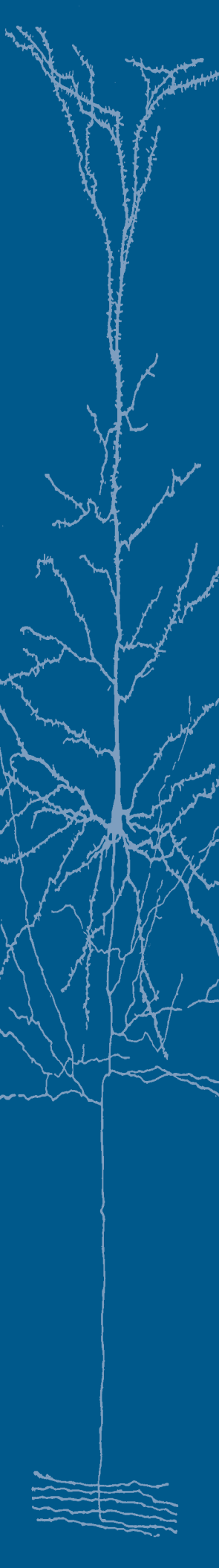
AstraZeneca Pharmaceuticals

Stevin Zorn

Lundbeck Research USA, Inc.

Charles Zorumski

Washington University, St. Louis



About the Neuroscience Forum

The IOM in 2006 established the Forum on Neuroscience and Nervous System Disorders. The Forum is designed to provide its members with a venue for exchanging information, sharing individual views, and allowing a structured opportunity for dialogue and discussion while scrutinizing critical and possibly contentious scientific and policy issues. Representatives from government, industry, academia, patient advocacy organizations, and other interested parties serve as Forum members. It convenes three times a year to confer on subject areas of mutual interest and concern. At its meetings, the Forum identifies and discusses emerging scientific and policy issues related to basic neuroscience and nervous system disorders, as well as effective clinical interventions and policy options. The Forum also sponsors workshops (symposia) as an additional mechanism for informing the membership of the Forum, other relevant stakeholders, and the public. Information about past or upcoming meetings is available at the Forum's website, www.iom.edu/neuroforum.

About the Institute of Medicine

The Institute of Medicine serves as adviser to the nation to improve health. Established in 1970 under the charter of the National Academy of Sciences, the Institute of Medicine provides independent, objective, evidence-based advice to policymakers, health professionals, the private sector, and the public. The mission of the Institute of Medicine embraces the health of people everywhere.

IOM Staff

Bruce Altevogt, Ph.D.

Project Director

Sarah Hanson

Associate Program Officer

Lora Taylor

Senior Project Assistant

IOM Board on Health Sciences Policy

Andrew M. Pope, Ph.D.

Director

THE NATIONAL ACADEMIES

Advisers to the Nation on Science, Engineering, and Medicine

For additional information on the Forum on Neuroscience and Nervous System Disorders visit the Forum's website at www.iom.edu/neuroforum, or call Bruce Altevogt at (202) 334-3984.