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Dear Friends:



Welcome to the inaugural World Medical Innovation Forum. Powerful new technologies, with parallel breakthroughs in informatics, genetics and the management of large populations have the potential to profoundly improve health care in the United States and around the globe. Ensuring that patients get the full benefit from those technologies and approaches will require an enhanced

commitment to collaborative innovation and its application in the delivery of care.

We come together over the next three days to further our understanding of new technologies for treating and managing neurologic and psychiatric disease and, through that discussion, assess the overall state of healthcare innovation during a period of transformation. The World Medical Innovation Forum was established to reaffirm the importance of collaborative innovation – academia, industry and government working jointly to push back historic boundaries. Our goal is to provide the insights and tools needed to deliver the best and most effective care to every patient during this time of change. We want attendees to gain actionable insights that they can take back with them to their positions throughout the medical innovation community. Thank you for joining us.

We are grateful to the more than 100 senior executives, investors, clinicians and investigators who interrupted their busy schedules to participate in the Forum, many traveling from a great distance. Hundreds of industry, investment, government, clinical and research leaders are also in attendance. We are pleased that so many of our key faculty from Brigham and Women's Hospital, Massachusetts General Hospital, McLean Hospital and Spaulding Rehabilitation Network are in attendance. They and their colleagues conduct nearly \$1.5 billion in research annually, which includes funding that drives historic advancements in neurological and psychiatric care.

I would also like to thank the many sponsors representing some of the most innovative companies in healthcare. Without their support, this World Forum would not have been possible. Thank you to the Steering Committee and Planning Team for their outstanding contributions and especially to Anne Klibanski, MD, Chief Academic Officer, and Chris Coburn, Vice President, Innovation, for the vision, resourcefulness and commitment that has resulted in the 2015 World Medical Innovation Forum. We hope that many of you will join us here at the Westin Copley next year, April 25-27, 2016, when we will reconvene the World Medical Innovation Forum and focus on the newest technologies and challenges in the diagnosis, treatment and management of cancer.

David Torchiana, MD

CEO, Partners HealthCare

We Welcome You.

Dear Medical Innovation Leader,

This is an unprecedented era in neuroscience. Never before has the pipeline of novel technologies and therapies been so promising. At the same time, never have the human and economic burdens of neurological disease been so large.

Alzheimer's disease, dementia, depression, epilepsy, multiple sclerosis, Parkinson's disease, and other diseases create an almost incalculable, chronic burden on patients, their families, and society. More than 1 million Americans live with Parkinson's disease; an estimated 400,000 struggle with multiple sclerosis. It is estimated that more than 5 million Americans may suffer from Alzheimer's disease. The burden of depression, schizophrenia and other mental illnesses in the United States is immense to patients and their families and costs society more than \$700 billion a year.

This inaugural World Medical Innovation Forum highlights emerging successes in neurological and psychiatric diseases, and explores their clinical context and impact. Many believe a threshold combining new genomic insights, powerful new therapies, diagnostic tools and electronic systems is finally being crossed. Over the next three days, the clinicians, scientists, executives and investors shaping the future of the field will explore the most promising technology and care in this field.

This Forum is brought to you by Innovation, the arm of Partners HealthCare charged with the commercial application of the breakthroughs of its faculty and staff into patient benefiting technologies, therapeutics, and procedures.

We would like to express our deep appreciation to the many individuals who made this Forum possible. We are particularly grateful to our speakers-including CEOs and top executives of global medical companies, investors, media leaders, and scientific experts—for sharing their substantial expertise and unique perspectives. Generous support provided by our leading sponsors—Biogen, Novartis, Amgen, Boston Scientific, General Electric, MacDougall Biomedical Communications, AstraZeneca, Genzyme, the Massachusetts Life Sciences Center, Polaris, Vertex, HeatlhXL, and Yorn—made this initiative world class.

Finally, we want to recognize the Steering Committee whose insights and standing in the field made the Forum possible. We are especially grateful to the Planning Team whose dedicated work over 18 busy months shaped every aspect of this new undertaking.

Enjoy the Forum!



Christopher Coburn Vice President, Innovation, Partners HealthCare





Chief Academic Officer,

Partners HealthCare





Caring Deeply. Changing Lives.™

As a leader in neurodegenerative disease research and development, we are proud to sponsor the inaugural World Medical Innovation Forum.

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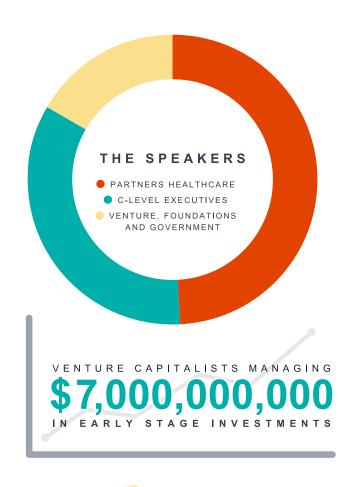


We have research programs in autism, schizophrenia, bipolar disorder, Parkinson's disease, alzheimer's and frontotemporal dementias.

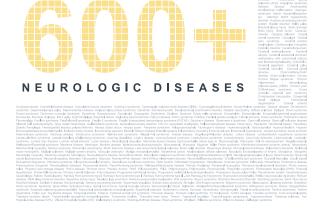
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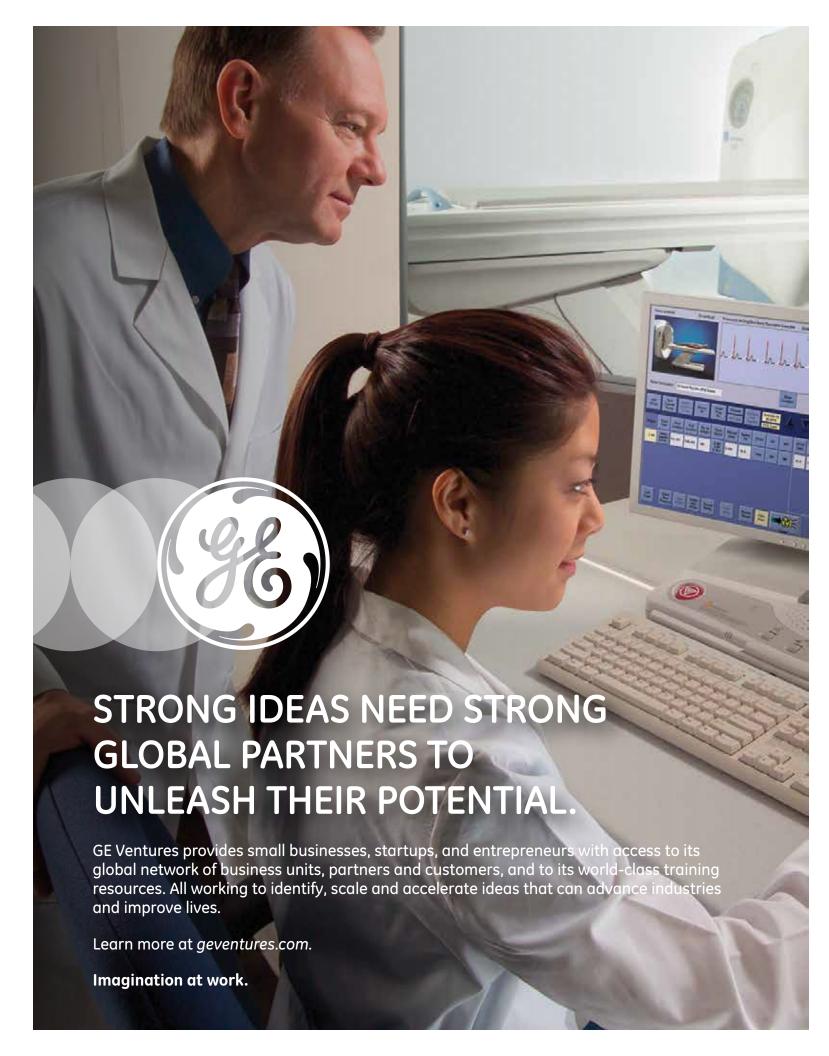
The Numbers













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The Innovation Advisory Board provides Partners HealthCare with independent guidance on commercial strategy, market potential and collaborative opportunities

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The Commercialization Council represents Partners research community

—its innovators, translational investigators and leadership



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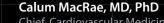
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Founder and Director, Partners HealthCare Multiple Sclerosis Center; Robert L. Kroc Professor of Neurology, Harvard Medical School







Excellence in the Neurosciences

Breakthrough research throughout Partners HealthCare – including the Massachusetts General Hospital, Brigham and Women's Hospital, McLean Hospital and Spaulding Rehabilitation Network – is redefining how healthcare is delivered. From neuroinformatic analysis of big data to cutting-edge gene-editing technology, the research in progress at Partners HealthCare is truly game changing.

Partners HealthCare innovators are finding ways to prevent, halt, and defeat neurological diseases ranging from Alzheimer's to multiple sclerosis. A few highlights of the work underway at the hospitals show the bright promise of the field.



Alzheimer's disease

Alzheimer's disease remains the only top 10 cause of death in the U.S. that cannot be prevented, stalled or cured. Research underway at Partners aims to change that for the estimated 5.3 million Americans who suffer from this relentless disease.

A novel technique unveiled last year by Rudy Tanzi, PhD, the Joseph P. and Rose F. Kennedy Professor of Child Neurology at MGH, promises to open the doorway for more vigorous drug discovery. Tanzi made worldwide headlines with reports of an 'Alzheimer's-in-a-dish' approach that replaces mouse models with a 3-D culture system. His group also evaluates the genetic underpinnings of the disease via the Alzheimer's Genome Project, which has identified several gene candidates to date.

At the BWH Center for Alzheimer Research and Treatment (CART), researchers refine new strategies for early diagnosis, including highly sensitive cognitive tests, biomarkers and neuroimaging techniques. Clinical trials of five promising therapeutics are currently in progress, alongside long-term observational studies to identify early symptoms of the disease.

Neuroimaging studies underway at McLean Hospital have uncovered important changes in the brain's white matter that appear to underlie Alzheimer's symptoms such as anxiety, disinhibition, sleep disturbances, and abnormal movement.

Finally, innovations in big data allow researchers to mine electronic health records for clues about the onset and progression of Alzheimer's disease. The NeuroDiscovery Center oversees a state-of-the-art repository of clinical information, part of the Partners HealthCare BioBANK, collected from thousands of neurology patients to test biomarker hypotheses and accelerate drug discovery for Alzheimer's disease, Parkinson's disease, and other neurological disorders.



PARTNERS HEALTHCARE,





Autism

The recent rise in autism spectrum diagnoses has triggered intense research into the disorder's mysterious causes. Identical twin studies suggest a strong genetic basis, but the exact mechanisms remain unclear.

Partners HealthCare researchers are making headway into understanding the biological basis of autism and enhancing the daily lives of these children and their caregivers.

In 2010, scientists at McLean Hospital introduced the world's first biologically based test for autism. The test identifies aberrant brain circuitry via MRI, and is 94% accurate at detecting individuals with high-functioning autism.

Earlier this year, Christopher Cowan, PhD, a McLean Hospital psychiatrist, reported that a gene previously linked to autism is responsible for connecting key brain regions involved in sensory processing. The findings may explain why individuals with autism have difficulty processing stimuli from touch, sound and vision.

At the MGH, the TRANSCEND imaging and body biomarker programs, directed by MGH researcher Martha Herbert, MD, PhD, aim to uncover the mechanisms of autism and other neurodevelopmental disorders. Short for Treatment Research and NeuroSCience Evaluation of Neurodevelopmental Disorders, TRANSCEND uses a number of tools, including MRI, EEG, and MEG to assess brain activity in children as they complete various tasks. A biomarker study searchers for metabolic and immune markers in urine and blood samples, hoping to shed light on the brain-body connection in people with autism.

Landmark discoveries on the genetic basis of autism and schizophrenia stem from ongoing work at the MGH Center for Human Genetic Research and the international Psychiatric Genomics Consortium. Leaders Mark Daly, PhD, James Gusella, PhD, and their collaborators have uncovered seven genes and a number of genetic changes implicated in the diseases. Daly's leadership role in the largest autism exome sequencing study to date has fueled discovery in this field.

Many of these studies are performed collaboratively with the Athinoula A. Martinos Center for Biomedical Imaging, founded in partnership with the MGH, Harvard and MIT. The Martinos Center uses a collaborative and multidisciplinary model to advance the entire spectrum of innovation – from the basic biosciences through to clinical investigation, development and application. Groundbreaking discoveries in the fields of brain mapping and tractography continue to emerge, benefiting patients with autism as well as neurodegenerative disorders such as Alzheimer's disease.

Depression

Major depression is among the most common and most debilitating of psychiatric disorders, affecting more than 350 million people globally. One million deaths are attributed to depression each year, according to the World Health Organization.

Effective treatments for depression exist, but predicting a patient's response to any given treatment is challenging. The McLean Laboratory for Translational and Affective Neuroscience aims to discover predictive factors that could usher in a new era of personalized medicine for people with depression. The lab relies on a variety of neuroimaging techniques, including EEG, fMRI, and PET to explore the specific patterns of brain activity that correlate with treatment response, depression severity, anxiety and other symptoms of depression.

Novel neurostimulation treatments for psychiatric disorders such as depression and bipolar disorder are under development by McLean spinoff Tal Medical, a clinical stage medical device company. Early human trials of the company's first-in-class and noninvasive technique, low-field magnetic stimulation (LFMS), have shown promise in treating major depressive disorder and bipolar depression.

In collaboration with Partners HealthCare researcher Maurizio Fava, MD, Vice Chairman of Psychiatry at MGH, biotech firm Neuralstem is in pursuit of stem cell therapies for major depressive disorder and other psychiatric disorders. Fava is currently overseeing a Phase II trial of Neuralstem's small molecule NSI-189. The company is also pursuing Phase III trials for a spinal cord stem cell treatment known as NSI-566 as a potential therapy for amyotrophic lateral sclerosis (ALS), ischemic stroke, spinal cord injury, and multiple sclerosis.

Finally, the BWH Department of Psychiatry is taking a multi-modal biomarker approach to the stratification of patient disease subtypes. These studies promise to advance current efforts to guide diagnostic classification and design targeted therapeutics.

PARTNERS HEALTHCARE

Epilepsy

Epilepsy is the fourth-most common neurological illness, following migraine, stroke and Alzheimer's disease. An estimated 1 in 26 Americans will be diagnosed with epilepsy at some point in their lives. The disease can have a devastating effect on quality of life. Specialized facilities and expertise at Partners HealthCare hospitals are raising the bar for epilepsy diagnosis and treatment.

At the intersection of psychiatry, neurology and anesthesia is Emad Eskandar, MD, a neurosurgeon at the MGH and the Charles Anthony Professor of Neurosciences at Harvard Medical School. A renowned expert in the use of deep brain stimulation for Parkinson's disease and dystonia, Eskandar's group is also advancing novel surgical treatments for epilepsy, traumatic brain injury and stroke. Eskandar's basic science research in primates and humans has revealed the multifaceted role of the basal ganglia, a region of the brain tied to learning, motivation, depression and drug addiction.

As Director of Stereotactic and Functional Neurosurgery at MGH, Eskandar plays a leadership role in the MGH Epilepsy Service – one of the only U.S. epilepsy centers equipped to examine brain electrical activity and structure in minute detail via high-resolution (7 tesla) MRI and magnetoencephalography (MEG). Multidisciplinary collaboration among epileptologists, neurosurgeons, neuroradiologists, neuropsychiatrists and anesthesiologists raises the bar for surgical outcomes. A neurostimulation device known as the NeuroPace® System recently gained FDA approval following successful clinical trials at the MGH. The smart device detects the aberrant electrical activity that precedes partial onset seizures and targets low levels of electrical stimulation to the area of seizure focus.

Also a leader in the MGH Epilepsy Service, Sydney Cash, MD, Associate Professor of Neurology and the Elizabeth Riley and Dan Smith MGH Research Scholar, has pioneered the use of microelectrode arrays in understanding and eventually controlling seizures. His group employs multiple systems which are able to record the activity of single neurons in the brains of patients with epilepsy. With this approach, they are redefining what a seizure is, how they spread and how they might be predicted. The same technology is being used to explore the neural mechanisms which underlie language, sleep and other fundamental brain functions.



Multiple sclerosis

Multiple sclerosis afflicts an estimated 2.3 million people around the world. Despite extensive research in this field, the underlying causes remain unclear. Partners HealthCare's researchers are devising ways to halt the progression of disease, reverse disability and loss of function, and prevent new cases of MS.

Through the "Decade of Discovery," the Partners Multiple Sclerosis Center at Brigham and Women's Hospital, led by Howard Weiner, MD, has unveiled powerful therapeutics for MS and made strides toward unraveling immunologic origins of the disease. Both BWH and MGH are sites for a multi-center clinical trial evaluating a neuroprotective therapy for progressive MS, a subtype of MS with no current proven therapies, with MGH serving as the clinical coordinating center for the study.

A number of research projects are ongoing, including MRI-based efforts to visualize the disease process and inflammatory changes in the brain. At the Martinos Center for Biomedical Imaging at MGH, Eric Klawiter, MD and Caterina Mainero, MD utilize an ultra-high gradient Human Connectome MRI and the center's 7T MRI to evaluate how brain connectivity changes and cortical pathology relate to cognitive dysfunction and other manifestations of disability in MS. The Natural History Study at BWH integrates research projects in proteomics, gene expression, genetics, and immune phenotypes to define novel biomarkers of disease. The Genes and Environment in Multiple Sclerosis (GEMS) Research Study, headed by neurologist Philip De Jager, MD, will follow 5,000 participants with known risk factors for MS to uncover the hidden interplay between genetics, environmental, and immune factors that raise a person's risk of developing MS.

Advanced informatics allow researchers to integrate genetic, immunological, and clinical data from a large cohort of MS patients into a predictive model capable of forecasting individual patients' responses to therapy. De Jager collaborates with the Informatics to the Bedside (i2b2) initiative to mine electronic health records for vast amounts of information that might otherwise go unused. Codified and narrative data from doctors' notes are used to enrich studies of MS progression and treatment.

Parkinson's disease

Parkinson's disease remains one of the most common neurodegenerative diseases of the elderly, affecting an estimated 500,000 to 1 million people in the United States alone.

Like other neurodegenerative disorders, including Alzheimer's, Huntington's, and amyotrophic lateral sclerosis (ALS), Parkinson's disease has no effective therapies. The human and economic impacts of a Parkinson's diagnosis are immense – approximately \$10.8 billion dollars are expended every year in the U.S. on medical care and indirect costs of living with the disease.

Thanks to advances made by Partners HealthCare researchers, Parkinson's patients of the not-so-distant future may benefit from personalized medicine. A major player in the field of Parkinson's research is the Neurogenomics Lab, led by Clemens Scherzer, MD, an associate neurologist at the BWH and MGH, associate professor of neurology at HMS, and Co-Director of the Harvard NeuroDiscovery Biomarker Program. The Lab's genomicists, computational biologists and clinical scientists use next-generation genomics technologies to explore how the brain differs in patients with Parkinson's, Huntington's or Alzheimer's disease. Identifying novel biomarkers and increasing the efficiency of drug discovery are top goals.

At McLean Hospital, researchers are using gene correction to reverse specific mutations underlying the mitochondrial DNA damage inherent in Parkinson's disease. In addition, the hospital's Neuroregeneration Institute, led by Ole Isacson, MD, aims to accelerate the treatment of Parkinson's and other degenerative brain disorders. Isacson's research has uncovered specific characteristics of the brain cells most vulnerable to degeneration. The findings may benefit patients with Parkinson's disease, Huntington's disease and Amyotrophic Lateral Sclerosis (ALS).



chizophrenia

It is clear that genetics plays a vitally important role in the etiology and pathogenesis of schizophrenia: 10% of people with an affected first-degree relative will develop the illness, while only 1% of the general population will be diagnosed with schizophrenia. The specific genetic mechanisms at play, however, are not well defined.

Collaborations among investigators at the MGH, McLean, and Harvard are driving forward the Brain Genomics Superstruct project, overseen by Randy Buckner, PhD, Director for the MGH Psychiatric Neuroimaging Research Program. Brain imaging and genetic information from patients with schizophrenia and other neuropsychiatric disorders are entered into a database that will help propel therapeutic discovery via detailed comparisons of schizophrenia with other illnesses.

The Martinos Center is home to the MGH Schizophrenia Program, where investigators benefit from one-of-a-kind neuroimaging technologies like specialized fMRI. Current efforts aim to untangle the neurobiological mechanisms at work in patients with schizophrenia. Combined with genetic tests, these imaging studies are potent tools for identifying genes that raise the risk of schizophrenia, and for revealing the impacts of these genes on brain structure and function.

The BWH Functional Neuroimaging Laboratory (FNL) uses a symptom-oriented approach to explore deep-brain structural abnormalities that underlie psychiatric illnesses such as schizophrenia. Novel fMRI methods and innovative imaging modalities developed at the FNL continue to uncover important neural circuitry abnormalities responsible for schizophrenic hallucinations and delusions. Collaborations with researchers at other academic centers aim to fine-tune a novel cognitive behavioral treatment approach for patients with paranoia, and predict how patients will respond to various treatments.

Investigators at the McLean Laboratory for Psychiatric and Molecular Neuroscience are exploring the genetic and structural overlaps between schizophrenia, bipolar disorder, and autism. A recent postmortem study revealed for the first time that bipolar disorder is accompanied by changes in brain morphology similar to those found in patients with schizophrenia. Researchers are currently studying genetic aberrations in Huntington's disease, Alzheimer's disease, and substance abuse

Through the Schizophrenia and Bipolar Research Program, McLean investigators are performing fMRI studies of auditory hallucinations and large-scale brain network abnormalities in patients with schizophrenia and bipolar disorder.

Sleep disorders

Sleep disorders are exceptionally common. Of the estimated 70 million Americans affected by disorders of sleep and wakefulness, nearly 18 million have sleep apnea – many of them undiagnosed.

To address this problem, numerous clinical trials and basic science studies are underway at Partners HealthCare. John Winkelman, MD, PhD, Chief of the MGH Sleep Disorders Clinical Research Program, studies the effects of pharmacological and cognitive behavioral therapies on patients with sleep disorders and comorbid psychiatric illness such as major depressive disorder or sleep-related eating disorder.

The MGH Division of Sleep Medicine, is one of the few such divisions in the nation to be housed within a hospital neurology department. Patients treated at the sleep laboratory benefit from the combined multidisciplinary expertise of neurology, psychiatry, pulmonary and pediatric specialists. Sophisticated technology in use at the sleep laboratory – one of the only hotel-like facilities in the U.S. – offers patients the unique opportunity to benefit from high-resolution snapshots of brain activity during sleep studies.

At BWH, a newly formed Division of Sleep and Circadian Disorders spans the departments of medicine and neurology, and encompasses the similarly new Sleep Disorders Service. The service offers home sleep testing and specialty care for patients with neurologic complications such as movement disorders, behavioral disturbances, epilepsy and stroke.

The BWH Program in Sleep and Cardiovascular Medicine and Sleep Medicine Epidemiology (PSCM-SME) aims to improve patient care through a number of local and national epidemiological studies. A particular emphasis is placed on individuals with combined sleep and cardiovascular disease.

Scientists at McLean's sleep research lab are investigating the neurocognitive and behavioral effects of sleep deprivation, as well as the influences of drug abuse.

Stroke

As a leading cause of long-term disability, the costs associated with stroke are enormous: \$34 billion per year in the U.S. alone.

Partners' Telestroke Program, led by the MGH, is making strides to enhance the diagnosis and treatment of stroke, in hopes of decreasing these immense human and economic burdens. The Telestroke Program allows an extensive network of hospitals to benefit from the world-class expertise of Partners' stroke specialists.

In addition, the Neurology of Vision Lab – overseen by MGH professors Lucia Vaina, MD, PhD, and Ferdinando Buonanno, MD – links stroke neurology to neuroscience and multimodal brain imaging to address problems with visual perception and cognition.

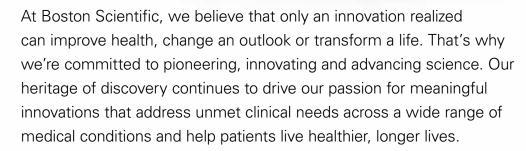
At the MGH Clinical Proteomics Research Center, researchers are discovering prognostic tools and novel biomarkers to enhance clinical diagnosis and treatment in patients with acute neurovascular injury. The Center's director, MingMing Ning, MD, oversees a NIH-funded clinical study, "Clinical Proteomics Research (CPR) on the Brain" that seeks to identify changes in the proteomic profiles of patients with ischemic brain injuries, chronic neurologic diseases, or systemic vascular diseases, relative to their healthy counterparts. The results will provide insight into the biological pathways underlying various therapeutic interventions.

Additional research at the Center focuses on the development of a proteomic repository and database using plasma, cerebrospinal fluid, and urine collected from patients.

These projects, and many more in progress at Partners HealthCare, are steering CNS healthcare into a new era – one marked by opportunity, innovation and success.



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Agenda

MONDAY, 27TH



11:30 AM Discovery Cafe: Sharing Perspectives

NOVARTIS BALLROOM

Top neuroscience faculty from Brigham and Women's Hospital, Massachusetts General Hospital and McLean Hospital – all appointed at Harvard Medical School – gather in an intimate setting to explore their specific areas of expertise. Attendees select the faculty member they would like to share lunch with.

2:00 PM Welcome

BIOGEN BALLROOM

David Torchiana, MD, CEO, Partners HealthCare

INTRODUCTION BY

Anne Klibanski, MD, Chief Academic Officer, Partners HealthCare; Laurie Carrol Guthart Professor of Medicine, Harvard Medical School

2:10 PM

Neurocare, Neuromarkets, and Neuro Challenges

BIOGEN BALLROOM

Session 101

Fifty million people worldwide suffer from neurodegenerative diseases costing more than \$650 billion annually. Fueled by DNA editing technologies, genetic sequencing, new drugs and other breakthroughs, the neuromarket has taken flight. Three senior clinical leaders briefly describe the context for these innovations including unmet needs, neurocare trends, and the ongoing challenges of developing new technologies for the CNS.

Jonathan LaPook, MD, Chief Medical Correspondent, CBS News

Antonio Chiocca, MD, PhD, Chairman, Neurosurgery, Brigham and Women's Hospital; Harvey W. Cushing Professor of Neurosurgery, Harvard Medical School Merit Cudkowicz, MD, Chairman, Neurology, Massachusetts General Hospital; Julieanne Dorn Professor of Neurology, Harvard Medical School Scott Rauch, MD, President and Psychiatrist in Chief, McLean Hospital; Rose-Marie and Eijk van Otterloo Chair of Psychiatry, Harvard Medical School

2:50 PM

Over the Horizon: Witnessing the Disruption of Neurocare

BIOGEN BALLROOM

Session 102

This panel of unmatched neuro-futurists describe technologies and therapies that promise to disrupt neurocare in the future. From implantable neuroprosthetics and real time brain monitoring to effective, safe precision-targeted medications, game-changing technologies in the pipeline or under development.

MODERATOR

Alice Park, Writer, TIME Magazine

Ajay Verma, MD, PhD, Vice President of Experimental Medicine, Biogen Geoffrey Ling, MD, PhD, Director, Biological Technologies Office, DARPA Moncef Slaoui, PhD, Chairman of Global R&D and Vaccines, GlaxoSmithKline

Please find all speaker bios on our website at: worldmedicalinnovation.org

3:40 PM

Transformation and Innovation: Conflict? Collision? Opportunity?

BIOGEN BALLROOM

Session 103

The health care landscape is evolving at a breakneck pace. Chief executives from the provider, pharmaceutical and medical device communities will share perspectives on how transformative innovation can elevate patient care and population health in a period when financial sustainability and affordability might appear to be competing priorities.

MODERATOR

Nancy Snyderman, MD, Chief Medical Editor, NBC News (ret.)

Jeff Leiden, MD, PhD, CEO, Vertex Pharmaceuticals

Mike Mahoney, CEO, Boston Scientific

Betsy Nabel, MD, President, Brigham and Women's Hospital;

Professor of Medicine, Harvard Medical School

George Scangos, PhD, CEO, Biogen

Peter Slavin, MD, President, Massachusetts General Hospital;

Professor of Healthcare Policy, Harvard Medical School

4:30 PM

Gene to Drug: Kansas to Oz, Making it Happen in the Real World

BIOGEN BALLROOM

Session 104

Modern drug discovery often starts with human genetics to validate a target or mechanism and then pursues a specific gene in the drug discovery and development process. This model has had great impact in certain oncology drug programs, but can this approach work for neurological drug development? The panel of industry heavyweights discusses what is possible, realistic and likely, as the field further unfolds.

MODERATOR

Jonathan LaPook, MD, Chief Medical Correspondent, CBS News

David Altshuler, MD, PhD, Executive Vice President of Global Research and CSO, Vertex Pharmaceuticals

Mark Fishman, MD, President, Novartis Institutes for BioMedical Research Jeffrey Gulcher, MD, PhD, Co-Founder and CSO WuXi NextCODE

Sean Harper, MD, Executive Vice President, Research and Development, Amgen

5:30 PM

Welcome Reception

GE BALLROOM

Dinner Program

6:45 PM

NOVARTIS BALLROOM

The chairman and CEO of one of the world's largest technology companies will share thoughts on the next generation of neuroscience innovation and the challenges and opportunities that will affect growth in the medtech sector.

INTRODUCTION BY

Edward Lawrence, Chairman, Board of Directors, Partners HealthCare

Nancy Snyderman, MD, Chief Medical Editor, NBC News (ret.)

Jeff Immelt, CEO, General Electric



AGENDA | TUESDAY, 28TH



6:30 AM

Session

Session

202

201

Continental Breakfast

BIOGEN BALLROOM FOYER

7:00 AM Clinical Demonstrations

BIOGEN BALLROOM

NeuroSwitch: Amyotrophic lateral sclerosis (ALS) leaves patients imprisoned in their own minds, unable to communicate. NeuroSwitch, a novel compact device, uses computer hardware and proprietary software to allow patients to regain control of their environment. Live demonstration.

AMIGO Suite: Surgeons at Brigham and Women's Hospital are using the \$20 million Advanced Multimodality Image Guided Operating (AMIGO) Suite to change the neurological landscape. This innovative intraoperating theater helps surgeons noninvasively locate brain targets in real time, clearly distinguish malignant from normal tissue, get enhanced images and then perform minimally invasive image-guided neurosurgery—without moving the patient from the operating table. Live demonstration.

INTRODUCTION BY

David Storto, President, Partners Continuing Care,

Spaulding Rehabilitation Network

MODERATORS

Merit Cudkowicz, MD, Chairman, Neurology, Massachusetts General Hospital; Julieanne Dorn Professor of Neurology, Harvard Medical School

Antonio Chiocca, MD, PhD, Chairman, Neurosurgery, Brigham and Women's Hospital; Harvey W. Cushing Professor of Neurosurgery, Harvard Medical School

NEUROSWITCH

Peter Ford, Founder and CEO, Control Bionics

AMIGO SUITE

Nathalie Agar, PhD, Neuroscientist, Brigham and Women's Hospital, Assistant Professor of Radiology, Harvard Medical School

Alexandra Golby, MD, Director, Image-Guided Neurosurgery, Brigham and Women's Hospital, Associate Professor of Radiology, Harvard Medical School

8:00 AM Patient One-On-One

BIOGEN BALLROOM

Ann Romney, wife of Mitt Romney, was diagnosed with multiple sclerosis (MS) in 1998 and treated at Brigham and Women's Hospital. Ann will share her experiences as a patient and her reasons for optimism. The newly launched Ann Romney Center for Neurologic Diseases at Brigham and Women's Hospital is a global collaboration to accelerate treatment, prevention and cures for five of the world's most complex and difficult neurologic diseases: MS, Alzheimer's disease, ALS, Parkinson's disease and brain tumors.

INTRODUCTION BY

Scott Sperling, Co-President, Thomas H. Lee Partners, Chairman, Board of Trustees, Brigham and Women's Hospital

MODERATOR

Nancy Snyderman, MD, Chief Medical Editor, NBC News (ret.)

Ann Romney, Global Ambassador, Ann Romney Center for Neurologic Diseases at Brigham and Women's Hospital

8:30 AM

The Alzheimer's Phoenix: New Technologies, New Economics

BIOGEN BALLROOM

Session 203 Alzheimer's disease is a devastating, costly and incurable neurodegenerative condition that is estimated to afflict more than five million patients and accounts for more than \$148 billion in annual costs in the United States. Top experts discuss promising diagnostic and treatment candidates currently in development.

MODERATOR

Rudolph Tanzi, PhD, Director, Genetics and Aging Research Unit, MassGeneral Institute for Neurodegenerative Disease & Joseph P. and Rose F. Kennedy Professor of Neurology, Harvard Medical School

Michael Hutton, PhD, CSO, Neurodegenerative Diseases, Eli Lilly & Co.

Brad Hyman, MD, PhD, Director, Massachusetts General Hospital Alzheimer's

Disease Research Center; John B. Penney Professor of Neurology,

Harvard Medical School

Roger Nitsch, PhD, Director, Division of Psychiatry Research, University of Zurich **Dale Schenk, PhD**, CEO, Prothena

Dennis Selkoe, MD, Co-Director, Ann Romney Center for Neurologic Diseases, Brigham and Women's Hospital; Vincent and Stella Coates

Professor of Neurologic Diseases, Harvard Medical School

9:25 AM Regeneration, Cell Therapy, and Neurocare: Products? Delivery?

BIOGEN BALLROOM

Session 204 Regenerative medicine holds the promise of healing damaged tissues and organs from within. Expert panel members discuss CNS therapies that use healthy cells, tissues or organs—or those created with 3D bioprinters—to replace damaged ones.

MODERATOR

Alice Park, Writer, TIME Magazine

Ole Isacson, MD, Director, Center for Neuroregeneration Research/ Neuroregeneration Laboratories, McLean Hospital; Professor of Neurology, Harvard Medical School

Martin McGlynn, CEO, StemCells

Doug Melton, PhD, Xander University Professor, Harvard University; Investigator, Howard Hughes Medical Institute; Co-Chair Department of Stem Cell and Regenerative Biology

David Scadden, MD, Director, Center for Regenerative Medicine,

Massachusetts General Hospital; Gerald and Darlene Jordan Professor of Medicine, Harvard Medical School

10:25 AM Morning Break

BIOGEN BALLROOM FOYER

10:50 AM CEO One-On-One

BIOGEN BALLROOM

Session 205 Robert Bradway, the CEO of one of the world's most storied biotechnology companies, will offer insights on the discovery, development and manufacturing of new medicines in today's highly complex and competitive CNS environment.

INTRODUCTION BY

Cathy Minehan, Dean, School of Management, Simmons College, Chair, Board of Trustees, Massachusetts General Hospital

MODERATOR

Meg Tirrell, Biotech & Pharma Reporter, CNBC

Robert Bradway, CEO, Amgen

11:30 AM Lunch

NOVARTIS BALLROOM

AGENDA | TUESDAY



CEO George Scangos, PhD will discuss this breakthrough and industry efforts to move from slowing the damage from neuro disease to stopping disease progression. **INTRODUCTION BY** Peter Slavin, MD, President, Massachusetts General Hospital; Professor of Healthcare Policy, Harvard Medical School **Kyra Phillips**, Anchor and Correspondent, CNN George Scangos, PhD, CEO, Biogen 12:45 PM Secretary One-On-One Session Since her confirmation by the Senate last year, HHS Secretary Sylvia Mathews 207 Burwell has established herself as a champion of medical innovation. She will share her thoughts on how the federal government can work with industry to advance precision medicine and the development of new treatments and cures. **INTRODUCTION BY David Torchiana, MD**, CEO, Partners HealthCare Hon. Sylvia Matthews Burwell, Secretary, US Department of Health & Human Services 1:25 PM Neurostimulation: First Line Therapy? **BIOGEN BALLROOM** Session Electroceuticals, new therapies based on the body's bioelectric signals, rather than 208 its chemistry, are using the electrical language of the body to target individual nerve fibers to treat an array of conditions by modulating the neural impulses. MODERATOR **Peter Ford**, Founder and CEO, Control Bionics **Emad Eskandar, MD**, Neurosurgeon, Massachusetts General Hospital; Charles Pappas Professor of Neurosurgery, Harvard Medical School Frank Fischer, CEO, NeuroPace Lothar Krinke, PhD, Vice President and General Manager, Brain Modulation, Medtronic Ben Pless, CEO, ATI Mark Demitrack, MD, Chief Medical Officer, Neuronetics 2:15 PM Olympus Explained: Neuroinvesting for Mortals **BIOGEN BALLROOM** Session Five neuro industry investment leaders discuss the special opportunities and challenges of investing in CNS technologies and challenges. MODERATOR Meg Tirrell, Biotech & Pharma Reporter, CNBC **Doug Cole, MD**, General Partner, Flagship Ventures **Jean-François Formela, MD**, Partner, Atlas Ventures Corey Goodman, PhD, Managing Partner, venBio Rajiv Kaul, Select Biotechnology Portfolio and Advisor Biotechnology Fund, Fidelity Investments **Sue Siegel**, CEO, GE Ventures & healthymagination

12:00 PM

Session

206

Lunch Program - CEO One-On-One

Last month, Biogen made worldwide news when it reported that its experimental drug for Alzheimer's disease showed promise in slowing cognitive decline. Biogen

NOVARTIS BALLROOM

3:15 PM **FOCUS SESSIONS I**

National Security Through Neurodevelopment: Country Initiatives to Meet CNS Challenges

BOSTON SCIENTIFIC BALLROOM

Session 210

International panel members will review global initiatives to drive understanding of the CNS to develop new tools, diagnostics and therapeutics as well grow new

MODERATOR

John Roberts, Senior National Correspondent, Fox News

Miri Polachek, Executive Director, Israel Brain Technologies

Michael Hodin, PhD, Executive Director, Global Coalition on Aging;

Managing Partner, High Lantern Group

Tom Large, PhD, Senior Vice President, Preclinical Research and Translational Medicine, Sunovion Pharmaceuticals

Luc Truyen, MD, PhD, Vice President, Neuroscience External Affairs, Chair, Johnson & Johnson Global Fight Against Alzheimer's Disease

Technology, Pathology, Radiology: Changing the Game through Neurodiagnostics

BIOGEN BALLROOM

Session 211

While both pathology and radiology have traditionally been used to guide neurological interventions, four experts explain why advanced diagnostics technologies are shifting our fundamental understanding of neurological disease. This understanding (and technology) is serving as the basis for a systems approach to diagnosing, intervening, and managing neurodegenerative disease.

MODERATOR

Jerrold Rosenbaum, MD, Psychiatrist-In-Chief;

Stanley Cobb Professor of Psychiatry, Harvard Medical School

Jeffrey Golden, MD, Chairman, Department of Pathology,

Brigham and Women's Hospital: Ramzi S. Cotran Professor of Pathology. Harvard Medical School

Jeff Hersh, MD, PhD, Chief Medical Officer, GE Healthcare

David Louis, MD, Pathologist-in-Chief, Massachusetts General Hospital; Benjamin Castleman Professor of Pathology, Harvard Medical School

Bruce Rosen, MD, PhD, Director, Athinoula A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital; Professor of Radiology,

Harvard Medical School

Autism and Neurodevelopment: Are Therapies Possible Today? GE BALLROOM

Session 212

Autism spectrum disorder (ASD), the high-cost, lifelong, neurological condition that currently affects up to 1 child in every 88 and about 1 percent of adults, has no cure, nor is there global consensus on which intervention is most effective. While many drugs are prescribed for the associated symptoms, there are no approved drugs specifically to treat core symptoms. National experts and high profile patient advocates discuss current and future therapeutic approaches.

MODERATOR

Ron Suskind, Pulitzer Prize-winning Journalist and Author, Director of the Project on Public Narrative, Harvard University

Randall Carpenter, MD, Translational Medicine Consultant; Research Affiliate, Department of Brain and Cognitive Sciences, MIT

Mark Daly, PhD, Chief, Analytic and Translational Genetics, Massachusetts General Hospital; Associate Professor of Medicine, Harvard Medical School

Christopher McDougle, MD, Director, Lurie Center for Autism,

Massachusetts General Hospital for Children; Nancy Lurie Marks Professor of Autism, Harvard Medical School

Ricardo Dolmetsch, PhD, Global Head of Neuroscience,

Novartis Institutes for Biomedical Research

Bob Wright, Co-Founder, Autism Speaks; Senior Advisor, Lee Equity Partners



Session 213 4:40 PM Session 214

Psychiatric Targets: Finally New Mechanisms?

NOVARTIS BALLROOM

Major psychiatric disorders such as schizophrenia, major depressive and bipolar disorders are severe, chronic and debilitating, and are associated with high disease burden and healthcare costs. Early diagnosis is difficult, misdiagnosis is frequent, and there are no objective tests that aid in the prediction of individual responses to treatment. Despite these challenges, the medical approach to mental illness is changing dramatically. Panel members review ongoing clinical, molecular, genetic, neuroimaging and neurophysiological findings.

Gideon Gil, Health and Science Editor, The Boston Globe

Deborah Dunsire, MD, CEO, FORUM Pharmaceuticals

Mike Ehlers, MD, PhD, Neuroscience Chief Science Officer, Pfizer

Maurizio Fava, MD, Executive Vice Chair, Massachusetts General Hospital Psychiatry; Slater Family Professor of Psychiatry, Harvard Medical School

Corey McCann, MD, PhD, Founder and CEO, Pear Therapeutics

David Silbersweig, MD, Chairman, Psychiatry, Brigham and Women's Hospital;

Stanley Cobb Professor of Psychiatry, Harvard Medical School

FOCUS SESSIONS II

Sleep and Consciousness: Clinical Need Versus Safety

GE BALLROOM

Sleep, which Shakespeare called "nature's soft nurse," is vital to mental and physical health. Compromised sleep is now an enormous burden, leading to daytime fatigue, sleepiness, and difficulty concentrating, interfering with a person's ability to maintain a daily routine. About 30 to 40 percent of adults report some symptoms of insomnia within a given year, with 10 to 15 percent noting chronic insomnia. Panel members review insomnia, its causes, how it impacts cognition and longevity, and technologies and programs to ensure optimal sleep.

MODERATOR

Martha Bebinger, Reporter, WBUR

Matt Bianchi, MD, PhD, Chief, Division of Sleep Medicine, and Director, Sleep Laboratory, Massachusetts General Hospital Neurology; Assistant Professor of Neurology, Harvard Medical School

Charles Czeisler, PhD, MD, Brigham and Women's Hospital Medicine and Neurology; Baldino Professor of Sleep Medicine, Harvard Medical School Patrick Purdon PhD, Associate Bioengeneer, Massachusetts General Hospital -Department of Anesthesia, Critical Care, and Pain Medicine; Instructor of Anaesthesia, Harvard Medical School

Darryle Schoepp, PhD, Vice President & Therapeutic Area Head, Neuroscience, Merck Research Laboratories

Parkinson's: Finally Crossing the Therapeutic Threshold

NOVARTIS BALLROOM

Parkinson's disease, the progressive, degenerative, neurological movement disorder that affects more than one million people in the United States, has no cure. Despite this, effective treatments are getting closer. Panel members describe the great progress being made with experimental therapies to prevent, slow, or halt disease progression.

MODERATOR

Michelle Cortez, Reporter, Bloomberg Businessweek

Frank Bennett, PhD, Senior Vice President of Research, Isis Pharmaceuticals Michael Schwarzschild, MD, PhD, Chair, Parkinson Study Group (PSG) Executive Committee, MassGeneral Institute for Neurodegenerative Disease; Professor of Neurology, Harvard Medical School

Clemens Scherzer, MD, Director, Neurogenomics Lab and Parkinson Personalized Medicine Program, Brigham and Women's Hospital/Massachusetts General Hospital; Associate Professor of Neurology, Harvard Medical School

Todd Sherer, PhD, CEO, The Michael J. Fox Foundation for Parkinson's Research

New Leaders at the Table: Filling the Gap Through Philanthropy? **BIOGEN BALLROOM**

Session

216

Session

215

Hope for near-term change in CNS diseases lies not just with government and industry, but also with American philanthropy. In the face of fiscal stress on government budgets, family and disease foundations are committing substantial resources to help find cures for nearly all CNS diseases. Some of the most successful philanthropic entrepreneurs describe their approach, challenges and rewards. They also examine how peer-to-peer fundraising—and the Ice Bucket Challenge, in particular—has helped change the American donation landscape.

MODERATOR

David Shenk, Author, lecturer, filmmaker, Senior Advisor, Cure Alzheimer's Fund

Meryl Comer, President, Geoffrey Beene Foundation Alzheimer's Initiative Henry McCance, Chairman Emeritus, Greylock Partners, Co-Founder, Cure Alzheimer's Fund

Bill Sahlman, Dimitri V. D'Arbeloff - MBA Class of 1955 Professor of Business Administration, Senior Associate Dean for External Relations, Harvard Business School

Steven Tregay, CEO, Forma Therapeutics

Nancy and Pete Frates, The Pete Frates #3 Fund, Champions,

ALS Ice Bucket Challenge

Jeff Walker, Vice Chair, United Nations Envoy's Office for Health Finance and Malaria

5:50 PM Adjourn

6:00 PM **Networking Dinner Reception**

TURNER'S RESTAURANT, WESTIN

TUESI DA Z W

AGENDA | WEDNESDAY, 29TH

7:30 AM

8:00 AM Reshaping Innovation Through Electronic Health **BIOGEN BALLROOM** Few organizations are as central to the electronically enabled delivery of care and Session 301 related research than EPIC. CEO and Founder Judy Faulkner shares her unique perspective of having made a decades long journey from the earliest conception of an electronic medical record to today's near ubiquity in academic medicine. **Gregg Meyer, MD**, Chief Clinical Officer, Partners HealthCare **Judy Faulkner**, CEO and Founder, EPIC Systems 8:45 AM Gene Editing, Gene Therapy, and the Eye as a Gateway **BIOGEN BALLROOM** Session Panel members detail why the future of CNS therapeutics is moving away from 302 miracle drugs and gravitating towards personalized treatments using gene therapy. They also describe how the DNA-editing tool, CRISPR, is empowering scientists to make quick and inexpensive edits to a stretch of DNA with a level of ease and efficiency not previously possible. **MODERATOR** Jennifer Joe, MD, CEO, Medstro, Editor-In-Chief, MedTech Boston Katrine Bosley, CEO, Editas Medicine **Eric Pierce, MD, PhD**, Director, Retinal Degenerations Service, Massachusetts Eye and Ear; Solman and Libe Friedman Associate Professor of Ophthalmology, Harvard Medical School Philip Gregory, D. Phil, Senior Vice President, Research and CSO, Sangamo BioSciences **David Meeker, MD**, CEO, Genzyme 9:40 AM MS Transformed: Harnessing Biology and Inflammation **BIOGEN BALLROOM** In MS, which affects at least 400,000 people in the U.S., the body's immune system Session 303 attacks the myelin sheath protecting nerves in the brain, eyes, and spinal cord. While the exact cause of the condition is unclear, it is known to be triggered by an autoimmune response that causes inflammation in the central nervous system. Panel members describe latest research efforts, including development of therapies to stop MS attacks, vaccines using the body's immune system, and how gut microorganisms may influence immune system activity in people with MS. MODERATOR Mallika Marshall, MD, Medical Reporter, WBZ-TV Boston Tim Coetzee, PhD, Chief Advocacy, Services, and Research Officer, National Multiple Sclerosis Society Al Sandrock, MD, PhD, Group Senior Vice President, Chief Medical Officer, Biogen Howard Weiner, MD, Founder and Director, Partners Multiple Sclerosis Center; Robert L. Kroc Professor of Neurology, Harvard Medical School Michael Panzara, MD, Group Vice President, Therapeutic Area Head, Multiple Sclerosis and Neurology, Genzyme 10:35 AM Morning Break **BIOGEN BALLROOM FOYER**

Continental Breakfast

BIOGEN BALLROOM FOYER

11:00 AM The Disruptive Dozen: 12 Technologies That Will Reinvent Neurocare BIOGEN BALLROOM

Leading CNS faculty from the Brigham and Women's Hospital, Massachusetts General Hospital, and McLean Hospital nominated the technologies they believe will have the greatest impact on neurological care in the next decade. A panel of senior Partners neuroscience leaders chose the final list and ranking of these 12 disruptive technologies. This intriguing and fun session will let you in on how the experts view the future in their field.

MODERATOR

Rudolph Tanzi, PhD, Director, Genetics and Aging Research Unit, MassGeneral Institute for Neurodegenerative Disease & Joseph P. and Rose F. Kennedy Professor of Neurology, Harvard Medical School

David Silbersweig, MD, Chairman, Brigham and Women's Hospital Psychiatry; Stanley Cobb Professor of Psychiatry, Harvard Medical School

12:00 PM Lunch Program

Session

Session

305

306

304

NOVARTIS BALLROOM

12:30 PM The Century of the Molecule Becomes The Century of the System

NOVARTIS BALLROOM

One of the most influential voices in all of health care will share his reflections on how the world of medicine has changed and where we are headed.

INTRODUCTION BY

Marshall Moriarty, Retired Chair, Brigham and Women's Hospital, Board of Trustees

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Atul Gawande, MD, Executive Director, Ariadne Labs;

General and Endocrine Surgery, BWH; Professor of Surgery, Harvard Medical School

1:15 PM The Builder's Roundtable: Perspectives of Public/Private Payer Architects NOVARTIS BALLROOM

Session Aetna CEO Mark Be

Aetna CEO Mark Bertolini has been an influential voice in transforming healthcare payment and delivery systems. Peter Orszag, vice chairman of Citigroup and former Obama Administration budget director, was a key architect of the Affordable Care Act and one of the true go-to health care experts. Moderated by Tim Ferris, MD, one of the nation's leading population health experts, these two builders will discuss finance, technology and the future of innovation.

MODERATOR

Tim Ferris, MD, Senior Vice President, Population Health Management, Partners HealthCare

Mark Bertolini, Chairman and CEO, Aetna

Peter Orszag, Vice Chairman, Corporate and Investment Banking, Citigroup

2:15 PM Closing Remarks and Preview of 2016 World Forum

NOVARTIS BALLROOM

Duke Collier, President, The Braxton Company

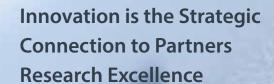
Anne Klibanski, MD, Chief Academic Officer, Partners HealthCare; Laurie Carrol Guthart Professor of Medicine, Harvard Medical School

30 PM Adjourn

2:30 PM

About Partners Innovation







Partners HeatlhCare hospitals account for nearly \$1.5 billion in laboratory and clinical research annually. The magnitude and breadth of its research and clinical capabilities makes Partners HealthCare a compelling source for new insights in disease mechanisms, technology breakthroughs and patient care. Its hospitals have had enormous historic success transferring technology to companies that have led to substantial market outcomes.

Innovation, Partners HealthCare's 85-person business development and investment arm, is charged with enhancing those outcomes and the pathways that enable them. It is designed to be the catalyst that strategically connects the enormous strength of the research community at Partners to external collaborators. In doing so, the Innovation team aims to deliver a broader and more consistent flow of new products and services to enhance patient benefits. Its new "Market Sector" model was established to significantly increase opportunities for collaborative innovation.

Nine Market Sectors act as clinical "verticals" in core specialties: the neurosciences, cardiovascular care, cancer/pathology, anesthesia, radiology, surgery, orthopedics, medicine and pediatrics, and dermatology. Highly experienced industry executives were recruited to lead the Market Sectors. Their expertise includes senior key roles at companies such as Baxter, Bristol Meyers Squib, Monsanto, Boston Scientific and PureTech. Each Sector is built around discrete strategies, goals, and metrics -- all drawing on deep domain knowledge. The Market Sector Leaders are charged with developing a "thesis for commercial investment" in Partners HealthCare research and clinical capabilities. To achieve successful engagements, Market Sectors focus on the attributes that industry seeks from academic medical centers, including disease insights, therapeutic options, technology, clinical expertise, compatibility with the company's portfolio and strategic direction, and a viable matching timeline for development.

Partners HealthCare offers a number of complementary strengths to industry collaborators including broad, scientific and clinical expertise; patient access; rapid point-of-care progression; and longitudinal, phenotyped patient data to inform studies of intervention, cost, outcomes, patient behavior and population health management. Partners also has substantial expertise in pre-clinical, clinical, post-approval and observational research. Its paradigm-shifting initiatives such as the Biobank, Big Data Platform, Connected Health, and Computational Pathology, as well as its other repositories offer industry an opportunity to drive the delivery of value based care. Finally, Partners hospitals offer unique insights as an accountable care organization and major purchaser and user of thousands of medical products daily.

The Market Sectors are designed to better align Partners HealthCare's ability to meet industry needs. Market Sector leadership engages at the decision-making level of key companies relevant to each sector. The Sectors deliver cohesive, tailored offerings to industry and also engage hospital leadership while efficiently conveying industry perspectives to Partners faculty and innovators to foster a lively, entrepreneurial culture. Team members in each Sector are mentored to enhance understanding of the related IP portfolio strengths and gaps, effectively engage in industry collaborations and experience the notion of "de-risking" product development through the industry lens. The Market Sectors analyze and share information on pattern of spend, state of pipeline, recent partnering decisions, IP portfolio and, importantly, desire to be a true partner.

Partners Innovation also seeks to bring more investment capital to support the commercialization of faculty and employee discoveries. The impact of its highly successful "Partners Innovation Fund" is rapidly increasing. More than \$200 million in new capital is being pursued through multiple new funds linked in novel ways to the technology strengths of the Partners family. If investment campaigns are successful, the funds will likely comprise the largest pool of capital directly tied to the technology of any academic center in the U.S. – no surprise, considering the size and quality of the Partners HealthCare research enterprise.

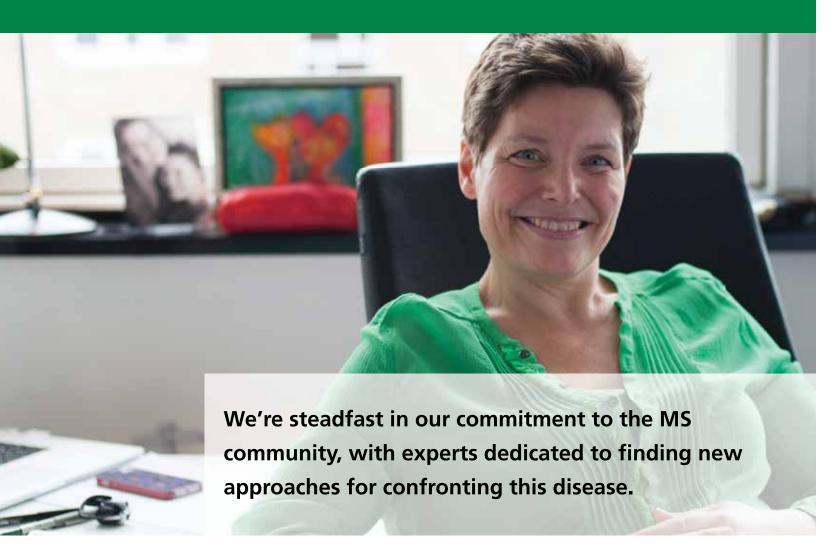
Another substantial priority is further organizing the commercial application of a large portfolio of information technology (IT) solutions that Partners has developed and implemented for its own use. Spearheaded by the Innovation Business Development/Healthcare IT team, these technologies are being packaged into high-impact industry offerings. In parallel, leading health IT centers throughout Partners and its hospitals play a core role in the offerings provided to industry. This helps leverage the unique environment and broad resources available through Partners' health delivery system. Domain expertise and clinical context for industry solutions are provided in situations where understanding clinical, research, and administrative workflows are critical to the product development process.

Innovation is also responsible for myriad functions that enable groundbreaking research and translation. This includes the transaction of more than 1500 material transfers and nearly 200 industry-sponsored research agreements each year. Innovation handles an enormous patent portfolio with upwards of 300 US filings per year and total patent management several times that amount. With more than 2,400 agreements in place, Innovation also helps ensure full compliance with thousands of discrete financial requirements. Recent focused process improvements and tools have enhanced reliability, increased speed and reduced inventory - in one case resulting in a greater than 85% enhancement.

As a matter of operating philosophy, Innovation seeks to run its operations like a business, organizing for outcomes and increased capabilities. The overriding goal is to ensure that Partners is the optimal collaborator with context of real-world success always in the forefront. This translates to organization-wide performance measures and better management of workflows, expectations, processes and approvals. The Innovation Advisory Board provides invaluable real-time, independent commercial guidance and contacts. The Board is complemented by the Commercialization Council consisting of top investigators from across Partners - committed to ensuring that the capabilities, insights and needs of the research community are priorities in all Innovation activities and plans.

Innovation's entire approach is based on executing a discrete and measurable strategy in each of its operating units with an overriding sense of urgency, mirroring the stakes for patients and providers during this time of rapid transformation. •

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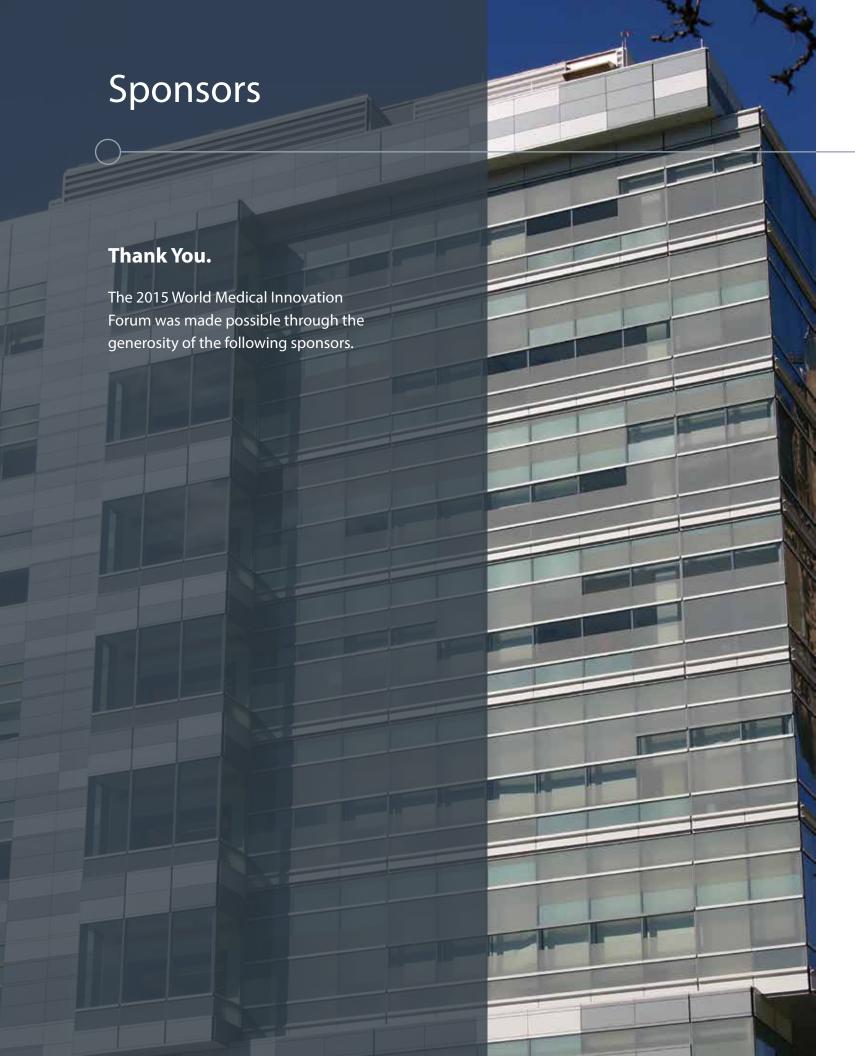
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STAKEHOLDER



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Basel, Switzerland

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www.novartis.com

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biomedical communications

MacDougall Biomedical Communications (MBI)

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Information and Events





REGISTRATION HOURS

Monday, April 27 – 8:00am – 6:00pm Tuesday, April 28 – 6:30am – 6:00pm Wednesday, April 29 – 7:00am – 12:00pm

NAME BADGES

Name badges will be provided at Registration. On-site registration is available on the 4th floor outside the Biogen Ballroom. Name badges must be worn during all events including meals and receptions. Please return your badge to the Registration Desk when you depart. Badges will be recycled.

IMPORTANT LOCATIONS

Forum Luncheons and Dinner Novartis Ballroom, 3rd Floor

Continental Breakfast – Daily Biogen Ballroom Foyer, 4th Floor

Monday Evening Welcome Reception
Novartis Ballroom and GE Ballroom Foyers, 3rd Floor

Registration Desk and Information Biogen Ballroom Foyer, 4th Floor

Tuesday Evening Networking Reception Turner's Restaurant, at the Westin Copley Place

Registration on 4th Floor

WIRELESS ACCESS

Complimentary Internet access is available to all Forum attendees. To connect to the Internet:

STEP 1: Access your computer's Wireless Network connection

STEP 2: Click/connect to the network "Westin_ Meeting Room" from the list of available networks

STEP 3: Open your Internet browser

STEP 4: The login page will ask for Password, first and last name, and you will have to accept the Westin's terms and conditions.

Password is: WMIF15

If you have an iPhone or iPad you must set your browser to "allow cookies" or "Block Cookies NEVER".

AUDIENCE RESPONSE SYSTEM

During this year's Forum we will utilize YORN. Throughout the meeting you will be asked to participate interactively via our audience response system. A link to the system is available via your mobile device at: worldmedicalinnovation.org

SPECIAL EVENTS

All World Medical Innovation Forum attendees are invited to attend a special Welcome Reception before Monday night's dinner and Tuesday night's off-site Networking Reception.

Monday Evening Welcome Reception

Network with Forum attendees during our Welcome Reception and Dinner at the Novartis Ballroom and GE Ballroom Foyers, 3rd Floor

Tuesday Networking Dinner Reception

The Tuesday Networking Dinner Reception will be held at Turner's Restaurant, at the Westin Copley Place. Please join us for this unique networking opportunity. Turner's Restaurant is located on the 2nd floor lobby level of the Westin Copley Place, found directly to the right of the Starbucks.

SPEAKER BIOS

A complete list of speakers and bios are available on line via the agenda on your web and mobile device at: worldmedicalinnovation.org/speakers



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a World Medical Innovation Forum Event

We are pleased to announce One-on-One Partnering at this year's World Forum.

MeetMax, a leader in managing private scheduled meetings within overall events, is providing scheduling solutions for registrants. Their meeting planner software allows guests to log into the site, search a database of attendees and request meetings with other attendees. For additional information, users should check their inboxes for login information, or inquire at the registration desk for login information, or inquire at the registration desk.

PARTNERING WITH PARTNERS HEALTHCARE

To schedule a meeting with Partners HealthCare Innovation staff during or after the Forum, please utilize the One-on-One Partnering system or stop by our exhibit space located on the fourth floor.

VISIT PARTNERS INNOVATION

We invite you to visit with Innovation staff at our dedicated space on the 4th Floor. Stop by to meet staff, get contact information and learn more about collaborative innovation at Partners HealthCare.

Connect with Us



Partners HealthCare Innovation

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worldmedicalinnovation.org









A HUMBLE THANK YOU

A special thanks to all of the speakers who gave so graciously of their time to be with us; to our Steering Committee who provided invaluable insight and resource to help plan this inaugural World Medical Innovation Forum; and to our Planning Committee staff for their unstinting commitment over the last 18 months to launch the World Medical Innovation Forum.

Planning Committee

Jonathan Behr, PhD
Jerry Mizer
Jamie Belkin
Beth Mollineaux
Greg Brace
Greg Mueller
Eric Castle
Judi Mullen
Rich Copp
Lynnea Oliverez
Gerald Couzens
Brandon Sarmas
Meaghan Doherty
Lisa Savin

Lynn Drake, MD Diana Schwartzstein Lorraine Fanton Rudy Tanzi, PhD Michael Freeman Kari Watson

Thank you for attending the 2015 World Medial Innovation Forum. We look forward to seeing you in 2016.
Clinical Focus: **Oncology**

Register Today at: worldmedicalinnovation.org







Cancer innovation on a global scale.

The 2016 World Medical Innovation Forum will highlight state-of-the-art and emerging approaches to diagnosing, treating and managing cancer—including early cancer detection and prevention; precision medicine and evolving models of care; immunological therapies; combination therapies to circumvent resistance; methods to find and develop new targets and new drugs as well as new informatics-driven tools and research approaches.

Join Us Next Year.

Special discounted pricing is available for registrants who sign up during this year's Forum (April 27-29, 2015). Visit the website or registration desk to take advantage of this special program.

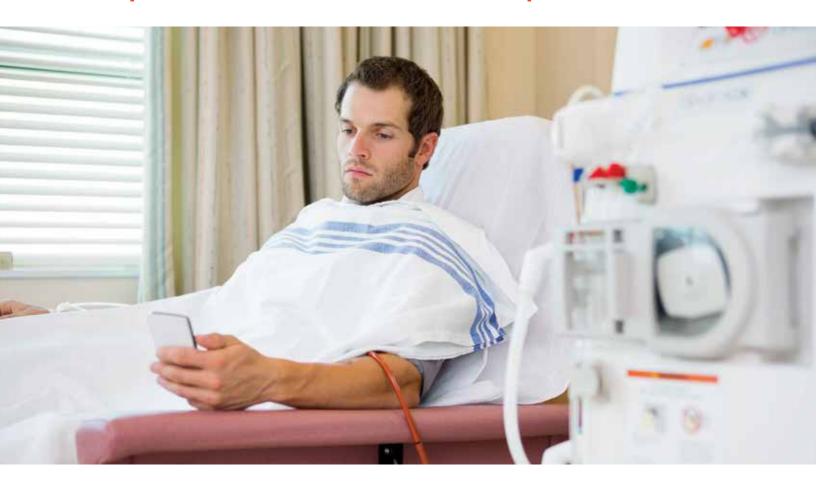
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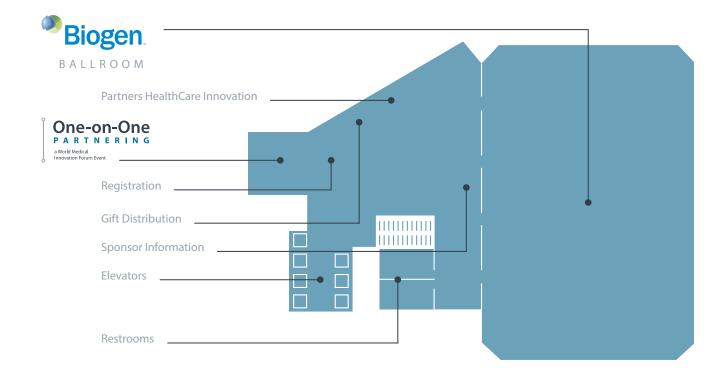
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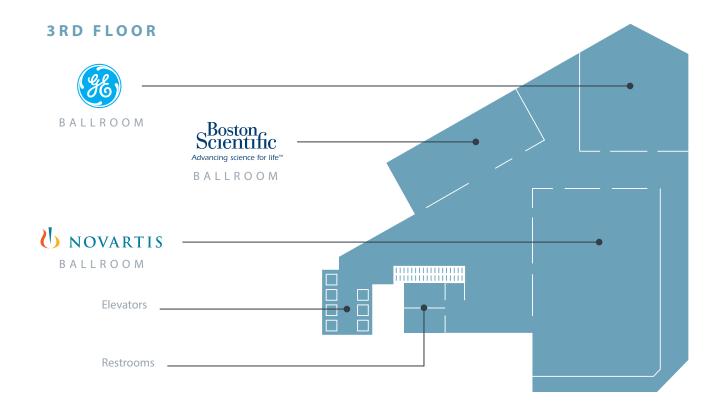


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