



assfn

American Society for Stereotactic
and Functional Neurosurgery

2024 BIENNIAL MEETING

Nashville, TN • June 1-4, 2024



SCIENTIFIC PROGRAM

Forging Connections and Collaborations
in Functional Neurosurgery and Beyond



Congress of
Neurological
Surgeons

Jointly provided by the Congress of Neurological
Surgeons and the American Society for Stereotactic
and Functional Neurosurgery



BOSTON SCIENTIFIC LUNCH SYMPOSIUM DURING THE 2024 ASSFN BIENNIAL MEETING

BIOLOGICALLY INSPIRED PALLIDAL BURST STIMULATION FOR PARKINSON'S DISEASE

Presented by:

Nader Pouratian, M.D., Ph.D.

UT Southwestern Medical Center
Dallas, Texas

Sunday, June 2, 2024

12:00 PM – 12:55 PM

Summit Ballroom E, Level 4

While at ASSFN join us at booth 201

Stay up to date with Boston Scientific
at ASSFN by scanning the QR code.



Lunch is provided as a courtesy for persons attending this reception. While you are welcome to attend, due to restrictions imposed by Vermont law, we ask that healthcare professionals who are licensed in Vermont not partake in the food.

U.S. Federal Government Employees – U.S. Federal Government Employees may be required to obtain approval from their agency's or institution's ethics officer or ethics committee or from a supervisor to attend this program. For more details, please contact your ethics officer or supervisor.

Vermont-Licensed HCPs – Vermont law prohibits Boston Scientific from providing any food, meals or refreshments at no charge to health care professionals licensed by and regularly practicing in Vermont. Accordingly, health care professionals licensed by and regularly practicing in Vermont are requested not to partake in any of the food, meals or refreshments offered at this event.

All U.S. Physicians – The U.S. Physician Payment Sunshine Act requires all pharmaceutical, biologics and medical device companies to disclose annually to the U.S. government payments and transfers of value provided to U.S. physicians and teaching hospitals. This includes the value of meals and refreshments provided to U.S. physicians in connection with attending Boston Scientific educational programs.

Indication for Use: The Boston Scientific Verice™ PC, Verice Gevia™, Verice Genus™ Deep Brain Stimulation Systems are indicated for use in:

- Bilateral stimulation of the subthalamic nucleus (STN) as an adjunctive therapy in reducing some of the symptoms of moderate to advanced levodopa-responsive Parkinson's disease (PD) that are not adequately controlled with medication.
- Bilateral stimulation of the internal globus pallidus (GP) as an adjunctive therapy in reducing some of the symptoms of advanced levodopa-responsive Parkinson's disease (PD) that are not adequately controlled with medication.
- Unilateral thalamic stimulation of the ventral intermediate nucleus (VIM) is indicated for the suppression of tremor in the upper extremity. The system is intended for use in patients who are diagnosed with essential tremor or parkinsonian tremor not adequately controlled by medications and where the tremor constitutes a significant functional disability.
- Bilateral stimulation of the ventral intermediate nucleus (VIM) of the thalamus for the suppression of disabling upper extremity tremor in adult essential tremor patients whose tremor is not adequately controlled by medications and where the tremor constitutes a significant functional disability.

The Boston Scientific Verice Deep Brain Stimulation System is indicated for use in:

- Bilateral stimulation of the subthalamic nucleus (STN) as an adjunctive therapy in reducing some of the symptoms of moderate to advanced levodopa-responsive Parkinson's disease (PD) that are not adequately controlled with medication.
- Contraindications, warnings, precautions, side effects: The Boston Scientific Deep Brain Stimulation (DBS) Systems or any of its components, are contraindicated for: Diathermy as either a treatment for a medical condition or as part of a surgical procedure, Electroconvulsive Therapy (ECT) and Transcranial Magnetic Stimulation (TMS) as the safety of these therapies in patients implanted with the Boston Scientific DBS System has not been established, patients who are unable to operate the system, patients who are poor surgical candidates or who experience unsuccessful test stimulation. Patients implanted with Boston Scientific DBS System without ImageReady™ MRI Technology should not be exposed to Magnetic Resonance Imaging (MRI). Patients implanted with Verice Gevia or Verice Genus or Verice Genus Mixed System with M8 Adapter or Verice DBS Lead-Only System (before Stimulator is implanted) with ImageReady MRI Technology are Full Body MR Conditional only when exposed to the MRI environment under the specific conditions defined in ImageReady MRI Guidelines for Boston Scientific DBS Systems. Assess patients for the risks of depression and suicide. This assessment should consider both the risk of depression and suicide as well as the potential clinical benefits of DBS therapy. Monitor patients for new or worsening symptoms of depression, suicidal thoughts or behaviors, or changes in mood or impulse control and manage appropriately. Refer to the Instructions for Use provided with the Boston Scientific DBS Systems or BostonScientific.com for potential adverse effects, warnings, and precautions prior to using this product. Caution: U.S. Federal law restricts this device to sale by or on the order of a physician.

IMPORTANT INFORMATION: These materials are intended to describe common clinical considerations and procedural steps for the use of referenced technologies but may not be appropriate for every patient or case. Decisions surrounding patient care depend on the physician's professional judgment in consideration of all available information for the individual case.

Boston Scientific (BSC) does not promote or encourage the use of its devices outside their approved labeling. Case studies are not necessarily representative of clinical outcomes in all cases as individual results may vary.

Collaboration and funding in part by Boston Scientific as applicable.

Physician compensated for their time in the creation or presentation of the Boston Scientific ASSFN Lunch Symposium.

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**American Society for Stereotactic
and Functional Neurosurgery**

The American Society for Stereotactic and Functional Neurosurgery (ASSFN) serves as an affiliate joint section of the CNS and AANS, and remains deeply involved in a variety of educational, organizational, and advocacy activities on behalf of North American functional neurosurgeons.



**Congress of
Neurological
Surgeons**

Jointly provided by the Congress of Neurological Surgeons and the American Society for Stereotactic and Functional Neurosurgery.

WELCOME

WELCOME TO THE 2024 ASSFN BIENNIAL MEETING IN NASHVILLE!

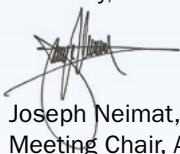
We extend a warm welcome to all attendees of the 2024 American Society for Stereotactic and Functional Neurosurgery (ASSFN) Biennial Meeting in Nashville, Tennessee. Explore cutting-edge topics at the Daily Plenary Sessions, featuring experts on Innovation in Neurosurgery, Collaborations in Music, Sports, and Neurosurgery, Exploring the Conscious and Unconscious Brain, Advances in Neural Interfaces, and Unlocking the Brain. Tailor your experience with parallel sessions covering diverse topics, including Big Data and AI, Pediatric Surgical Advances, The Evolution of Epilepsy Surgery, The Evolution of Movement Disorder Surgery, The Evolution of Psychiatric Neuromodulation, The Evolution of Pain Surgery, and Connectomic Functional Neurosurgery and Bench to Bedside Advances.

We welcome you to visit the Exhibit Hall to engage with exhibitors, view state-of-the-art products, and enjoy a beverage as you discover the latest advancements in the field.

The 2024 ASSFN Biennial Meeting offers an unparalleled opportunity to stay at the forefront of stereotactic and functional neurosurgery, collaborate with colleagues, and connect with renowned faculty from around the world. We look forward to your presence at this enriching event, and we trust it will be both professionally rewarding and personally enjoyable.

Thank you again for joining us at the 2024 ASSFN Biennial Meeting! While in downtown Nashville, immerse yourself in the city's vibrant culture, enjoy local cuisine, and experience the unique charm of Music City.

Sincerely,



Joseph Neimat, MD, MS
Meeting Chair, ASSFN



Dario J. Englot, MD, PhD
Scientific Program Chair, ASSFN



Andre Machado, MD
President, ASSFN

MEETING DIRECTORS



Andre Machado
ASSFN President
Cleveland Clinic
Cleveland, Ohio



Joseph S. Neimat
Meeting Chair
University of Louisville
Louisville, Kentucky



Dario J. Englot
Scientific Program Chair
Vanderbilt University
Nashville, Tennessee



Ellen L. Air
Scientific Program Committee
Henry Ford Hospital
Detroit, Michigan



Rushna Ali
Scientific Program Committee
Mayo Clinic
Rochester, Minnesota



Nicole Bentley
Scientific Program Committee
University of Alabama at Birmingham
Birmingham, Alabama



Kate Davis
Scientific Program Committee
University of Pennsylvania
Philadelphia, Pennsylvania



Jason Gerrard
Scientific Program Committee
University of Tennessee
Memphis, Tennessee

MEETING DIRECTORS



Suneil K. Kalia

Scientific Program Committee
University of Toronto
Toronto, Canada



Cameron C. McIntyre

Scientific Program Committee
Duke University
Durham, North Carolina



Jonathan Miller

Scientific Program Committee
University Hospitals of Cleveland
Case Medical Center
Cleveland, Ohio



Michael S. Okun

Scientific Program Committee
University of Florida
Gainesville, Florida



Julie G. Pilitsis

Scientific Program Committee
University of Arizona
Banner Health
Tucson, Arizona



Nathan C. Rowland

Scientific Program Committee
Medical University of South Carolina
Charleston, South Carolina



Nitin Tandon

Scientific Program Committee
University of Texas
Houston, Texas



Doris Wang

Scientific Program Committee
University of California, San Francisco
San Francisco, California

Ronald R. Tasker



Ronald R. (Ron) Tasker, 95, died peacefully on April 19, 2023, near his home of 50 years in Toronto, following a long and productive life. He was predeceased by his beloved wife Mary M. Tasker, née Craig, in 2003. Having a precocious

mind, Ron entered U of T at 16 on a classics scholarship, where he studied Honour Science (Lt. Governor's Medal, 1948). This led to the lab of Dr. Charles Best, the co-discoverer of insulin. Dr. Best and Ron's mother counselled him to study medicine, where he won the 1950 Saddington Medal in Pathology, and the 1952 Cody Silver Medal. Ron was a classically trained scientist in the analog methods of early modern medicine. He pioneered clinical neurophysiology by adopting digital technology and instrumentation in the operating room, and by melding his training in neurophysiology and stereotactic neurosurgery. Ron joined the Division of Neurosurgery at Toronto General Hospital (TGH) in 1961 and was distinguished as a Markle Scholar (1961-1966). He traveled the world training neurosurgeons in the field of Stereotactic and Functional Neurosurgery and later became Head of Neurosurgery at TGH from 1979 to 1988. Ron taught in the Faculty of Medicine at U of T for more than 40 years, becoming Full Professor in 1978, and honoured with the title of Professor Emeritus – Neurosurgery in 2005, along with Officer of the Order of Canada. Ron was the recipient of Spiegel & Wycis Medal, World Society Stereotactic and Functional Neurosurgery (WSSFN), 1993. The R.R. Tasker Chair in Functional Neurosurgery was endowed in the Department of Surgery at U of T in 1999 to mark his many contributions to this field of medicine. Ron established a world-renowned reputation in clinical research as a brilliant surgeon, teacher, mentor, and professional role model, highly regarded for his clarity of thinking and plain spoken voice. Ron was a man of indisputable professional honesty and integrity, highly regarded as a gentle, courteous and approachable teacher.

HONORED GUESTS

Jerome Engel, Jr.



Jerome Engel, Jr. is Director of the Seizure Disorder Center, The Jonathan Sinay Distinguished Professor of Neurology, Neurobiology, and Psychiatry and Biobehavioral Sciences, and a member of the Brain Research Institute at UCLA. He received his undergraduate degree from Cornell University, his advanced degrees from Stanford University, and completed his training in neurology at Albert Einstein College of Medicine. He has received numerous awards and honors, including a Fulbright Scholarship, a Guggenheim Fellowship, a Javits Award from the National Institutes of Health, and the Life-Time Achievement Award from the International League against Epilepsy.

George Ojemann



George Ojemann received his undergraduate and doctorate degrees at the University of Iowa College of Medicine. After completing his neurological surgery residency at the University of Washington medical centers, he began a distinguished career as a neurosurgeon and researcher specializing in epilepsy, joining the University of Washington faculty in 1966. He retired from clinical practice in 2005 but has continued this research and teaching. For his research, he received the 1984 Grass Prize from the Society of Neurological Surgeons, a Javits award from the National Institute of Neurological Diseases and Stroke, and multiple other prestigious honors.

FEATURED SPEAKERS



Ed Boyden

Neurotech Innovator, MIT Professor,
Award-Winning Researcher



György Buzsáki

Neuroscience Pioneer, Brain Rhythm
Researcher, Award Recipient



Lee Thomas Miller

Chart-Topping Songwriter with
Three Grammy Nominations



David Owens

Innovation Expert, Acclaimed Speaker,
Global Consultant



The Warren Brothers

Nine #1 Hits; Acclaimed Songwriters
for Country's Finest



Pete Weber

Nashville Predators Voice for
24 Seasons, Award-Winning
Announcer



INFINITY™ DBS SYSTEM WITH NEUROSPHERE™ DIGITAL CARE

Go beyond clinic walls and extend movement disorder patient care, with first-of-its-kind remote neurostimulation programming in the U.S.¹ and secure in-app video chat directly from Abbott's Clinician Programmer.



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INVITED SPEAKERS

Taylor Abel

University of Pittsburgh
Medical Center
Pittsburgh, PA

Ellen Air

Henry Ford Hospital
Detroit, MI

Rushna Ali

Mayo Clinic
Rochester, MN

Elsa Arocho-Quinones

Medical College of Wisconsin
Milwaukee, WI

Wael Asaad

Brown University
Westwood, MA

Tyler Ball

Vanderbilt University
Nashville, TN

Ausaf Bari

UCLA
Los Angeles, CA

Kara Beasley

Boulder Neurosurgical
Associates
Boulder, CO

Sharona Ben-Haim

University of California San
Diego
Cardiff-by-the-Sea, CA

Nicole Bentley

University of Alabama at
Birmingham
Birmingham, AL

Sarah Bick

Vanderbilt University
Nashville, TN

Kelly Bijanki

Baylor College of Medicine
Houston, TX

Hal Blumenfeld

Yale University
New Haven, CT

Jennifer Blumenthal-Barby

Baylor College of Medicine
Houston, TX

Ed Boyden

Massachusetts Institute of
Technology
Cambridge, MA

David Burdette

Spectrum Health
Grand Rapids, MA

György Buzsáki

NYU Langone
New York, NY

Iahn Cajigas

University of Pennsylvania
Philadelphia, PA

Lola Chambless

Vanderbilt University
Nashville, TN

Edward Chang

University of California, San
Francisco
San Francisco, CA

Erin Conrad

University of Pennsylvania
Philadelphia, PA

Christos Constantinidis

Vanderbilt University
Nashville, TN

G. Rees Cosgrove

Brigham and Women's
Hospital, Harvard Medical
School
Boston, MA

Arthur Cukiert

Sao Paulo Epilepsy Clinic
Sao Paulo, Brazil

Ashley Dalrymple

University of Utah
Salt Lake City, UT

Eyiyemisi Damisah

Yale School of Medicine
New Haven, CT

INVITED SPEAKERS

Shabbar Danish

Rutgers Robert Wood Johnson
Medical School
Neptune, NJ

David Darrow

University of Minnesota
Minneapolis, MN

Kate Davis

University of Pennsylvania
Philadelphia, PA

Benoit Dawant

Vanderbilt University
Nashville, TN

Pierre D'Haese

Vanderbilt University
Nashville, TN

Darin Dougherty

Massachusetts General
Hospital
Charlestown, MA

W. Jeffrey Elias

University of Virginia
Charlottesville, VA

Jerome Engel, Jr.

University of California, Los
Angeles
Los Angeles, CA

Dario J. Englot

Vanderbilt University
Nashville, TN

Kelly Foote

University of Florida College of
Medicine and McKnight Brain
Institute
Gainesville, FL

Michael Fox

Berenson-Allen Center for Non
Invasive Brain Stimulation,
Beth Israel Deaconess
Medical Center, Harvard
Medical School
Boston, MA

Jason Gerrard

University of Tennessee
Memphis, TN

Shawn Gliner

Pendant Biosciences, Inc.
Nashville, TN

Jorge González-Martínez

University of Pittsburgh
Pittsburgh, PA

Robert Gross

Rutgers
New Brunswick, NJ

Ayse Gunduz

University of Florida
Gainesville, FL

Kunal Gupta

Indiana University
Indianapolis, IN

Ryder Gwinn

Eastside Neuroscience
Institute
Seattle, WA

Mallory Hacker

Vanderbilt University
Nashville, TN

Casey Halpern

University of Pennsylvania
Philadelphia, PA

Clement Hamani

University of Toronto
Toronto, ON Canada

Travis Hassell

Vanderbilt University
Nashville, TN

Leigh Hochberg

Massachusetts General
Hospital
Brookline, MA

Kathryn Holloway

VCU Health System
Richmond, VA

Kullervo Hynynen

University of Toronto
Toronto, ON Canada

Kara Johnson

University of Florida
Gainesville, FL

INVITED SPEAKERS

Lora Kahn

Ochsner Medical Center
New Orleans, LA

Lorraine Kalia

University of Toronto
Toronto, ON Canada

Suneil Kalia

University of Toronto
Toronto, ON Canada

Michael Kaplitt

Weill Cornell Medicine
New York, NY

Patrick Karas

University of Texas
Houston, TX

Zelma Kiss

University of Calgary
Calgary, AB Canada

Andrew Ko

University of Washington
Seattle, WA

Peter Konrad

West Virginia University
Morgantown, WV

Vibhor Krishna

The Ohio State University
Columbus, OH

Bornali Kundu

University of Utah
Salt Lake City, UT

Nandan Lad

Duke University Medical Center
Durham, NC

Paul Larson

University of Arizona
Tucson, AZ

Brian Lee

University of Southern
California
Los Angeles, CA

Darrin Lee

Keck School of Medicine of
USC
Los Angeles, CA

Emily Levin

University of Michigan
Ann Arbor, MI

Nir Lipsman

University of Toronto
Toronto, ON Canada

Andres Lozano

University of Toronto
Toronto, ON Canada

Timothy Lucas

University of Pennsylvania
Philadelphia, PA

André Machado

Cleveland Clinic Foundation
Cleveland, OH

Neena Marupudi

University of Michigan
Ann Arbor, MI

Helen Mayberg

Mount Sinai School of
Medicine
New York, NY

Cameron McIntyre

Duke University
Durham, NC

Guy McKhann

Columbia University
New York, NY

Jonathan Miller

SUNY
Syracuse, NY

Kai Miller

Mayo Clinic, Minnesota
Rochester, MN

Lee Thomas Miller

Nashville, TN

Alon Mogilner

NYU Grossman School of
Medicine
New York, NY

Vicky Morgan

Vanderbilt University
Nashville, TN

INVITED SPEAKERS

Ian Mutchnick

Norton Neuroscience Institute
Louisville, KY

Robert Naftel

Vanderbilt University Medical
Center
Nashville, TN

Joseph Neimat

University of Louisville
Louisville, KY

Michael Okun

University of Florida College
of Medicine and McKnight
Brain Institute
Gainesville, FL

David Owens

Vanderbilt University
Nashville, TN

Fedor Panov

Mount Sinai Health System
New York, NY

Parag Patil

University of Michigan
Ann Arbor, MI

Sanjay Patra

Spectrum Health
East Grand Rapids, MI

Danika Paulo

Vanderbilt University
Nashville, TN

Erika Petersen

University of Arkansas
Little Rock, AR

Richard Pierce

Vanderbilt University
Nashville, TN

Julie Pilitsis

University of Arizona
Banner Health
Tucson, AZ

Nader Pouratian

UT Southwestern Medical
Center
Dallas, TX

Shervin Rahimpour

University of Utah
Salt Lake City, UT

Richard Rammo

Cleveland Clinic
Cleveland, OH

Abigail Rao

Norton Neuroscience Institute
Louisville, KY

Ahmed Raslan

Oregon Health and Science
University
Portland, OR

Ali Rezai

Rockefeller Neuroscience
Institute
Morgantown, WV

R. Mark Richardson

Massachusetts General
Hospital
Boston, MA

Joshua Rosenow

Northwestern University
Chicago, IL

Nathan Rowland

Medical University of South
Carolina
Charleston, SC

Uzma Samadani

Hennepin Healthcare
Research Institute
Minneapolis, MN

Sridevi Sarma

Johns Hopkins University
Baltimore, MD

Demitre Serletis

Cleveland Clinic
Cleveland, OH

Ashwini Sharan

Thomas Jefferson University
Hospital
Philadelphia, PA

Sameer Sheth

Baylor College of Medicine
Houston, TX

INVITED SPEAKERS

Konstantin Slavin

University of Illinois at Chicago
Chicago, IL

Michael Staudt

University Hospitals Cleveland
Medical Center
Cleveland, OH

Jennifer Sweet

University Hospitals Cleveland
Medical Center
Cleveland, OH

Viviane Tabar

Memorial Sloan Kettering
Cancer Center
New York, NY

Nitin Tandon

McGovern Medical School
Houston, TX

Nicole Toth

Henry Ford Hospital
Detroit, MI

Elizabeth Tyler-Kabara

University of Texas, Austin
Austin, TX

Meena Vessell

Texas Children's Hospital
Austin, TX

Doris Wang

University of California, San
Francisco
San Francisco, CA

Brett Warren

Nashville, TN

Brad Warren

Nashville, TN

Peter Weber

Nashville Predators
Nashville, TN

Ziv Williams

Massachusetts General
Hospital
Boston, MA

Jon Willie

Washington University School
of Medicine
St Louis, MO

Chengyuan Wu

Thomas Jefferson University
Hospital
Philadelphia, PA

Ajmal Zemmar

University of Louisville
Louisville, KY



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Go beyond clinic walls and extend movement disorder patient care, with first-of-its-kind remote neurostimulation programming in the U.S.¹ and secure in-app video chat directly from Abbott's Clinician Programmer.



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PROGRAM SCHEDULE

SATURDAY, JUNE 1, 2024

8:00 am–4:00 pm

GRAND HALL FOYER

Registration

8:30 am–12:00 pm

GRAND HALL A

Special Course 1

Epilepsy Surgery Fundamentals and Challenges

Course Directors: Andrew Ko, Kai Miller

Part 1: Video Sessions

8:30–9:10 am

sEEG-guided LITT

Eyiyemisi Damisah, Robert Naftel, Demitre Serletis

9:10–9:50 am

Patient with Extensive Heterotopia: Discussion of RNS at Heretopia vs. DBS/RNS Thalamus vs. VNS

Arthur Cukiert, Fedor Panov, Sanjay Patra

9:50–10:30 am

Patient with Drop Attacks with Thin CC: Open vs. LITT vs. Endoscopic Callosotomy

Taylor Abel, Neena Maripudi, Jorge Gonzalez Martinez

10:30–10:45 am

Beverage Break

Part 2: Hands On Session

10:45–11:20 am

Robotic vs. StarFix sEEG with Demonstration of RF via sEEG Electrodes

Andrew Ko, Kai Miller, Ian Mutchnick, Jon Willie, Chengyuan Wu

11:20 am–12:00 pm

Endoscope and LITT Demonstration of Callosotomy

Taylor Abel, Neena Maripudi, Jorge Gonzalez Martinez

Educational Grant provided by

Brainlab, Monteris Medical and Zimmer Biomet

In-Kind Equipment provided by

Brainlab, FHC Inc., Monteris Medical and Zimmer Biomet

PROGRAM SCHEDULE

8:30 am–12:00 pm

GRAND HALL B

Special Course 2

Movement Disorder Surgery Fundamentals and Challenges

Course Directors: Rushna Ali, Alon Mogilner

8:30–8:35 am

Introduction

Rushna Ali, Alon Mogilner

8:35–9:00 am

Advanced Imaging and Connectomics for DBS Planning

Mallory Hacker, Shervin Rahimpour

9:00–9:25 am

Hands-on: Pitfalls and Principles of Planning

All Faculty

9:25–9:50 am

iMRI vs. iCT vs. Robotic vs. MER Overview

Kathryn Holloway, Paul Larson, Richard Rammo

9:50–10:15 am

Hands-on: iMRI vs. iCT vs. Robotic

All Faculty

10:15–10:40 am

Beverage Break

10:40–11:05 am

Focused Ultrasound vs DBS: When, Why, Who

Rees Cosgrove, Peter Konrad

11:05–11:30 am

Directional and Closed Loop DBS

Nandan Lad, Joshua Rosenow

11:30 am–12:00 pm

Challenging Cases Discussion

Abigail Rao, Ashwini Sharan

Educational Grant provided by

Alpha Omega USA, Brainlab and Zimmer Biomet

In-Kind Equipment provided by

Alpha Omega USA, Brainlab, FHC Inc. and Zimmer Biomet

PROGRAM SCHEDULE

1:00–4:00 pm

GRAND HALL A

Special Course 3

Business of Functional Neurosurgery and Choosing a Job for Residents *(for Residents and Fellows)*

Course Director: Ellen Air

1:00–1:05 pm

Overview

Ellen Air

1:05–1:25 pm

Exploring the Academic to Practice-Based Spectrum

Jason Gerrard

1:25–1:45 pm

Prioritization and Job Fit

Rushna Ali

1:45–2:05 pm

Negotiating the Package

Kunal Gupta

2:05–2:25 pm

Building and Growing an Interdisciplinary Team

Michael Staudt

2:25–2:40 pm

Beverage Break

2:40–3:00 pm

Infrastructure

Lora Kahn

3:00–3:20 pm

Building an “Outside” Referral Base

Paul Larson

3:20–3:40 pm

Who Bills and Where does the Money Go?

Ellen Air, Nicole Toth

3:40–4:00 pm

Integrating Research Without Breaking the Bank

Wael Asaad

Gold Sponsor: Alpha Omega USA

PROGRAM SCHEDULE

1:00–4:00 pm

GRAND HALL B

Special Course 4

Mentorship for Medical Students

Course Director: Nathan Rowland

1:00–1:05 pm

Overview

Nathan Rowland

1:05–1:30 pm

Evolution of the Neurosurgery Residency Match Process

Lola Chambless

1:30–1:55 pm

The Role of Research for the Neurosurgical Candidate

Patrick Karas

1:55–2:20 pm

Choosing the Ideal Sub-Internships

Nicole Bentley

2:20–2:45 pm

Successful Interviewing Strategies for the Neurosurgery Match

Emily Levin

2:45–3:10 pm

Beverage Break

3:10–3:35 pm

The Role of ASSFN in Supporting URM Neurosurgical Candidates: The AMPLify Model

Nathan Rowland

3:35–4:00 pm

Organized Neurosurgery and Neurosurgical Societies

Danika Paulo

1:00–4:00 pm

GRAND HALL C

Special Course 5

Entrepreneurship and Innovation

Course Directors: Shawn Glitner, Cameron McIntyre, Joseph Neimat, David Owens

4:00–5:00 pm

GRAND HALL FOYER

WINS Networking Event

Gold Sponsor: Abbott **Bronze Sponsor:** Alpha Omega USA

PROGRAM SCHEDULE

SUNDAY, JUNE 2, 2024

6:30 am–6:00 pm

GRAND HALL FOYER

Registration

7:00–7:55 am

GRAND HALL FOYER

Continental Breakfast

7:00–7:55 am

SUMMIT D

Breakfast Session 1

Neurorehabilitation

Moderator: David Darrow, Andre Machado

7:00–7:15 am

VNS for Neurorehabilitation

Darrin Lee

7:15–7:30 am

Spinal Cord Stimulation for Spinal Cord Injury

Uzma Samadani

7:30–7:45 am

Spinal Cord Stimulation to Restore a Sense of Touch

Ashley Dalrymple

7:45–7:55 am

Panel Discussion

All Faculty

7:00–7:55 am

SUMMIT E

Breakfast Session 2

Personalized Neuromodulation Biomarkers

Moderator: Shabbar Danish, Doris Wang

7:00–7:15 am

Personalized DBS for Binge-Eating Disorder

Casey Halpern

7:15–7:30 am

Personalized DBS for Parkinson's Disease

Kara Johnson

7:30–7:45 am

Personalized Visualization for DBS Planning

Cameron McIntyre

PROGRAM SCHEDULE

7:45–7:55 am

Panel Discussion

All Faculty

8:00–9:50 am

GRAND HALL D

Plenary Session 1

Innovation in Neurosurgery: Possibilities and Pitfalls

Moderators: Brian Lee, Jonathan Miller, Joseph Neimat

8:00–8:05 am

Introduction

Joseph Neimat

8:05–8:35 am

Keynote on Innovation

David Owens



8:35–8:50 am

Brain Stimulation for Stroke

André Machado

8:50–9:05 am

Intermittent DBS: From Animal Studies to Application

Christos Constantinidis

9:05–9:20 am

Recent Innovations in Neural Interfaces

Leigh Hochberg

9:20–9:50 am

Roundtable Discussion

Christos Constantinidis, Leigh Hochberg,
André Machado, Joseph Neimat, David Owens

9:30 am–4:30 pm

GRAND HALL E

Exhibit Hall Open

9:50–10:20 am

GRAND HALL E

Beverage Break – Visit the Exhibits!



PROGRAM SCHEDULE

10:20 am–12:00 pm

GRAND HALL D

Parallel Session 1

Big Data and AI

Moderators: Pierre D’Haese, Chengyuan Wu

10:20–10:35 am

Understanding Complex Brain Networks with AI

Kai Miller

10:35–11:05 am

Big Data and AI in Movement Disorders

Benoit Dawant, Pierre D’Haese, Peter Konrad

11:05–11:20 am

AI Applications in Intracranial EEG for Epilepsy

Erin Conrad

11:20 am–12:00 pm

Open Papers

11:20–11:25 am

An Intracortical Brain Computer Interface to Restore Communication in a Person with ALS

Nicholas Card; Maitreyee Wairagkar; Carrina Iacobacci; Xianda Hou; Tyler Singer-Clark; Francis Willett; Erin Kunz; Chaofei Fan; Maryam Vahdati Nia; Darrel Deo; Eun Young Choi; Matthew Glasser; Leigh R. Hochberg; Jaimie M. Henderson; Kiarash Shahlaie; Sergey Stavisky; David M. Brandman

11:26–11:31 am

Unveiling Phonological Processing: sEEG Insights in Natural Speech Tasks

Aditya Singh; Nitin Tandon; Jinlong (Torres) Li

11:32–11:37 am

One-Shot Learning in the Human Brain

Megha Ghosh; Sophia Lowe-Hines; Adam Crandall; Andrew Lin Ko; Jeffrey Ojemann; Ben L. Grannan

11:38–11:43 am

Capturing Synchronized Neural and Experiential Data in the Wild with The Neuropace Responsive Neurostimulator

Cory Inman; Luis Garcia; Uros Topalovic; Mauricio Vallejo; Matthias Stangl; Tyler Davis; Martina Hollearn; Justin Michael Campbell; Lensky Augustin; Dawn Eliashiv; Vikram Rao; Itzhak Fried; Nicholas Hasulak; Sonja Hiller; Nanthia Suthana

PROGRAM SCHEDULE

11:44–11:49 am

Timing of Spiking Activity Suggests a Role in Reach Braking Control and Error Monitoring for the Ventral Intermediate Nucleus of the Thalamus in Essential Tremor Patients

Rex Tien; Jonathan Platt; Madelyn Mendlen; Drew Kern; Steven Ojemann; John Thompson; Daniel Kramer

11:50–11:55 am

Recordings of Anterior Cingulate Cortex Dopamine Activity in Sub-second Time During Working Memory Tasks

Priya Ramaiah; Seth Batten; Thomas Twomey; Natalie Melville; Jason White; Alexis Torres; Xavier Celaya; Dan Bang; Yi Luo; Leonardo Barbosa; Gi-Yeul Bae; Samuel McClure; Gene Brewer; Terry Lohrenz; Read Montague; Robert Wagner Bina

11:56 am–12:01 pm

An Implantable AI Enabled Device Can Predict Seizures with High Accuracy Up to 1 Hour Before Events

Ali Saeizadeh; Daniel Uvaydov; Douglas Schonholtz; Jorge M. Jimenez; Joseph Neimat; Raja N. Jani; Tommaso Melodia

10:20 am–12:00 pm

GRAND HALL ABC

Parallel Session 2

Pediatric Surgical Advances

Moderators: Tyler Abel, Elizabeth Tyler-Kabara

10:20–10:35 am

RNS in the Pediatric Population

Meena Vessell

10:35–10:50 am

Cerebellar Deep Nuclei DBS for Acquired Dystonias in Children

Iahn Cajigas Gonzalez

10:50–11:05 am

Laser Ablation for Pediatric Epilepsies

Elsa Arrocho Quinones

11:05–11:20 am

Multimodal Approaches to Pediatric Spasticity

Robert Naftel

11:20 am–12:00 pm

Open Papers

PROGRAM SCHEDULE

11:20–11:25 am

Modeling Aberrant Hemodynamic Autoregulation and Infralow Modulation of Neural Activity

Maren Loe; Michael Morrissey; Rebekah Landre; Stuart Tomko; Rejean Guerriero; ShiNung Ching

11:26–11:31 am

Outcomes of Stereoelectroencephalography Following Failed Epilepsy Surgery in Children

Georgia Wong; Ashley McCray; Kara Hom; Saige Teti; Nathan Cohen; William Gaillard; Chima Oluigbo

11:32–11:37 am

Revealing the Functional and Physiological Properties of Human Single Neurons in a Temporal Cortical Microcircuit Using Neuropixels

Shraddha Shah; Kalman Katlowitz; Joshua Adkinson; Raissa Mathura; Nicole Provenza; Nisha Giridharan; Garrett P. Banks; Lan Luan; Chong Xie; Alica Goldman; Atul Maheshwari; Sarah Heilbronner; Andrew Watrous; Benjamin Hayden; Sameer A. Sheth

11:38–11:43 am

Neural Evidence Accumulation in the Dorsolateral Prefrontal Cortex Mediates Working Memory-based Decision-making

David P. Darrow; Seth Koenig; Xiyuan Yan; Alexander Herman

11:44–11:49 am

Electric Field Stimulation Collaborates with mTOR to Direct Retinal Ganglion Cell Axon Regeneration and Partial Restoration of Vision After Optic Nerve Crush Injury

Kimberly K. Gokoffski; Connie Huang; Anahit Simonyan; Sasha Medvidovic; Timothy Silliman; Timothy Kim; Pooyan Pahlavan; Gengle Niu; Ege Iseri; Mahnaz Shahidi; Biju Thomas; Gianluca Lazzi; Darrin J. Lee

11:50–11:55 am

Ultra-High-Frequency Deep Brain Stimulation of the Medial Septal Nucleus Demonstrates Unique Septohippocampal Circuit Cerebral Blood Volume Activation Compared to Standard High Frequency Stimulation

Kevin Wu; Jack Yu Tung Lo; Aafreen Qureshi; Rebecca Chow; Avinash Pandit; Kofi Agyerman; Wooseong Choi; Robert G. Briggs; Matthew Bergosh; Nancy Zepeda; Lindsey Crown; Charles Y. Liu; Vasileios Christopoulos; Darrin J. Lee

PROGRAM SCHEDULE

11:56 am–12:01 pm

Beta Wave Analysis on Two Public Data Sets with Open-source Frequency Range Explorer to Assist Epileptogenic Zone Localization (FREEZ) Module

Anne-Cecile Lesage; Sean O'Leary; Liliana Camarillo Rodriguez; Patrick J. Karas; Zhengjia Wang; John F. Magnotti; Michael S. Beauchamp; Sameer A. Sheth

12:00–12:55 pm

SUMMIT D

Medtronic

Non-CME Sponsored Lunch Session

Insight-Driven Strategies: Tools and Innovations for Refractory Epilepsy

Ausaf Bari, Jon T. Willie

12:00–12:55 pm

SUMMIT E

Boston Scientific

Non-CME Sponsored Lunch Session

Biologically Inspired Pallidal Burst Stimulation for Parkinson's Disease

Nader Pouratian

1:00–3:00 pm

GRAND HALL D

Plenary Session 2

Collaboration in Music, Sports, and Neurosurgery

Moderators: Dario J. Englot, Joseph Neimat

1:00–1:05 pm

Introduction of Musicians

Joseph Neimat

1:05–1:55 pm

Collaboration in Music: Performance and Discussion

Lee Thomas Miller, The Warren Brothers



1:55–2:00 pm

Introduction of Pete Weber

Dario J. Englot, Richard Pierce

PROGRAM SCHEDULE

2:00–2:20 pm

Collaborations in Sports: A Conversation with a Sportscaster and Patient

Dario J. Englot, Richard Pierce, Pete Weber



2:20–2:30 pm

Honoring Ronald R. Tasker

Andres Lozano

2:30–2:35 pm

Introduction of ASSFN President

Joseph Neimat

2:35–3:00 pm

Presidential Address

André Machado



3:00–3:30 pm

GRAND HALL E

Beverage Break – Visit the Exhibits!

3:30–6:00 pm

GRAND HALL D

Parallel Session 3

The Evolution of Epilepsy Surgery

Moderators: Sharona Ben-Haim, Guy McKhann

3:30–3:45 pm

Standardization of the Epilepsy Surgical Evaluation

Kate Davis

3:45–4:00 pm

Measuring Benefit Beyond Engel Outcome

Dario J. Englot

4:00–4:15 pm

Evolving from Resection to Ablation

Robert Gross

4:15–4:30 pm

Thalamic Neuromodulation for Primary Generalized Epilepsy

David Burdette

4:30–4:45 pm

FUS as a Novel Tool for Epilepsy

Vibhor Krishna

PROGRAM SCHEDULE

4:45–5:05 pm

Panel Discussion

All Faculty

5:05–6:00 pm

Open Papers

5:05–5:10 pm

Focal Seizures Induce Spatiotemporally Organized Spiking Activity in the Human Cortex

Joshua M. Diamond; Julio Chapeton; Weizhen Xie; Samantha Jackson; Sara Inati; Kareem A. Zaghloul

5:11–5:16 pm

Peri-Ictal Dynamics of The Interictal Suppression Hypothesis: An SEEG Study

Graham Walter Johnson; Derek Doss; Ghassan Makhoul; Leon Cai; Camden Bibro; Addison Cavender; Danika Lea Paulo; Baxter Rogers; Shilpa Reddy; Robert Partlow Naftel; Benoit Dawant; Catie Chang; Mark Wallace; Shawniqua Williams Roberson; Vicky Morgan; Sarah Bick; Dario J. Englot

5:17–5:22 pm

Thalamo-Cortical Connectivity Deterioration in Focal Epilepsy

Camden Bibro; Derek Doss; Graham Walter Johnson; Ghassan Makhoul; Sarah Goodale; Lucas Sainburg; Dingjie Su; Danika Lea Paulo; Sarah Bick; Catie Chang; Vicky Morgan; Dario J. Englot

5:23–5:28 pm

The Interictal Suppression Hypothesis is the Dominant Differentiator of Seizure Networks in Focal Epilepsy

Jared Shless; Derek Doss; Sarah Bick; Ghassan Makhoul; Aarushi Negi; Camden Bibro; Rohan Rashingkar; Abhijeet Gummadvelli; Catie Chang; Martin Gallagher; Robert Partlow Naftel; Shilpa Reddy; Shawniqua Williams Roberson; Vicky Morgan; Graham Walter Johnson; Dario J. Englot

5:29–5:34 pm

Disrupting the Epileptogenic Network with Stereoelectroencephalography-guided Radiofrequency Thermocoagulation

Ana Suller; Hellen Kreinter; Poul Espino; Sonia Mejia; Jorge Burneo; Seyed Mirsattari; Michelle-Lee Jones; Giovanni Pellegrino; David Diosy; David A. Steven; Keith MacDougall; Jonathan C. Lau

PROGRAM SCHEDULE

5:35–5:40 pm

Convergent Hierarchical Dynamics Within the Language Network for Speech Listening and Silent Reading

Kathryn Snyder; Kiefer Forseth; Oscar Woolnough; Elliot Murphy; Nitin Tandon

5:41–5:46 pm

Hippocampal Closed-loop Electrical Stimulation Augments Hippocampal-neocortical Memory Network Activity

Kathryn Snyder; Kiefer Forseth; Oscar Woolnough; Elliot Murphy; Nitin Tandon

5:47–5:52 pm

Consistent Stimulation Response May Help Define Epileptic Networks: A Single Pulse Electrical Stimulation Study

Ghassan S. Makhoul; Bruno Hidalgo Monroy Lerma; Derek J. Doss; Graham W. Johnson; Addison C. Cavender; Camden Bibro; Danika E. Paulo; Catie Chang; Mark Wallace; Shanniqua Williams Roberson; Sarah Bick; Vicky Morgan; Dario J. Englot

5:53–5:58 pm

A First-In-Human Study of Interneuron Transplantation for Drug-Resistant Focal Epilepsy

Derek Southwell; Harish Babu; Robert Beach; Sharona Ben-Haim; Kim J. Burchiel; Matthew Luedke; Rebecca O'Dwyer; Sepehr Sani; Jerry Shih; David Spencer; Gautam Banik; Marina Bershteyn; David Blum; Brianna Feld; Holly Finefrock; Luis Fuentealba; John Hixson; Ji-Hye Jung; Tia Kowal; Sonja Kriks; Rose Larios; Seonok Lee; Sheri Madrid; Yves Maury; Catherine Priest; Cory Nicholas

3:30–6:00 pm

GRAND HALL ABC

Parallel Session 4

The Evolution of Movement Disorder Surgery

Moderators: Nicole Bentley, Michael Okun

3:30–3:45 pm

Bilateral FUS vs. DBS for Tremor

Kara Beasley

3:45–4:00 pm

Gene Therapy of Movement Disorders

Paul Larson

4:00–4:15 pm

Advanced Stimulation Paradigms

PROGRAM SCHEDULE

Travis Hassell

4:15–4:30 pm

Value of Closed Loop: Clinician's Perspective

Kelly Foote

4:30–4:45 pm

Value of Closed Loop: Engineer's Perspective

Ayşe Gunduz

4:45–5:05 pm

Panel Discussion

All Faculty

5:05–6:00 pm

Open Papers

5:05–5:10 pm

Gait Phase Adaptive Deep Brain Stimulation Improves Gait Parameters in Parkinson's Disease Patients

Kenneth Louie; Jannine Balakid; Jessica Bath; Hamid Fekri Azgomi; Jacob Marks; Julia Choi; Philip A. Starr; Doris D. Wang

5:11–5:16 pm

Connectomics of Chronic VIM vs Rescue VIM/VO Deep Brain Stimulation in Essential Tremor

Vyshak Chandra; Yusuf Mekri; Anna Fusco; Joshua Wong; Justin D. Hilliard; Kelly D. Foote

5:17–5:22 pm

Long-term Clinical Outcomes for Patients with Parkinsons Disease Receiving a Unilateral Implantation to the Substantia Nigra of an Investigational Cell-based Therapy at the Time of DBS Surgery (DBS-plus)

George Quintero; John Slevin; Julie Gurwell; Greg Gerhardt; Craig van Horne

5:23–5:28 pm

Automated Deep Brain Stimulation Parameter Selection via Meta-Active Learning of Evoked Potentials

Eric Cole; Mariah Schrum; Enrico Opri; Letian Chen; Arthur Wang; Paola Testini; Bahram Borgheai; Arthur Nascimento; Faical Isbaine; Robert E. Gross; Matthew Gombolay; Svjetlana Miocinovic

PROGRAM SCHEDULE

5:29–5:34 pm

Reduction of Alpha Synuclein Oligomers in Preclinical Models of Parkinsons Disease by Electrical Stimulation In Vitro and Deep Brain Stimulation In Vivo

Suneil K. Kalia; Eun Jung Lee; David Hernán Aguirre-Padilla; Anton Fomenko; Grishma Pawar; Minesh Kapadia; Andres M. Lozano; Clement Hamani; Lorraine Kalia

5:35–5:40 pm

Optimal Focused Ultrasound Lesion Location in Essential Tremor

Melissa Ming Jie Chua; Alfredo Morales Pinzon; Clemens Neudorfer; Patrick Ray Ng; Sarah Blitz; Garance Meyer; Konstantin Butenko; Till Dembek; Fardad Behzadi; Nathan McDannold; John Rolston; Charles R.G. Guttmann; Michael Fox; Garth Cosgrove; Andreas Horn

5:41–5:46 pm

fMRI-based Deep Brain Stimulation Programming: A Blinded, Crossover Clinical Trial

Brendan Santyr; Afis Ajala; Ibrahim Alhashyan; Jurgen Germann; Jianwei Qui; Alexandre Boutet; Alfonso Fasano; Andres M. Lozano

5:47–5:52 pm

Focused Ultrasound Pallidothalamic Tractotomy for Cervical Dystonia

Shiro Horisawa; Takaomi Taira

5:53 – 5:58 pm

A Network Imaging Biomarker to Predict Clinical Responses to Subthalamic Nucleus Deep Brain Stimulation Surgery for Parkinsons Disease

Prashin Unadkat; Vijay Dhawan; Yilong Ma; Chris Tang; Shichun Peng; Martin Niethammer; An Vo; Silvia Caminiti; Daniela Perani; David Eidelberg

6:00–8:00 pm

GRAND HALL TERRACE

Opening Reception



Kick off the ASSFN Biennial Meeting experience by connecting with colleagues over drinks and delicious hors d'oeuvres!

PROGRAM SCHEDULE

MONDAY, JUNE 3, 2024

6:30 am–6:00 pm

GRAND HALL FOYER

Registration

7:00–7:55 am

GRAND HALL FOYER

Continental Breakfast

7:00–7:55 am

SUMMIT D

Abbott

Non-CME Sponsored Breakfast Session

DBS for Depression: the TRANSCEND Pivotal Study

Robert Gross, Brian Kopell, Patricio Riva Posse

7:00–7:55 am

SUMMIT E

Insightec

Non-CME Sponsored Breakfast Session

The Silent, Unmet Need in Movement Disorders; Advancements in Focused Ultrasound—Exablate® Prime

Stephen Harward II, Ahmed Raslan

8:30 am–5:30 pm

GRAND HALL E

Exhibit Hall Open

8:00–9:30 am

GRAND HALL D

Plenary Session 3

Exploring the Conscious and Unconscious Brain

Moderators: Julie Pilitsis, Konstantin Slavin

8:00–8:02 am

Introduction

Nitin Tandon

8:02–8:30 am

Unlocking the Neural Systems of the Brain

György Buzsáki

8:30–8:50 am

Theory of Mind and Social Cognition

Ziv Williams

PROGRAM SCHEDULE

8:50–9:10 am

Neuromodulation for Restoration of Consciousness

Hal Blumenfeld

9:10–9:30 am

Roundtable Discussion

9:30–10:00 am

GRAND HALL E

Beverage Break with Exhibitors

10:00 am–12:00 pm

GRAND HALL D

Parallel Session 5

The Evolution of Psychiatric Neuromodulation

Moderators: Sarah Bick, Nader Pouratian

10:00–10:20 am

Physiological Biomarkers in Psychiatric Neurosurgery

Kelly Bijanki, Sameer Sheth

10:20–10:40 am

Clinical Trials in DBS for Depression: State of the Field

Helen Mayberg

10:40–11:00 am

Addiction as a Novel Indication for DBS

Ali Rezai

11:00–11:20 am

Interdisciplinary Engagement in Psychiatric Neurosurgery

Darin Dougherty

11:20 am–12:00 pm

Open Papers

11:20–11:25 am

Structural, Connectivity, and Metabolic Changes Following Magnetic Resonance Guided Focused Ultrasound Capsulotomy

Benjamin Andrew Davidson; Lyndon Boone; Karim Mithani; Clement Hamani; Peter Giacobbe; Sean Nestor; Ying Meng; Jennifer Rabin; Maged Goubran; Nir Lipsman

PROGRAM SCHEDULE

11:26–11:31 am

Acute Deep Brain Stimulation of the Fornix in Alzheimers Disease Disrupts Memory Recall

Anna Kimata; Matthew Chan; Bryan Zheng; Peter M. Lauro; Jennifer Davis; Umer Akbar; Wael Asaad

11:32–11:37 am

Pathway Specific Stimulation of Prefrontal Cortical Pathways Recruits Unique Cortical Sources

Andreas Seas; M. Sohail Noor; Ki Sueng Choi; Ashan Veerakumar; Mosadoluwa Obatusin; Jacob Dahill-Fuchel; Vineet Tiruvadi; Elisa Xu; Patricio Riva Posse; Christopher Rozell; Helen S. Mayberg; Cameron C. McIntyre; Bryan Howell; Allison Waters

11:38–11:43 am

Stereo-electroencephalography Guided Multi-Lead Deep Brain Stimulation for Treatment-Resistant Obsessive-Compulsive Disorder

Robert Seilheimer; Liming Qiu; Younghoon Nho; Gustavo Campos; Neda Kaboodvand; Taneeta Ganguly; Kristie Bauman; Mario Cristancho; William Wilent; Cammie Rolle; Michael A. Jensen; Kai Miller; Desmond Oathes; Lily Brown; A. Moses Lee; Nolan R. Williams; Katherine Scangos; Daniel Barbosa; Casey H. Halpern

11:44–11:49 am

Brain Network Changes Characterized with Resting State Functional MRI are Associated with Anti-depressant Effects After Deep Brain Stimulation of the Medial Forebrain Bundle

Prashin Unadkat; Nha Nguyen; Jack Nhat Truong; Patrick Do; David Eidelberg; An Vo; Albert Fenoy

11:50–11:55 am

Circuit-based Relevant Electrophysiology Modulation of Personalized Evocation is Associated with Amelioration in OCD-related Distress

Younghoon Nho; Liming Qiu; Gustavo Campos; Robert Seilheimer; Camarin Rolle; Katherine Scangos; Daniel Barbosa; Casey H. Halpern

11:56 am–12:01 pm

Induced Emotional State and Aperiodic Activity of the Amygdala

Haeorum Park; Carl Hacker; Hohyun Cho; Peter Brunner; Jon Timothy Willie

PROGRAM SCHEDULE

10:00 am–12:00 pm

GRAND HALL ABC

Parallel Session 6

The Evolution of Pain Surgery

Moderators: Ahmed Raslan, Jennifer Sweet

10:00–10:20 am

Advances in Peripheral Nerve Stimulation

Sridevi Sarma

10:20–10:40 am

Choosing the Right Spinal Neuromodulation Technology

Erika Petersen

10:40–11:00 am

Advances in Intraoperative Monitoring for Spinal Cord Stimulation

Michael Staudt

11:00–11:20 am

New Directions in Intracranial Ablation for Pain

Jeff Elias

11:20 am–12:00 pm

Open Papers

11:20–11:25 am

Artificial Intelligence Based Imaging Analysis of Pain and Non-Pain States

Timur Latypov; Matthew So; Peter Shih Ping Hung; Matthew R. Walker; Sarasa Tohyama; Frank Rudzicz; Mojgan Hodaie

11:26–11:31 am

First In-Human Deep Brain Stimulation of Subgenual Cingulate Cortex for Chronic Low Back Pain: 9-Month Outcomes of a Randomized Trial

Michael Ward; Evangelia Tsolaki; Wenxin Wei; Meskerem Tolossa; Nader Pouratian; Ausaf A. Bari

11:32–11:37 am

Mesolimbic Beta and Gamma Power Modulate Motor Output

Leah Mann; Helen Qian; Natasha Hughes; Zixiang Zhao; Balbir Singh; Zhengyang Wang; Jenna Fulton; Dario J. Englot; Christos Constantinidis; Shawniqua Williams Roberson; Daniel Claassen; Sarah Bick

PROGRAM SCHEDULE

11:38–11:43 am

Responsive Neurostimulation for Post-Traumatic Stress Disorder: Interval Update

Evan Einstein; Mauricio Vallejo; Ralph Koek; Julia Schneiders; Jay Gill; Sonja Hiller; Anthony Jang; Jonny Baham; Matthias Stangl; Uros Topalovic; Martin Seeber; Vikram Rao; Michael Fanselow; Michelle Craske; Scott Krahl; James Chen; Merit Vick; Nicholas Hasulak; Nanthia Suthana; Jean-Philippe Langevin

11:44–11:49 am

A Clinical Trial to Investigate Neuromodulation of the Insula for Chronic Neuropathic Pain

W. Jeffrey Elias; Shayan Moosa; Chang-Chia Liu; Patrick Finan; Mark Quigg

11:50–11:55 am

Human Cervical Epidural Spinal Electrogram Topographically Maps Distinct Volitional Movements

Poojan Shukla; John Frederick Burke; Nikhita Kunwar; Kara Presbrey; Jannine Balakid; Maria Yaroshinsky; Kenneth Louie; Line G. Jacques; Prasad Shirvalkar; Doris D. Wang

11:56 am–12:01 pm

A Week in the Life of the Human Brain: Stable States Punctuated by Chaotic Transitions

Maxwell Wang; Max G. Sell; James Castellano; R. Mark Richardson; Avniel Ghuman

12:00–1:15 pm

SUMMIT D

Honored Guest Lunch

Moderators: Dario J. Englot, Joseph Neimat

Honorees: Jerome Engel Jr., George Ojemann

1:15–3:00 pm

GRAND HALL D

Plenary Session 4

Advances in Neural Interfaces

Moderators: Parag Patil, Nitin Tandon

1:15–1:35 pm

BCI for Speech

Edward Chang

1:35–1:55 pm

Sensory BCI

Timothy Lucas

PROGRAM SCHEDULE

1:55–2:15 pm

Neural Devices and Ethical Implications

Jennifer Blumenthal-Barby

2:15–2:45 pm

Ethics Roundtable Discussion

All Faculty

2:45–3:15 pm

GRAND HALL E

Beverage Break with Exhibitors

3:15–5:15 pm

GRAND HALL FOYER

Poster Session with Wine & Cheese

Moderators: Tyler Ball, Ausaf Bari, Zelma HT Kiss, Ajmal Zemmar

Sponsored by: NeuroPace, Inc.



5:00–6:00 pm

GRAND HALL D

ASSFN Business Meeting

Presiding Officer: André Machado

PROGRAM SCHEDULE

TUESDAY, JUNE 4, 2024

6:30 am–12:00 pm

GRAND HALL FOYER

Registration

7:00–7:55 am

GRAND HALL FOYER

Continental Breakfast

8:00–10:00 am

GRAND HALL D

Plenary Session 5

Unlocking the Brain

Moderators: Jason Gerrard, R. Mark Richardson

8:00–8:05 am

Introduction

Michael Okun

8:05–8:35 am

Noninvasive Brain Stimulation through Temporal Interference

Ed Boyden

8:35–9:00 am

Development and Future Directions of Focused Ultrasound

Kullervo Hynynen

9:00–9:25 am

Non-Invasive Neuromodulation

Mike Fox

9:25–9:50 am

Group Discussion

All Faculty

9:50–10:00 am

Awards Ceremony

8:30–10:30 am

GRAND HALL E

Exhibit Hall Open



PROGRAM SCHEDULE

10:00–10:30 am

GRAND HALL E

Beverage Break with Exhibitors

10:30 am–12:00 pm

GRAND HALL D

Parallel Session 7

Connectomic Functional Neurosurgery

Moderators: Bornali Kundu, Cameron McIntyre

10:30–10:50 am

Introduction and Modeling Methods

Cameron McIntyre

10:50–11:10 am

Applications in Parkinson's Disease

Chengyuan Wu

11:10–11:30 am

Applications in Psychiatric Disorders

Nader Pouratian

11:30–11:50 am

Applications in Epilepsy

Vicky Morgan

11:50–12:00 pm

Round Table Discussion

10:30 am–12:00 pm

GRAND HALL ABC

Parallel Session 8

Bench to Bedside Advances

Moderators: Clement Hamani, Suneil Kalia

10:30–10:50 am

Molecular Therapies-Early Pipeline

Lorraine Kalia

10:50–11:10 am

Delivery of Molecular Therapeutics

Nir Lipsman

PROGRAM SCHEDULE

11:10–11:30 am

Stem Cells Translation Pipeline

Vivian Tabar

11:30–11:50 am

Gene Transfer: Animal Models to Human Studies

Michael Kaplitt

11:50 am–12:00 pm

Questions



MAY 30–JUNE 2, 2026
HILTON CLEVELAND DOWNTOWN

2026

BIENNIAL MEETING

CLEVELAND, OH



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American Society for Stereotactic
and Functional Neurosurgery

GRAND HALL FOYER

100 Preoperative Network Expression is Associated with Stimulation Mediated Antidepressant Effects After Deep Brain Stimulation to the Medial Forebrain Bundle

Prashin Unadkat; Chris Conner; An Vo; David Eidelberg; Albert Fenoy

101 A Multifunctional Intracortical Brain Computer Interface in the Human Precentral Gyrus

Nicholas Au Yong; Samuel Nason-Tomaszewski; Anna Pritchard; Brandon Jacques; Yahia Ali; Mattia Rigotti; Eun Young Choi; Darrel Deo; Francis Willett; Nicholas Card; Jaimie M. Henderson; David M. Brandman; Sergey Stavisky; Leigh R. Hochberg; Chethan Pandarinath

102 Stimulation Responsiveness to Ventral Capsule Ventral Striatum and Subgenual Cingulate Stimulation

Garrett P. Banks; Eleonora Bartoli; Joshua Adkinson; Isabel Danstrom; Anusha Allawalla; Denise Oswald; Nicole Provenza; Ben Shofty; Victoria Pirtle; Andrew Watrous; Raissa Mathura; Nader Pouratian; Sanjay Mathew; Wayne Goodman; Kelly R. Bijanki; Sameer A. Sheth

103 Preoperative Tremor Severity and Operative Parameters Predict Imbalance in Patients Undergoing Focused Ultrasound

Rohan Jha; Melissa Ming Jie Chua; Aryan Wadhwa; John David Rolston

104 Mapping Heterogeneous Hydraulic Parameters in White Matter for Convection Enhanced Delivery

Tom Lilieholm; Doug Dean III; Jayse M. Weaver; Andrew L. Alexander; Raghu Raghavan; Martin Brady; Walter F. Block

105 Modeling the Epileptogenic Network Disconnection with Simulated Temporal Lobe Surgery

Elliot G. Neal; Samantha Joell Schimmel; Zeegan George; Adam Alayli; Gavin Lockard; Keaton Piper; Fernando L. Vale; Yarema Basil Bezchlibnyk

106 Deep Brain Stimulation for Epilepsy: Sweetspot for ANT DBS Connectomic Underpinnings and Meta-Analysis of Outcomes

Artur Vetkas; Alexandre Boutet; Jurgen Germann; Can Sarica; Anton Fomenko; Mojgan Hodaie; Suneil Kumar Kalia; Taufik Valiante; Andres M. Lozano

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340 A Clinical Trial Design to Investigate an Autologous Repair Cell Therapy to Prevent Disease Progression in Parkinson's Disease

Craig van Horne; George Quintero; John Slevin; Julie Gurwell; Greg Gerhardt

341 BrainLab Segmentation Atlas for Direct DBS Targeting

Kristin Nosova; Isabel L. Bauer; James Kelbert; Robert Wagner Bina

343 The Current State of Clinical Trials Examining Deep Brain Stimulation for the Treatment of Epilepsy: An Analysis of the ClinicalTrials.gov Registry

Saarang Patel; Nathan A. Shlobin

344 Establishment of a Multidisciplinary Obsessive-Compulsive Disorder Clinic: Initial 6-year Experience

Ajay Gandhi; Mohammed Hasen; Garrett P. Banks; Nicole Provenza; Faiza Momin; Nisha Giridharan; Sarah McKay; Michelle Avendano-Ortega; Gabriel Reyes; Sandy Reddy; Anthony Allam; Eric Storch; Wayne Goodman; Sameer A. Sheth

345 Stereotactic Ablation via Laser Interstitial Thermal Therapy (LITT) or Radiofrequency Thermocoagulation (RFTC) for Insular Epilepsy: A Systematic Review

Jan Hachmann; Kathryn Holloway; Paul Koch

Accreditation



This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the Congress of Neurological Surgeons and the American Society for Stereotactic and Functional Neurosurgery. The Congress of Neurological Surgeons is accredited by the ACCME to provide continuing medical education for physicians.

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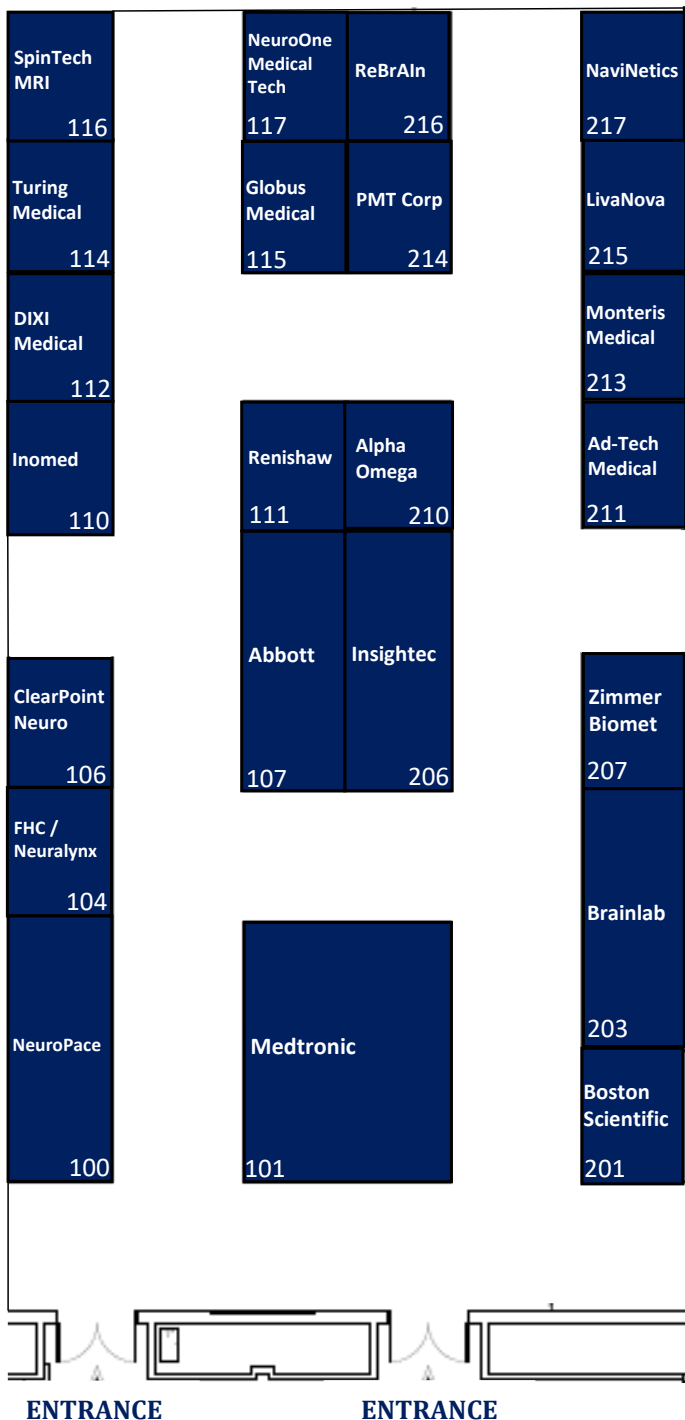


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EXHIBIT HALL MAP



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GENERAL INFORMATION

EXHIBIT HALL

Sunday, June 2

Monday, June 3

Tuesday, June 4

GRAND HALL E

9:30 am-4:30 pm

8:30 am-5:30 pm

8:30-10:30 am

REGISTRATION

Saturday, June 1

Sunday, June 2

Monday, June 3

Tuesday, June 4

GRAND HALL FOYER

8:00 am-4:00 pm

6:30 am-6:00 pm

6:30 am-6:00 pm

6:30 am-12:00 pm

No Smoking Policy: Smoking is not permitted at any official ASSFN Biennial Meeting events. The Grand Hyatt Nashville Hotel is a non-smoking hotel.

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NETWORKING EVENTS

Opening Reception Grand Hall Terrace

Sunday, June 2 — 6:00-8:00 pm

Enjoy a delicious array of food and refreshments while reconnecting with colleagues and new contacts with exhibiting companies at the Opening Reception. Each medical attendee registered for the meeting will receive one complimentary ticket.

Poster Session with Wine and Cheese Grand Hall Foyer

Monday, June 3 — 3:15-5:15 pm

Enjoy a pre-dinner glass of wine during this uninterrupted time dedicated to viewing the scientific posters and take advantage of this opportunity to interact with the poster authors.

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