



One Mind

For Research

“Molecules to Minds”

Key Findings of U.S. House Oversight & Government Reform Hearing
September, 2010

- Disorders of brain and behavior among humankind’s greatest disease burdens across lifespan
- Disturbing trend of declining investment in R&D of neuroscience & CNS drugs by U.S. pharmaceutical companies
- Intellectual property concerns prohibit sharing of vital pre-competitive research data
- NIH Blueprint for Neuroscience underfunded by \$450 million, does not include DOD & VA

- Lack of common data elements and standardized, integrated clinical data for broad sharing
- Discovery research funding for neuroscience underfunded at a national level compared with other disease groups
- Growing necessity for private philanthropy and advocacy community to participate in basic and translational research
- Sustained national commitment to brain and CNS research will have transformative impact on health of society

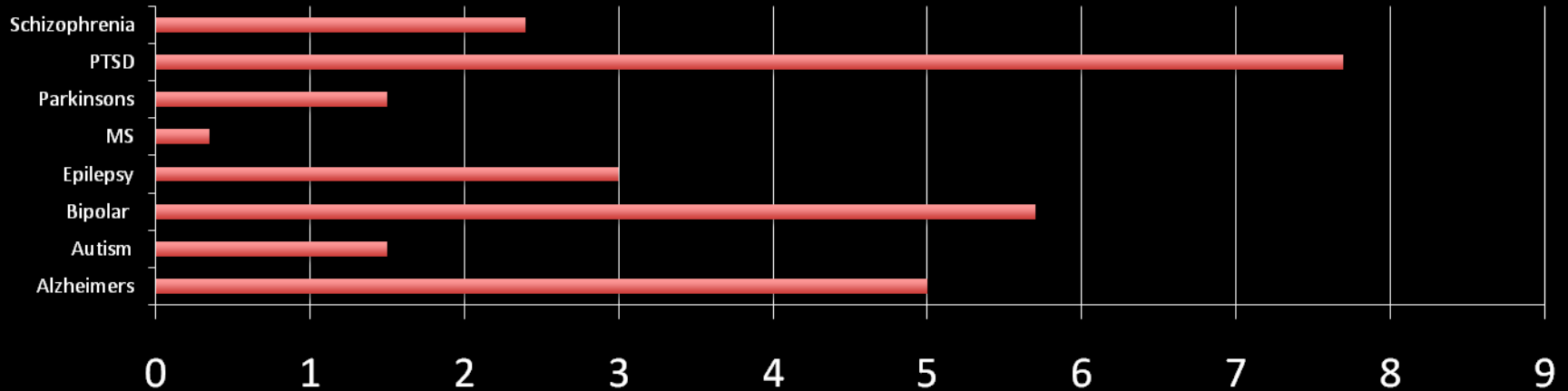
Emergency Science

- > 400,000 American soldiers and veterans suffering from Traumatic Brain Injury (TBI) and Post-Traumatic Stress Disorder (PTSD)
- Individuals with TBI face increased and earlier-onset instances of Alzheimer's Disease, Parkinson's Disease, A.L.S., other neurological disorders
- > 1 billion individuals worldwide battling a brain disorder
- Estimated 26.2 percent of Americans suffer from a diagnosable mental illness in a given year
- Over 34,000 suicides per year in the U.S., > 90% due to mental illness
- Annual cost of Alzheimer's disease care alone in U.S. over \$100 billion; 400,000 new cases of Alzheimer's will be diagnosed this year



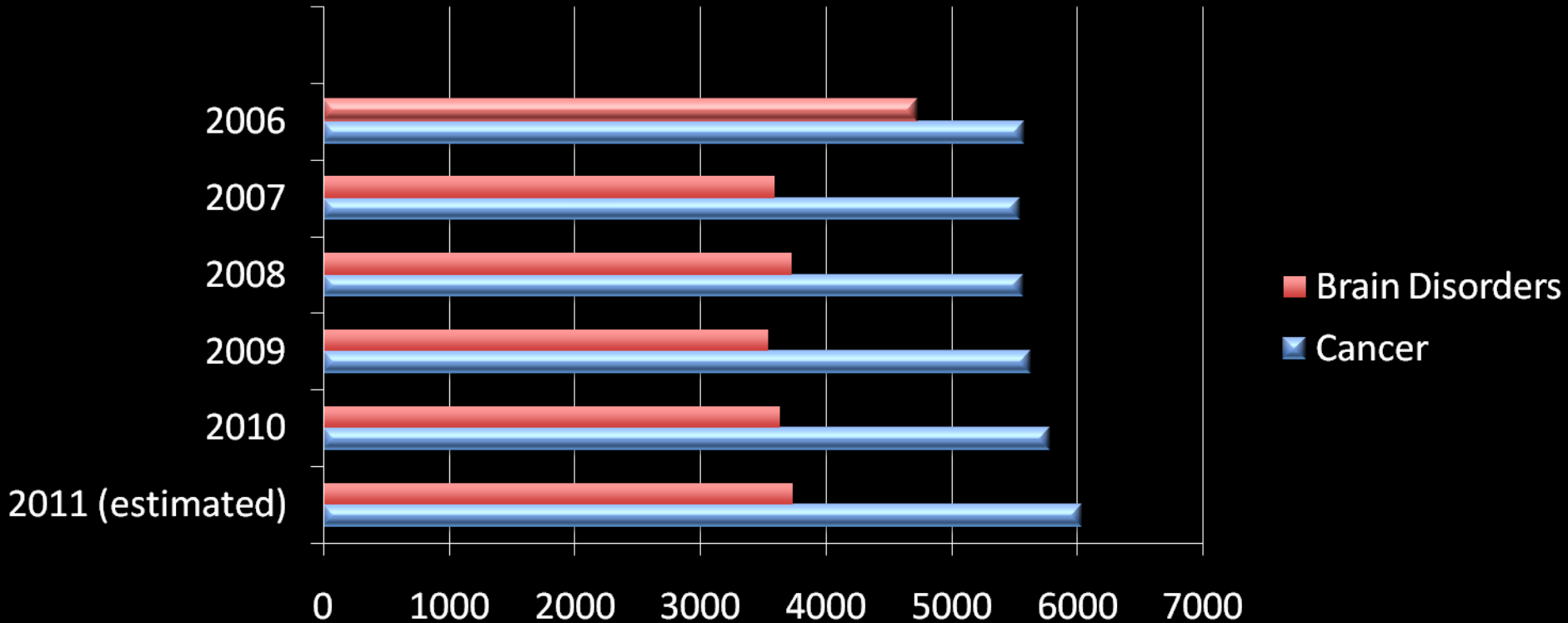
1 in 3 Americans lives with neurological or psychiatric disorder

Instance of Common Disorders in the United States
(in millions)



Annual NIH Research Spending (in millions)

Brain Disorders/Cancer



A Scientific Plan

“Based on relatively recent advances in knowledge and technology, the neuroscience field is on the cusp of revolutionary discoveries that can open new avenues for scientific understanding as well as for better human health and functioning. It is crucial that this effort begin with a thorough evaluation of opportunities for major advances, and a diverse group of leading scientists and physicians is working along with NIH scientific leaders to identify the most promising avenues for further investigation and progress.”

Dr. Steven Hyman

Provost, Harvard University

Professor of Neurobiology, Harvard Medical School

Chairman, Scientific Planning Committee

Scientific Planning Committee

Dr. Steven Hyman, Chair
Provost, Harvard University
Professor of Neurobiology, Harvard University

NIH Institute Directors

Dr. Richard Hodes, National Institute on Aging
Dr. Thomas Insel, National Institute of Mental Health
Dr. Story Landis, National Institute of Neurological Disorders & Stroke
Dr. Nora Volkow, National Institute on Drug Abuse

Scientific Planning Committee Theme Chairs

Cellular/Molecular Neuroscience

Dr. Susan Amara
President, Society for Neuroscience
Detre Professor & Chair of Neurobiology
University of Pittsburgh

Development, Plasticity, Repair

Dr. Moses Chao
Professor of Cell Biology, Physiology, Neuroscience, &
Psychiatry
New York University

Behavioral, Systems, Cognitive Neuroscience

Dr. Marina Picciotto
Charles B.G. Murphy Professor of Psychiatry
Yale University

Neurobiology of Disease, Etiology, Pathophysiology

Dr. Frances Jensen, Professor of Neurology
Harvard University

Clinical Neuroscience, Psychiatry, Addictions

Dr. Jerrold Rosenbaum
Chief of Psychiatry, Massachusetts General Hospital
Dr. Maurizio Fava
Director, Massachusetts General Hospital Depression Clinical Research Program
Professor of Psychiatry, Harvard Medical School

Clinical Neuroscience, Neurology, Neurosurgery

Dr. Anne Young
Chief of Neurology Services
Massachusetts General Hospital
Founder & Scientific Director
Massachusetts General Hospital Institute for
Neurodegenerative Disease

Scientific Advisors

- Dr. Huda Akil, Director, Molecular Behavioral Neuroscience Institute, University of Michigan
- Dr. Gene Block, Chancellor, UCLA
- Dr. Eric Kandel, HHMI Investigator, Columbia University
- Dr. Jeffrey Lieberman, Lawrence C. Kolb Professor & Chairman of Psychiatry, Columbia University
- Dr. Hussein Manji, Global Therapeutics Director, Neuroscience, Johnson & Johnson Pharmaceuticals
- Dr. Eric Nestler, Chief of Neuroscience, Mt. Sinai Medical Center, President, American College of Neuropsychopharmacology
- Dr. Steven Paul, Director of Research, Weill Cornell
- Dr. Stanley Pruisner, Director, UCSF Institute for Neurodegenerative Disease
- Dr. Michael Rogawski, Chairman, Department of Neurology, University of California Davis
- Dr. Edward Scolnick, Director, Psychiatric Disease Program, MIT Broad Institute
- Dr. Bruce W. Stillman, President, Cold Spring Harbor Laboratory

10 Year National Neuroscience Research Collaborative: A Roadmap



150 Large-Scale Projects & Opportunities in

- genetics
- epigenetics
- genomics
- connectomics
- proteomics
- transgenics
- sequencing
- epidemiology
- cellular taxonomy
- pluripotent stem cells
- imaging technology

One Mind Forum for neuroscience research

The One Mind Forum is dedicated to enhancing state of neuroscience research with partners in

- government
- scientific community
- advocates
- business
- philanthropy

May 23rd & May 24th, 2011



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***ONE MIND:
A PUBLIC FACING CAMPAIGN***

- Official campaign kick-off May 25th, 2011
- Unified campaign for the American public to support brain research through individual donations and political advocacy
- Targeted private campaign to philanthropists/ members of Warren Buffet philanthropy challenge
- Targeted campaign for corporate funding of neuroscience research

Public Private Partnership for Neuroscience Research

A mechanism for collaborative precompetitive research and basic science between pharmaceutical and biotechnology industries, government, and philanthropy to break down existing silos and fund rapid progress:

Similar successful models exist in other industries:

- IMEC for nanotechnology
- Sematech for semiconductor industry
- CTMM for prostate cancer research



Partners

- AARP
- American Brain Coalition
- American College of Neuropsychopharmacology
- BringChange2Mind
- Brookings
- The Carter Center Mental Health Program
- American Council for American Medical Innovation
- Dana Alliance
- International Mental Health Research Organization
- Institute of Medicine Forum on Neuroscience
- JED Foundation
- National Foundation for Mental Health
- Research America
- Society for Neuroscience
- Sports Legacy Institute



The Moonshot: A Guiding Principle

⑧ Because that goal will serve to organize and measure the best of our energies and skills, because that challenge is one we are willing to accept, one we are unwilling to postpone, and one we intend to win.”

- President John F. Kennedy

