



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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CONTENTS

Welcome Letter	4
Meeting Directors	5
In Memoriam	7
Honored Guest	8
Featured Speakers.....	9
Invited Speakers.....	11
Program Schedule	17
Saturday, June 1, 2024	17
Sunday, June 2, 2024	21
Monday, June 3, 2024.....	32
Tuesday, June 4, 2024	38
Posters	41
Accreditation.....	67
Exhibit Hall	70
Exhibitor Information	71
General Information.....	75
Opening Reception	78



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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!

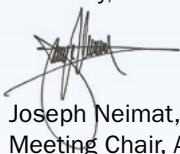
We extend a warm welcome to all attendees of the 2024 American Society for Stereotactic and Functional Neurosurgery (ASSFN) Biennial Meeting in Nashville, Tennessee. Explore cutting-edge topics at the Daily Plenary Sessions, featuring experts on Innovation in Neurosurgery, Collaborations in Music, Sports, 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

Raja N. Jani; Joseph Samir Neimat; 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

108 Translating the Transcriptome: A Connectomic Approach for Gene Network Decoding and Clinical Integration

Clemens Neudorfer; Bassam Al-Fatly; Barbara Hollunder; Ningfei Li; Garance Meyer; Konstantin Butenko; Matteo Vissani; Frederic Schaper; Ehsan Tadayon; Alan Bush; Pranav Nanda; Thomas Picht; Katharina Faust; Christine Klein; Jeremiah Scharf; Matthew State; Andrea Kühn; Christos Ganos; Michael Fox; R. Mark Richardson; Andreas Horn

109 Low-Frequency Power in The Ventral Capsule/Ventral Striatum and Orbitofrontal Cortex: A Neural Biomarker of Obsessive-Compulsive Symptom Severity

Nisha Giridharan; Nicole Provenza; Anthony Allam; Raphael Bechtold; Nabeel Diab; Sameer Vikram Rajesh; Sandy Reddy; Gabriel Reyes; Evan Dastin-van Rijn; Ajay Gandhi; Samad Hirani; Huy Dang; Garrett P. Banks; Michelle Avendano-Ortega; Sarah McKay; David Borton; Eric Storch; Jeffrey Herron; Wayne Goodman; Sameer A. Sheth

110 Neurons in the Lateral Prefrontal Cortex Encode Task Features During Virtual Navigation

Mohamad Abbass; Benjamin Corrigan; Renee Johnston; Roberto Gulli; Adam J. Sachs; Jonathan C. Lau; Julio Martinez-Trujillo

111 Single Neuron Representations of Sequential Task Structure Emerge Rapidly in Human Anterior Cingulate and Entorhinal Cortex

Habiba Azab; Mohamady El-Gaby; Shraddha Shah; Raissa Mathura; Eleonora Bartoli; Andrew Watrous; Adrish Anand; Joshua Adkinson; Thomas Donoghue; Sandra Perreira; Uros Topalovic; John Sakon; Zeb Kurth-Nelson; Elliot Smith; Nanthia Suthana; Itzhak Fried; Joshua Jacobs; Matt Botvinick; Timothy Behrens; Sameer A. Sheth

112 Offline Simulation of Adaptive Deep Brain Stimulation Algorithm Classification for Performance Characterization During Provocation of OCD Symptoms

Raphael Bechtold; Nicole Provenza; Sameer Vikram Rajesh; Nisha Giridharan; Ajay Gandhi; Gabriel Reyes; Anthony Kaspa Allam; Sandy Reddy; Eric Storch; Sameer A. Sheth; Wayne Goodman; Jeffrey Herron

113 Cortical/Subcortical Beta Dynamics and Grey Matter Thickness in Primary and Premotor Cortex: A Brodmann Area Approach in Parkinson's Disease

Amirreza Alijanpourotagsara; Koorosh Mirpour; Ahmed Shalaby; Krishna Kanth Chitta; Jeon Lee; Nader Pouratian

114 The Spatiotemporal Network Dynamics of Speech Production

Kathryn Snyder; Kiefer Forseth; Nitin Tandon

115 Defining a Possible Globus Pallidus Hot Spot for Image-Guided Programming of DBS in Parkinsons Disease

Jessica Ng; Sarah Wang; Jeff Solomon; Carrie Stegner; Mahsa Malekmohammadi; Merek Gourley; Jill L. Ostrem

116 Ethical Considerations of Deep Brain Stimulation for Treatment Refractory Schizophrenia: Surveying Stakeholders

Judith Gault; Elyn R. Saks; Stephanie Lehto; Nidal Moukaddam; Patrick W. Hosokawa; Paul Appelbaum; Wayne Goodman; Nicola Cascella; Akira Sawa; Sameer A. Sheth; Steven Ojemann; John Thompson; Daniel R. Kramer; Rachel Davis

117 Precisely Timed, On-Demand Intracranial Brain Stimulation Using the RNS System*Edward Bader; Alex Boro; Nathaniel Killian; Emad N. Eskandar***118 A Machine Learning Framework Using Brain Coordinates to Accurately Localize Surgical Targets***Alaa Taha; Greydon Gilmore; Mohamad Abbass; Violet Liu; Chris Zajner; Brendan Santyr; Abrar Ahmed; Ali Hadi; Sandy Wong; Ali Khan; Jonathan C. Lau***119 Beta-Band Power in the Human Amygdala During a Delayed Arm-Reaching Task***Shivani Sundaram; Arthur Shao; Roberto Martin del Campo-Vera; Jonathon Cavaleri; Selena Zhang; Miguel Parra; Ryan Chung; Adith Swarup; Alexandra Kammen; Christi Heck; Xenos Mason; Charles Y. Liu; Spencer Kellis; Brian Lee***120 Multiregional Human Single Neuron Dynamics During Intertemporal Choice***Jay Gill; Mahmoud Omidbeigi; Nanthia Suthana; Jonathan Kao; Ausaf A. Bari***121 A Posterior Approach for Combined Targeting of The Centromedian Nucleus and Pulvinar for Responsive Neurostimulation***Melissa Ming Jie Chua; Rohan Jha; Justin Campbell; Aaron Warren; Shervin Rahimpour; John Rolston***122 Differential Activity of Anterior and Posterior Entorhinal Cortex During Human Episodic Memory***Cody Wolfe; Bradley Lega***123 Extent of Ablation Negatively Correlates with Post Operative Apathy in LITT Anterior Capsulotomy for OCD***Daniel Biro; Maureen Lacy; Hannah Hagy; Peter C. Warnke***124 Neuronal Firing Characteristics of the Centromedian Nucleus to Guide Deep Brain Stimulation Targeting for Epilepsy***Megan Ryan; David Isaac Satzer; Steven Ojemann; John Thompson; Daniel R. Kramer***125 Classification of Consciousness-Impairing Seizures with Intracranial Recordings Using Deep Learning***Derek Doss; Rohan Rashingkar; Graham Walter Johnson; Caen Bibro; Jared Shless; Danika Lea Paulo; Shawniqua Williams Roberson; Kevin Haas; Sarah Bick; Catie Chang; Vicky Morgan; Dario J. Englot***126 Epilepsy and Tornadoes: Neuromodulating the Pre-Ictal Funnel Cloud***Graham Walter Johnson; Derek Doss; Ghassan Makhoul; Leon Cai; Caen 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*

127 Cingulum Bundle Electrographic Connectivity to the Affective Network Varies with Paracingulate Sulcal Morphology

Isabel Danstrom; Joshua Adkinson; Meghan Robinson; Lu Lin; Atul Maheshwari; Ben Shofty; Garrett P. Banks; Mohammed Ahmed Hasen; Sameer A. Sheth; Sarah Heilbronner; Alica Goldman; Kelly R. Bijanki

128 Frailty and Outcomes after Unilateral MRgFUS Thalamotomy for Tremor

Nathan Pertsch; Kazuki Sakakura; Dustin Kim; Julia Mueller; Jacob Mazza; Daniel Wolfson; Ryan Matthew Kelly; John Pearce; Shama Patel; Sepehr Sani

129 Spatial Localization of High-Frequency Oscillations in the Subthalamic Nucleus in Parkinson's Disease

Alan Bush; Matteo Vissani; Todd Herrington; R. Mark Richardson

130 Acute Theta-Burst Deep Brain Stimulation in Parkinsons Disease Demonstrates Cognitive and Motor Improvements

Kevin Wu; Jonathan Cavaleri; Wooseong Choi; Kaevon Brasfield; Melanie Cohn; Melissa L. Wilson; Kay B. Jann; Robert G. Briggs; Charles Y. Liu; Brian Lee; Xenos Mason; Darrin J. Lee

131 Brain State Limits Propagation of Neural Signals in Laminar Cortical Circuits

Natasha Kharas; Samantha Debes; Ariana Andrej; Valentin Dragoi

132 Characterizing Differential Tremor Sweetspots and Side Effect Sourspots Following Thalamic High-Intensity Focused Ultrasound through Probabilistic Lesion Mapping

Min Jae Kim; Liming Qiu; Gustavo Campos; Maya Alexis; Daniel Barbosa; Iahn Cajigas; Casey H. Halpern

133 Electrokinetic Convection Enhanced Delivery of Molecules to the Brain from Cortical Surface Hydrogel Reservoir

Jesus Cruz-Garza; Lokeshwar Sai Santosh Bhenderu; Khaled Taghlabi; Jaime Guerrero; Amir H. Faraji

135 Insula Risk-taking Signal is Positively Associated with Orbitofrontal Cortex Reward Prediction Error

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

136 Is the Ansa Lenticularis the Globus Pallidus Internas Secret Weapon Against Dyskinesias?

Shawn D'Souza; Vikram Seshadri; Jamie Toms; Pierre D'Haese; Benoit Dawant; Rui Li; Paul Koch; Paul S. Larson; Kathryn L. Holloway

138 Relationship Between Accumulated Thermal Dose and Early Tremor Improvement with MRgFUS

Tarannum Rahnema; Samuel Pichardo; G. Bruce Pike; Davide Martino; Camila Aquino; Marisol Ardila; Zelma HT Kiss; Fady Girgis

139 Thalamic Network Mapping in Patients with Multifocal Epilepsy Treated with RNS: Towards Network-Guided RNS Electrode Placement

Josue Moises Avecillas-Chasin; Varun Subramaniam; Ogechukwu Ariwodo; Andy Ho Wing Chan; Lara Marcuse; Madeline Fields; Maite La Vega-Talbott; Saadi Ghatan; Fedor Panov

140 Aperiodic Neural Activity is a Biomarker for Depression Severity

Carl Hacker; Kelly R. Bijanki; Sameer A. Sheth; Madaline Mocchi

142 Action of Glucagon-like Peptide-1 (GLP-1)/Gastric Inhibitory Polypeptide (GIP)-Receptor Dual-Agonism on Food Preoccupations Involves Low Frequency Oscillations Within the Human Nucleus Accumbens

Wonkyung Choi; Younghoon Nho; William Wilent; Nida Firdous; Andrew Chang; Gustavo Campos; David Bakalov; Liming Qiu; Robert Seilheimer; Isaac Jonathan; Jonathan Pomeranec; Marie Kerr; Disha S. Joshi; Anastassia Amaro; Matthew Hayes; Iahn Cajigas; Bijan Pesaran; Kelly Allison; Joshua Gold; Thomas Wadden; Casey H. Halpern

143 Connectomic Predictors of Outcome in Centromedian RNS and DBS for Generalized Epilepsy

Pranav Nanda; Gabriel Gonzalez-Escamilla; Aaron Warren; Clemens Neudorfer; Zachary Kons; Nathaniel D. Sisterson; Andreas Horn; R. Mark Richardson

144 Direct Motor Point Functional Electrical Stimulation for Improved Dexterity in Hand Movement

Ayobami Ward; Matthew Mender; Madison Kelberman; Jordan Lam; Nishant Ganesh Kumar; Yamaan S. Saadeh; Theodore Kung; Parag G. Patil; Cynthia Chestek

145 Evaluating fMRI Correlates of EEG-vigilance in Temporal Lobe Epilepsy

Sarah E. Goodale; Jeffery M. Harding; Haatef Pourmotabbed; Kimberly Rogge-Obando; Shiyu Wang; Caroline Martin; Caen Bibro; Vicky Morgan; Dario J. Englot; Catie Chang

146 Automated Preoperative Volumetric Analysis as an Independent Predictor of Seizure Irritative Zone

Dorian Kusyk; Christian Sanfilippo; Nicholar Blaney; Jenna Li; Timothy Quezada; Tyson Tragon; Alexander Whiting

147 Canonical Wnt Activator Chir99021 Prevents Epileptogenesis in the Intrahippocampal Kainate Mouse Model of Temporal Lobe Epilepsy

Muriel Mardones; Kevin Rostam; Margaret Nickerson; Kunal Gupta

148 DBS for Neuropathic Facial Pain Engages Multiple Tracts Implicated in Depression

Evangelia Tsolaki; Grace Eckroate; Wenxin Wei; Meskerem Tolossa; Stephano Chang; Ausaf A. Bari

149 Deep Brain Stimulation of the Ventral Capsule and Ventral Striatum Drives Approach Behavior and High Beta Power in Ventrolateral Prefrontal Cortex

Sameer Vikram Rajesh; Nicole Provenza; Gabriel Reyes; Kalman Katlowitz; Raphael Bechtold; Nabeel Diab; Sandesh Reddy; Anthony Allam; Ajay Gandhi; Samad Hirani; Nisha Giridharan; Garrett P. Banks; Mohammed Hasen; Ben Shofty; Benjamin Hayden; Jeffrey Cohn; Eric Storch; Jeffrey Herron; Mary Phillips; Wayne Goodman; Sameer A. Sheth

150 Hippocampal Interictal Epileptiform Discharges May Disrupt Working Memory

Angelique Tay; Jonathan Daume; Chrystal Reed; Ueli Rutishauser; Adam N. Mamelak

151 Mapping the Subcortical Connectome in Parkinson's Disease Patients Undergoing Deep Brain Stimulation

Alaa Taha; Jason Kai; Brendan Santyr; Mohamad Abbass; Greydon Gilmore; Bradley Karat; Arun Thurairajah; Ali Khan; Jonathan C. Lau

152 Response Inhibition is Associated with High Beta Oscillatory Power Increase in the Ventral Intermediate Nucleus of the Thalamus in Essential Tremor Patients

Helen Qian; Leah Mann; Zixiang Zhao; Danika Lea Paulo; Daniel Claassen; Sarah Bick

153 Subcellular-Scale Carbon Fiber Electrodes for Single-Unit Recording in Cortex and Peripheral Nerve

Jordan Lam; Joseph Letner; Julianna Richie; Paras Patel; Miranda Copenhaver; Abhilasha Kamboj; Jamie Phillips; Cynthia Chestek

154 Transcutaneous Afferent Patterned Stimulation Triggers Theta-Delta-Alpha Enhancement and Low Gamma Deterioration in the Thalamus of Essential Tremor Patients

Cuong Luu; Youngwon Youn; Jennifer Perrault; Aaron J. Suminski; Wendell Bradley Lake

155 Vibrotactile Auricular Vagus Nerve Stimulation Increases Low Frequency Coherence in Intracranial EEG

Kara Donovan; Joshua Adams; Ki Yun Park; Phillip Demarest; Gansheng Tan; Jon Timothy Willie; Jenna Gorlewicz; Peter Brunner; Eric C. Leuthardt

156 Comparison of Dentato-Rubro-Thalamic Tractography Methods Based on the Anatomy of the Rubral Wing

Assaf Berger; Jongchul Chung; Zane Schnurman; Valentin Stepanov; Ling Pan; Timothy Shepherd; Alon Mogilner

157 Low-Intensity Focused Ultrasound of the Subthalamic Nucleus May Alter Cognitive and Motor Behaviour: Preliminary Results

Terra Fairbanks; Hrishikesh Raghuram; Alan Coreas; Milad Naghizadeh; Shirshak Shrestha; Siyun Li; Julia Kam; G. Bruce Pike; Samuel Pichardo; Fady Girgis

158 Imaging of Pain States and Clinical Correlates in Chronic Low-back Pain Patients Implanted with Thoracic Spinal Cord Stimulation

Arjun Balaji Ashok; Yazan Shamli Oghli; Steven R. Glener; Isaiah Ailes; Mashaal Syed; KiChang Kang; Sara Naghizadehkashani; Islam Fayed; Feroze Mohamed; Laura Krisa; Chengyuan Wu; Caio M. Matias; Mahdi Alizadeh

159 Phase-Amplitude Coupling as A Predictor for Optimal DBS Contact in Movement Disorders

Ilknur Telkes; Shelby Sabourin; Tessa Harland; Julie G. Pilitsis

160 The Globalregionaland National Macroeconomic Consequences of Idiopathic Epilepsy

Jakob Gerstl; Emma Pair; Matilde Pittarello; Alexander Yearley; Philipp Lassarén; Joshua D. Bernstock; Christopher Sungwoon Hong; Timothy R. Smith; Melissa Ming Jie Chua

161 Real-World Outcomes Using DBS Systems with Directionality and Multiple Independent Current Control: USA Experience

Michael S. Okun; Kelly D. Foote; Theresa Zesiewicz; Yarema Basil Bezchlibnyk; Alexander Mark Papanastassiou; Juan Ramirez-Castaneda; Jonathan Dennis Carlson; Jason Aldred; Vibhor Krishna; Corneliu Luca; Jonathan R. Jagid; Jennifer Durphy; Leo Verhagen-Metman; Sepehr Sani; Steven Ojemann; Drew Kern; David Weintraub; Ritesh Rahani; Abdolreza Siadati; Bharathy Sundaram; Cong Zhao; Derek Martinez; Mustafa Siddiqui; Stephen B. Tatter; Lilly Chen; Edward Goldberg

162 Contribution of Gait and Freezing of Gait in Visual System in Patients with Parkinson's Disease: An fMRI study

Emad Alomari; Yazan Shamli Oghli; Kylee Shivok; Abdulaziz Alhussein; Mashaal Syed; Islam Fayed; Robert Sergott; Caio M. Matias; Kevin Hines; Chengyuan Wu; Tsao-Wei Liang; Mahdi Alizadeh

163 Adoption and Accessibility of Laser Interstitial Thermal Therapy (LITT) in the United States: A Nationwide Inpatient Sample Analysis

Can Sarica; Brian Melchiorson; Andrew Yang; Brendan Santyr; Artur Vetkas; Nardin Samuel; Ghazaleh Darmani; Cletus Cheyuo; Oliver Flouty; Ajmal Zemmar; Mojgan Hodaie; Suneil Kumar Kalia; Andres M. Lozano

164 Local Field Potential Characteristics from Directional and Omnidirectional Leads in Parkinsons Disease: Analysis of Patients Receiving Adaptive Deep Brain Stimulation

Travis Hassell; Todd Herrington; Martijn Beudel; Jill L. Ostrem; Simon Little; Leonardo Almeida; Adolfo Ramirez-Zamora; Alfonso Fasano; Kyle Mitchell; Elena Moro; Michal Gostkowski; Nagaraja Sarangmat; Scott Stanslaski; Lisa Tonder; Ye Tan; Tim Goble; Nathan Morelli; Robert Raike; Helen Bronte-Stewart

165 Non-Invasive Electrophysiological Recording and Modulation of the Human Olfactory Bulb: Preliminary Findings to Advance New Perspectives for Investigating the Limbic System

Mahmoud Omidbeigi; Andrew Sheriff; Greg Lane; Guangyu Zhou; Bruce Tan; Christina Zelano

166 A Pneumatically-actuated Robot for MRI-guided Stereotactic Neurosurgical Procedures

Gang Li; Atharva Paralikar; Ayush Nankani; Pavel Yarmolenko; Chima Oluigbo; Kevin Cleary; Reza Monfaredi

167 Aperiodic Activity as a Biomarker of Seizures and Neuromodulation

David Isaac Satzer; Lesley Kaye; Steven Ojemann; Daniel R. Kramer; John Thompson

169 Guided Mindfulness Meditation Increases Interictal Discharges in Patients Undergoing Invasive EEG monitoring

Dorian Kusyk; Vyas Praveer; Timothy Quezada; Alexander Whiting

170 Personalized Evocation of Cue-hyperreactivity May Optimize Deep Brain Stimulation for Opiate Use Disorder

Liming Qiu; Younghoon Nho; Robert Seilheimer; Altona Tufanoglu; Neda Kaboodvand; William Wilent; David Oslin; Katherine Scangos; Anna-Rose Childress; Casey H. Halpern

171 Phantom Testing of Induced-Current in DBS during MRI Acquisition at 3T

Stephen Slovensky; Meltem Izzetoglu; Islam Fayed; Feroze Mohamed; Mahdi Alizadeh; Chengyuan Wu

172 Digital Phenotyping of Patients Undergoing Focused Ultrasound Thalamotomy for Essential Tremor

Jakob Gerstl; Gustaf von Grothusen; David J. Segar; Philip Mattisson; Joshua D. Bernstock; Melissa Ming Jie Chua; Sarah Christie; Hassan Y. Dawood; Patrick Emedom-Nnai; Jukka-Pekka Onnela; Timothy R. Smith; John David Rolston; G. Rees "Rees" Cosgrove

173 Direct Electrical Stimulation of the Basolateral Amygdala Modulates Oscillatory Dynamics in the Hippocampus

Justin Michael Campbell; Krista Wahlstrom; Martina Hollearn; Tyler Davis; Amir Arain; James Swift; Peter Brunner; Ben Shofty; Shervin Rahimpour; John Rolston; Jon Timothy Willie; Cory Inman

174 Thalamic Responsive Neurostimulation Charge Density and Seizure Type Correlate with Seizure Reduction and Time to Response

Nathaniel D. Sisterson; Pranav Nanda; Ashley Walton; Zachary Kons; Catherine Chu; Syd Cash; Lidia Moura; Joel Oster; Alexandra Urban; R. Mark Richardson

175 Asleep Deep Brain Stimulation for Essential Tremor

Tessa Harland; Jared Brougham; Matthew Hefner; Jessica Wilden

176 Comprehensive Map of Subthalamic Pathway Activation as a Function of DBS Parameter Settings and Stimulation Location

Anneke Frankemolle-Gilbert; Angela Noecker; Tjitske Heida; Cameron C. McIntyre

177 Impaired Functional Connectivity of Subcortical Arousal Centers in Wake and Sleep: Identifying Therapeutic Targets for Neuromodulation in Epilepsy

Haatef Pourmotabbed; Caroline Martin; Sarah E. Goodale; Derek Doss; Shiyu Wang; Vicky Morgan; Catie Chang; Dario J. Englot

178 Investigating Scalp EEG and Subthalamic Nucleus LFP Cross Correlation Based on Sleep Stage Classification

John Thompson; Lisa Hirt; Younghoon Nho; Kristen Park; Michael Summers; Clete Kushida; Leslie West; Stephen Gliske; Casey H. Halpern; Aviva Abosch

179 Investigation of Gustatory Pathways Using Probabilistic Tractography: Implications for MR-guided Focused Ultrasound

Kazuki Sakakura; Alireza Borghei; Nicholas Rubert; Nathan J. Pertsch; Sepehr Sani

180 MR Guided Focused Ultrasound using VIM and VOP/A Dual-lesions for the Treatment of Tremor Dominant Parkinsons Disease: Outcomes in Six Treated Cases

Nathan Pertsch; Kazuki Sakakura; Julia Mueller; Dustin Kim; John Pearce; Jacob Mazza; Shama Patel; Sepehr Sani

181 Neural Signatures and Neuromodulation in a Subject Experiencing Inhibition Control Deficits Following Temporal Resection

Layth Mattar; Shraddha Shah; Joshua Adkinson; Raissa Mathura; Andrew Watrous; Yue Zhang; Kelly R. Bijanki; Sarah Heilbronner; Sameer A. Sheth; Garrett P. Banks; Eleonora Bartoli

182 Pharmacokinetics of ACH in Cortex After DBS Suggest that Diffusion Rather Than Cholinesterase Activity is the Rate Limiting Step in Clearance

Fernando L. Vale; Khadijah Shanazz; Tucker Oliver; Jamal Bogan; Philip O'Herron; Kun Xie; David Blake

183 Pupil Diameter as a Non-invasive Readout of Disrupted Salience Dynamics in the Depressed Human Brain

Madaline Mocchi; Eleonora Bartoli; John F. Magnotti; Jan Willem DeGee; Brian Metzger; Bailey Pascuzzi; Raissa Mathura; Jeffrey Yau; Wayne Goodman; Sameer A. Sheth; Matthew McGinley; Kelly R. Bijanki

184 Role of Frontotemporal Networks in Anxiety and Depression During the Performance of a Cognitive Control Task

Aniruddha Shekara; Alexander Ross; Angeliq Paulk; Alik Widge; Sydney Cash; Paula Shear; John Paul Sheehy; Ishita Basu

185 Subthalamic Nucleus Response in Parkinsons Disease Between Movement Initiation and Cue After Holding During a Center-Out-Task

Jonathan Platt; Rex Tien; Madelyn Mendlen; John Thompson; Daniel R. Kramer

186 Successful Magnetic Resonance-Guided Focused Ultrasound Treatment of Tremor in Patients with a Skull Density Ratio of 0.4 or Less

Artur Vetkas; Alexandre Boutet; Can Sarica; Jurgen Germann; Brendan Santyr; Suneil Kumar Kalia; Andres M. Lozano

187 The Impact of Registration Accuracy on Estimates of Deep Brain Stimulation Electrode Position in Stereotactic Space

Mohamad Abbass; Greydon Gilmore; Brendan Santyr; Alan Chalil; Alaa Taha; Mandar Jog; Keith MacDougall; Andrew Parrent; Terry M. Peters; Jonathan C. Lau

188 What's in a Name?: A Volumetric Analysis of Hemispherectomy Technique Choice on the Development of Hydrocephalus

Akshay Sharma; Fawaz Alotaibi; Demitre Serletis; William E. Bingaman; Richard Rammo

189 Selective Peripheral Denervation for Cervical Dystonia: A 40-Year Comparative Analysis at Mayo Clinic

Damiano Giuseppe Barone; Kirsten Hayford; Robert J. Spinner

190 Analysis of Price Transparency for Deep Brain Stimulation in the United States

Anthony Bishay; Stefan Wolfgang Koester; Campbell Liles; Austin Triana; Robert J. Dambrino; Danika Lea Paulo; Michael Feldman; Tyler Joseph Ball; Sarah Bick; Lola Blackwell Chambless; Dario J. Englot

191 Stereotactic Frame-based Targeting of the Posterior Fossa: A Systematic Workflow

Anton Fomenko; Artur Vetkas; Benjamin Davidson; Newton Cho; Suneil Kumar Kalia

192 Temporal Lobe Epilepsy Patients Demonstrate Global Neocortical Decreases in Functional Connectivity to Nucleus Basalis

Addison Cavender; Ghassan Makhoul; Caen Bibro; Derek Doss; Sarah Goodale; Hernan FJ Gonzalez; Danika Lea Paulo; Sarah Bick; Catie Chang; Graham Walter Johnson; Vicky Morgan; Dario J. Englot

193 Combining Tractography and Electrophysiological Connectivity for Hypothesis-Driven Network Probing in Stereo-Electroencephalography (sEEG)-Guided Deep Brain Stimulation (DBS) for Treatment-Refractory Obsessive-Compulsive Disorder (trOCD)

Gustavo Campos; Liming Qiu; Robert Seilheimer; Harvey Haung; Min Jae Kim; Zhengjia Wang; Younghoon Nho; Katherine Scangos; Dora Hermes; Kai Joshua Miller; Daniel Barbosa; Casey H. Halpern

194 The Geometry of Spinal Cord Population Dynamics Underlying Flexible Motor Patterns

Lahiru Wimalasena; Chethan Pandarinath; Nicholas Au Yong

195 Pallidal Recordings Indicate a Correlation Between Neurophysiology and Behavior During Motor Conflict

Jessica Bowersock; Rofyontsa Shanti; Travis Stewart; Ahmad Alhourani; Scott Wylie; Ajmal Zemmam; Joseph Samir Neimat; Nelleke van Wouwe

196 Seizure Identification and Classification in the Centromedian Nucleus of the Thalamus in LGSIGE and Focal Onset Epilepsy

John Rolston; R. Mark Richardson; Sanjay Earl Patra; Lise Johnson; Muhammad Furqan Afzal; Sharanya Desai; Thomas K. Tcheng; Merit Vick; Martha J. Morrell

197 A Biophysically Constrained Brain Connectivity Model Based on Stimulation-Evoked Potentials

Eleonora Bartoli; William Schmid; Isabel Danstrom; Maria Crespo Echevarria; Joshua Adkinson; Layth Mattar; Garrett P. Banks; Sameer A. Sheth; Andrew Watrous; Sarah Heilbronner; Kelly R. Bijanki; Aelssandro Alabastri

198 Beta-Band Power Decrease in the Human Amygdala During a Direct Arm-Reaching Task

Jonathon Cavaleri; Roberto Martin del Campo-Vera; Shivani Sundaram; Arthur Shao; Ryan Chung; Selena Zhang; Alexandra Kammen; Adith Swarup; Miguel Parra; Christi Heck; Xenos Mason; Charles Y. Liu; Spencer Kellis; Brian Lee

199 Closed-Loop Optogenetic Neuromodulation with Reinforcement Learning in a *C. elegans* Model of Tauopathy

Jason Andrew Chen; Chenguang Li; Gabriel Kreiman; Bradley Hyman; Sharad Ramanathan

200 A Wireless Batteryless Vagus Nerve Stimulation System for Rodents

Jacob Aaron Alderete; Iman Habibagahi; Catherine Cahill; Aydin Babakhani; Ausaf A. Bari

201 Accuracy and Outcomes for Stereotactic Laser Amygdalohippocampotomy Using a Fully MRI-Compatible Platform

Yifei Sun; Nicole Bentley; Faical Isbaine; Jennifer Cheng; Yarema Basil Bezchlibnyk; Robert E. Gross; Jon Timothy Willie

202 Pilot Study of Acute Behavioral Effects of Pallidal Burst Stimulation in Parkinson's Disease

Saar Kariv; Jeong Woo Choi; Koorosh Mirpour; Ann Gordon; Amirreza Alijanpourotagh Sara; Mohsen Benam; Ruwayd Abdalla; Wendy Gu; Hemant Bokil; Aryn Gittis; Nader Pouratian

203 Quantifying Loss Aversion Electrophysiology in the Amygdala

Lisa Hirt; Peter Sokol-Hessner; Gideon Felsen; Aaron Geller; Steven Ojemann; Daniel Kramer; John Thompson

204 Bilateral Conflict Processing in the Basal Ganglia

Ahmad Alhourani; Nelleke van Wouwe; Joseph Samir Neimat

205 Compact Drill Guide for Accelerating Minimally-Invasive MRI-Guided Neurosurgeries

Tom Lilieholm; Terrence R. Oakes; Wendell Bradley Lake; Azam Syed Ahmed; Andrew L. Alexander; Walter F. Block

206 Effect of Electrode Physical Properties on Stereoelectroencephalography Lead Accuracy

Brooke Elbersen; Zachary Waugh; Purav Chokhani; Viktoras Palys

207 Electrokinetic Convection-Enhanced Delivery: Localized Infusion in The Pig Brain Using Real-Time MRI Monitoring

Khaled Taghlabi; Rijul Nanda; Isuru Somawardana; Lokeshwar Sai Santosh Bhenderu; Jesus Cruz-Garza; Megan Guy; Aboud Tahanis; Christof Karmonik; Amir H. Faraji

208 Prefrontal Representation of Human Motivation and Reward Seeking: A Local Field Potential Study

Joel Diaz-Fong; Xiaonan Richard Sun; Ausaf A. Bari; Reza Tadayon-Nejad

209 Techniques for Synchronizing the Medtronic Percept Pulse Generator with Behavioral Tasks

Ammar Shaikhouni

210 Multicenter Evaluation of Tractography-Guided Deep Brain Stimulation of the Dentatorubrothalamic Tract for Essential Tremor

Josue Moises Avecillas-Chasin; Hyun Joo Park; Sema Akkus; Brian H. Kopell

211 Operative Time and Revision Rates of VP Shunt Surgery for NPH with and Without General Surgery

Ashley Kern; Kristin Nosova; Isabel L. Bauer; Cherry Barragan; Eujung Park; Nabia Nabia Kheshtchin-Kamel; Haley Kenner; James Kelbert; Robert Wagner Bina

212 Subthalamic Theta-Alpha Activity as a Potential Biomarker of Dystonia in Parkinsons Disease

Daniel Dighton Cummins; Varun Subramaniam; Joohee Shahed-Jimenez; Brian H. Kopell; Sema Akkus

213 Thalamic fMRI Activity Changes After Temporal Lobe Epilepsy Surgery Are Related to Connectivity and Resection Size

Lucas Sainburg; Andrew Janson; Graham Walter Johnson; Baxter Rogers; Catie Chang; Vicky Morgan; Dario J. Englot

214 Real-World Outcomes from a Prospective Multicenter Deep Brain Stimulation Registry of Essential Tremor Patients

Günther Deuschl; Norbert Kovacs; Griet Loret; Michael T. Barbe; Jung Il Lee; Frederik Clement; Marta Blázquez Estrada; Serge Jaumà-Classen; David Pedrosa; Jens Volkmann; Ana Oliveira; Steffen Paschen; P.R. Schuurman; Lilly Chen; Edward Goldberg

215 The Effect of Anodic and Cathodic Deep Brain Stimulation on Neural Pathways in Subthalamic Region

Seyyed Bahram Borgheai; Enrico Opri; Faical Isbaine; Eric Cole; Roohy Deligani; Nealen Laxpati; Robert E. Gross; Nicholas Au Yong; Svjetlana Miocinovic

216 A Window to the Brain: Ultrasound Imaging and Decoding of Human Neurovascular Activity Through an Acoustically-Transparent Cranioplasty

Whitney Griggs; Sumner Norman; Claire Rabut; Jonathan Russin; Kay B. Jann; Vasileios Christopoulos; Charles Y. Liu; Richard Andersen; Mikhail Shapiro

217 Impact of Collaboration with General Surgery on Readmissions and Total Cost of VP Shunt Placement for Normal Pressure Hydrocephalus (NPH): National Readmission Database Analysis 2016-2019

Kristin Nosova; Isabel L. Bauer; Ashley Kern; Robert Wagner Bina

218 Complications and Post-Operative Disposition in Epilepsy Surgery: Analysis of the ACS-NSQIP Database (2008-2018)

Diana Wang; Weston de Lomba; Anna Kimata; Hael Abdulrazeq; Athar N. Malik; Wael Asaad

219 DBS Disruption of Neural Rhythms Predicts Shifts in Clinical Response in Obsessive-Compulsive Disorder

Nicole Provenza; Sandesh Reddy; Anthony Allam; Sameer Vikram Rajesh; Nabeel Diab; Rose Caston; Kalman Katlowitz; Ajay Gandhi; Huy Dang; Ricardo Andres Najera; Nisha Giridharan; Faiza Momin; Mohammed Hasen; Garrett P. Banks; Ben Shofty; Benjamin Hayden; Jeffrey Herron; Eric Storch; Ankit Patel; Wayne Goodman; Sameer A. Sheth

220 Anti-Seizure Medication Changes After Intracranial EEG Monitoring and Epilepsy Surgery

Rohan Jha; Melissa Ming Jie Chua; David D. Liu; Garth Cosgrove; Steven Tobochnik; John David Rolston

221 The Effect of Adaptive Deep Brain Stimulation for Obsessive-Compulsive Disorder in Cognitive Self-Control Under Uncertainty

Jung Uk Kang; Wasita Mahaphanit; Nicole Provenza; Matthew Nassar; Anthony Allam; Raphael Bechtold; Nabeel Diab; Sameer Vikram Rajesh; Sandy Reddy; Gabriel Reyes; Evan Dastin-van Rijn; Ajay Gandhi; Samad Hirani; Garrett P. Banks; Huy Dang; Michelle Avendano-Ortega; Sarah McKay; David Borton; Michael Frank; Eric Storch; Jeffrey Herron; Wayne Goodman; Benjamin Hayden; Sameer A. Sheth

222 Long-Term Opioid Use is Associated with Stronger Connectivity Between the Amygdala and Orbitofrontal Cortex

Jihye Ryu; Scott Krahl; Jean-Philippe Langevin; Ausaf A. Bari

POSTERS

223 Novel Automated Connectomic-based Programming Algorithm of Deep Brain Stimulation for Parkinsons Disease

Kevin Hines; Angela Noecker; Anneke Frankemolle-Gilbert; Ahmet Fatih Atik; Tsao-Wei Liang; Melissa Heiry; Jeffrey Ratliff; Cameron C. McIntyre; Chengyuan Wu

224 Awake and Asleep Deep Brain Stimulation Targeting the Caudal Zona Incerta for Essential Tremor

Rasmus Stenmark-Persson; Yulia Blomstedt; Anders Fytagoridis; Marwan Hariz; Patrick Blomstedt

225 Prevalence of Pain Phenotypes and Co-morbidities of Chronic Pain in Parkinsons Disease

Hannah Thomas; Lisa Goudman; Marisa DiMarzio; Grace Barron; Julie G. Pilitsis

226 Trends in Functional Neurosurgery Reimbursement Rates: Analysis of the Medicare Database 2000-2021

Rohin Singh; Martin G. McCandless; Derek George; Aman Preet Singh; Andrew M. Wensel; G. Edward Vates

227 Utilizing a Cohort of 3,663 Epilepsy Operations to Investigate the effect of Deprivation Status on Outcomes

Alan Gordillo; Akshay Sharma; Jingdi Shen; William E. Bingaman; Lara Jehi

228 Advancing Accuracy Estimation in Stereotaxy Using Automatic CT Skull Segmentation

Greydon Gilmore; Mohamad Abbass; Brendan Santyr; Alaa Taha; Khalid Mohammed Alorabi; Arun Thurairajah; Juan Botta; Jonathan C. Lau

229 Computed Tomography Angiography in Surgical Planning for Deep Brain Stimulation: A Single Center Experience

Hael Abdulrazeq; Josh Feler; Tori Riccelli; Athar N. Malik; Wael Asaad

230 Bilateral Deep Brain Stimulation of the Ventral Intermediate Nucleus of the Thalamus Improves Objective Acoustic Measures of Essential Vocal Tremor

Rita Patel; Leah Paige Burroughs; Alexis Higgins; Elizabeth Zauber; Faical Isbaine; Dylan Schneider; Kunal Gupta

231 Virtual Reality Distraction During Deep Brain Stimulation Trial Lead Placement: A Pilot Study

Brooke Elberson; Mohamed Abdeldayem; Erika A. Petersen

232 Computational and Experimental Investigation of Probe-Tissue Interactions in Deep Brain Stimulation

Qifu Wang; Siyu Chen; Rungun Nathan; Ani Ural; Qianhong Wu; Chengyuan Wu

233 High-Gamma Activity Predicts ECS Symptom During Picture Naming

Christoph Kapeller; Milena Korostenskaja; Kyousuke Kamada; Christoph Güger

234 Accuracy of Robot-Assisted Deep Brain Stimulation

Lokeshwar Sai Santosh Bhenderu; Sibi Rajendran; Jesus Cruz-Garza; Khaled Taghlabi; Amir H. Faraji

235 Brain Networks During Focal Impaired Awareness Seizures Resembles Deep Sleep

Derek Doss; Graham Walter Johnson; Ghassan Makhoul; Jared Shless; Caen Bibro; Rohan Rashingkar; Danika Lea Paulo; Abhijeet Gummadvelli; Shawniqua Williams Roberson; Kevin Haas; Sarah Bick; Vicky Morgan; Dario J. Englot

236 Characterization of Spike-Field Coupling in the Internal and External Globus Pallidus using Intraoperative Microelectrode Recordings

Matthew Baker; Bryan T. Klassen; Gabriela Ojeda Valencia; Michael A. Jensen; Kai Joshua Miller

237 fMRI Correlates of Peripheral Nerve Field Stimulation in Refractory Trigeminal Pain

Clement Chow; Can Sarica; Brendan Santyr; Sriranga Kashyap; Artur Vetkas; Michael Colditz; Kimia Pourhossein; Asma Naheed; Kâmil Uluda; Simon Graham; Andres M. Lozano; Mojgan Hodaie

238 Relationship Between Preoperative Cognitive Status and Postoperative Cognitive Outcomes Following Deep Brain Stimulation

Michael Zargari; Anthony Bishay; Helen Qian; Natasha Hughes; Tyler Joseph Ball; Dario J. Englot; Kaltra Dhima; Sarah Bick

239 Reviving Lesion-Based Interventions in Obsessive-Compulsive Disorder: A Local and Network-Mapping Approach

Clemens Neudorfer; Julianna Pijar; Garance Meyer; Till Dembek; Barbara Hollunder; Ningfei Li; Konstantin Butenko; Benjamin Davidson; Melissa Ming Jie Chua; Andrew Pines; Ali Reza Tafreshi; Pranav Nanda; Ari D. Kappel; Tina Chou; Marcelo Q. Hoexter; Nir Lipsman; Sameer A. Sheth; Michael Fox; G. Rees "Rees" Cosgrove; Darin D. Dougherty; R. Mark Richardson; Andreas Horn

240 Safety of Transcranial Magnetic Stimulation in Patients with Deep Brain Electrodes: Gel Phantom Brain Testing

Andrew Chang; Jakob Michiels; Daniel Barbosa; Gustavo Campos; Ashley Koluda; Younghoon Nho; Liming Qiu; Robert Seilheimer; Wonkyung Choi; Romain Duprat; Aaron Boes; Nicholas Trapp; Hiroyuki Oya; Desmond Oathes; Roy Hamilton; Flavia Vitale; Casey H. Halpern

241 Surgical Intervention for Focal Drug Resistant Epilepsy Among Older Adults: Nationwide Readmissions Database (NRD) Study 2016-2019

Kristin Nosova; Isabel L. Bauer; Nabia Nabia Kheshtchin-Kamel; Robert Wagner Bina

242 Symmetry Analysis of Lesion Locations After Bilateral Focused Ultrasound Thalamotomies

Can Sarica; Kazuaki Yamamoto; Jurgen Germann; Michael Colditz; Andrew Yang; Artur Vetkas; Brendan Santyr; Nardin Samuel; Ghazaleh Darmani; Benjamin Davidson; Cletus Cheyuo; Oliver Flouty; Ajmal Zemmar; Vanessa Christine Milano; Alexandre Boutet; Mojgan Hodaie; Suneil Kumar Kalia; Christian Iorio-Morin; Andres M. Lozano

243 Weight Trends Following Spinal Cord Stimulation Therapy for Chronic Pain

Caroline Kremer; Assaf Berger; Alon Mogilner

244 Prospective Multicenter International Registry of Deep Brain Stimulation for Dystonia: Sub-Analysis of Cervical Dystonia Patients

Alberto Albanese; Alfons Schnitzler; Andrea Kühn; David Arkadir; David Ledingham; David Pedrosa; Edward Newman; Ignacio Regidor; Jens Volkmann; Marcin Rudas; Maria Fiorella Contarino; Mariachiara Sensi; Michael T. Barbe; Monica Pötter-Nerger; Norbert Kovacs; Ralph Lehrke; Ryoong Huh; Steffen Paschen; Tomasz Mandat; Tamaso Tufo; Veerle Visser-Vandewalle; Voelker A. Coenen; Yen Tai; Lilly Chen; Edward Goldberg

245 Dynamic Evolution of Evoked-Resonant Neural Activity in the Subthalamic Nucleus in Parkinsons Disease

Matteo Vissani; Alan Bush; Todd Herrington; R. Mark Richardson

246 Propofol Induced Burst Suppression Evokes Neuronal Firing and Local Field Potential Traveling Waves in the Human Brain

Veronica Zarr; Tyler Davis; Paul A. House; Bradley Greger; Elliot Smith

247 Safety of Spinal Cord Stimulation for Severe Medicationrefractory Restless Legs Syndrome

Artur Vetkas; Anton Fomenko; Benjamin Davidson; Newton Cho; Can Sarica; Darcia Paul; Brian J. Murray; Alfonso Fasano; Renato Munhoz; Suneil Kumar Kalia

248 Beta-Band Power in the Human Orbitofrontal Cortex During a Direct Reach Task

Selena Zhang; Roberto Martin del Campo-Vera; Shivani Sundaram; Jonathan Cavaleri; Arthur Shao; Ryan Chung; Miguel Parra; Adith Swarup; Alexandra Kammen; Christi Heck; Xenos Mason; Charles Y. Liu; Spencer Kellis; Brian Lee

249 Thalamocortical Connectivity Predicts Seizure Outcome in Patients with Thalamic Neuromodulation: A Decision-Tree Machine Learning Approach

Mohammed Hasen; Ron Gadot; Sandesh Reddy; Gabriel Reyes; Alica Goldman; Lu Lin; Mohamed Hegazy; Atul Maheshwari; Paul VanNess; Nicole Provenza; Garrett P. Banks; Ben Shofty; Sameer A. Sheth

250 Use of Recommended Neurodiagnostic Evaluation among Patients with Drug Resistant Epilepsy in the US: A Common Data Model Study of Multiple Large Databases

Matthew Spotnitz; Cameron D. Ekanayake; Anna Ostroplets; Guy M. McKhann; Hyunmi Choi; Ruth Ottman; Alfred Neugut; George Hripcsak; Karthik Natarajan; Brett E. Youngerman

251 Use of Three-Dimensional Printed Head Models to Ensure Feasibility of Non-Conventional Stereo-Electrocorticography Electrode Trajectories

Liming Qiu; Isaac Jonathan Jonathan Pomeraniec; Ashley Koluda; Gustavo Campos; Andrew Chang; Robert Seilheimer; Casey H. Halpern

252 A Randomized Sham-Controlled Trial of Globus Pallidus Focused Ultrasound Ablation for Parkinson's Disease

Vibhor Krishna; Paul Fishman; Howard Eisenberg; Michael Gordon Kaplitt; Gordon H. Baltuch; Jin Woo Chang; Chang Weichieh; Raúl Martínez-Fernández; Marta del Álamo; Casey H. Halpern; Pejman Ghanouni; Roberto Eleopra; Garth Cosgrove; Jorge Guridi; Ryder P. Gwinn; Pravin Khemani; Andres M. Lozano; Nathan McDannold; Alfonso Fasano; Marius Constantinescu; I. Schles; Arif Dalvi; Jeff Elias

253 Assessment of Image-Guided Programming (IGP) On Bilateral STN And GPI Deep Brain Stimulation Programming Time

Jason Aldred; Theresa Zesiewicz; Michael S. Okun; Juan Ramirez-Castaneda; Leo Verhagen-Metman; Corneliu Luca; Ritesh Rahani; Jennifer Durphy; Yarema Basil Bezchlibnyk; Jonathan Dennis Carlson; Kelly D. Foote; Sepehr Sani; Alexander Mark Papanastassiou; Jonathan R. Jagid; David Barrett Weintraub; Julie G. Pilitsis; Benjamin Reese; Lilly Chen; Rajat Shivacharan; Edward Goldberg

254 Case Series: Efficacy of Deep Brain Stimulation in Treating Chronic Pain Across Distinct Etiologies

Meskerem Tolossa; Luigi Remore; Ausaf A. Bari

255 Correlating Intraoperative Neuromonitoring Patient Specific Responses During Spinal Cord Stimulation with Clinical Outcomes

Alejandra Quintero; Deepak Berwal; Ilknur Telkes; Marisa DiMarzio; Tessa Harland; Steven Panicali; John C. Dalfino; Yohannes Iyassu; Bryan McLaughlin; Julie G. Pilitsis

256 Emotional Wellbeing After Bilateral Deep Brain Stimulation of the Subthalamic Nucleus for Parkinsons Disease: A Retrospective Cohort Study

Muhammad Faran; Danielle Pietramala; Franziska Anna Schmidt; Nancy Polyhronopoulos; Jessica Dong; Mini Sandhu; Fidel Vila-Rodriguez; Christopher Honey; Stefan T. Lang

257 Imaging Disconnection of The Broader Temporal Lobe Network after Resection or Ablation

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

258 LINAC-Based Stereotactic Radiosurgery for Tumor Control and Hearing Preservation in Patients with Acoustic Neuromas: A Meta-Analysis

Nolan James Brown; Ali Reza Tafreshi; Zach Pennington; Julian Lassiter Gendreau

259 MRI-guided Laser Ablation for Hemorrhagic Subcortical Cavernous Malformations

Brett E. Youngerman; W. Elorm Yevudza Jr; Eleonora Spinazzi; Michael B. Sisti; Guy M. McKhann; E. Sander Connolly

260 Preclinical Evaluation of a New Stereoelectroencephalography - Guided Radiofrequency Ablation (RFA) System with Real Time Temperature Monitoring

Robert E. Gross; Gerald A. Grant; Guy M. McKhann; Daniel Edward Couture; Joshua P. Aronson; David P. Darrow; Jamie Joseph Van Gompel; Vishwadeep Ahluwalia; Maria Porto Cruz; Maria Vomero; Hijaz Haris; Dave Rosa; Camilo Diaz-Botia; Mary McNeil; Aura Kullmann

261 Real-World Outcomes with Directional Deep Brain Stimulation (DBS) Systems: Awake versus Asleep Lead Placement

Jan Vesper; Guenther Deuschl; Lilly Chen; Edward Goldberg

262 Trends in Functional Neurosurgery Procedures: Analysis of the Medicare Database 2000-2021

Rohin Singh; Martin G. McCandless; Derek George; Aman Preet Singh; Andrew M. Wensel; G. Edward Vates

263 Deep Brain Stimulation of The Limbic-Motor Interface Network for Tourette Syndrome

Josue Moises Avecillas-Chasin; Tommaso Galbiati; Mauro Porta; Domenico Servello

264 The Effects of Deep Brain Stimulation on Sleep Across Varying Targets and Diseases: A Systematic Review and Meta-Analysis

Aryan Wadhwa; Niels Pacheco; Shreya Tripathy; Rohan Jha; Aaron Warren; John David Rolston

265 Beta-Band Power Modulation in the Human Insula During a Go/No-go Movement Task

Shivani Sundaram; Jonathon Cavaleri; Roberto Martin del Campo-Vera; Arthur Shao; Ryan Chung; Selena Zhang; Miguel Parra; Adith Swarup; Alexandra Kammen; Christi Heck; Xenos Mason; Charles Y. Liu; Spencer Kellis; Brian Lee

266 Task-based Mapping Complements Clinical Stimulation Mapping in Stereoelectroencephalography

Michael A. Jensen; Anthony Fine; Panagiotis Kerezoudis; Lily Wong Kisiel; Eva Alden; Dora Hermes; Kai Joshua Miller

267 Confronting Stimulation-Evoked Brain Potentials with Four Paradigms and Two Algorithms

Kai Miller; Dora Hermes; Klaus-Robert Mueller; Nick Ramsey

268 Incidence of Wound Complications Following RNS Hardware Replacement: A Retrospective Tri-Site Review Abstract

Lionel Fotso Kamga; Destiny Green; Kiersten Sydnor; Panagiotis Kerezoudis; Sanjeet Singh Grewal; Richard S. Zimmerman; Jamie Joseph Van Gompel; W. Richard Marsh

269 Annual Trends and Demographic Variables Associated with Receiving DBS for Patients Admitted to US Hospitals with Dystonia: 2012-2019

Brittany Grace Futch; Vishal Venkatraman; Andreas Seas; Pranav Warman; Zidanyue Yang; Hui-Jie Lee; Blake Parente; Nandan P. Lad; Theresa Williamson; Shervin Rahimpour

270 Comparison of Structural Connectomes for Modeling Deep Brain Stimulation Pathway Activation

Ketan Mehta; Angela Noecker; Cameron C. McIntyre

271 Multivariate Model-Based Prediction of Electrode Placement Error in Robotic-Guided Stereoelectroencephalography using O-arm Registration

Ryan Song; Akshay Sharma; Stephen Harasimchuk; Juan Bulacio; Richard Rammo; William E. Bingaman; Demitre Serletis

272 Spatial and Spectral Changes in Cortical Surface Potentials During Pinching versus Thumb and Index Finger Flexion

Panagiotis Kerezoudis; Michael A. Jensen; Harvey Haung; Jeffrey Ojemann; Nuri Ince; Dora Hermes; Kai Miller

273 Complex and Curvilinear Trajectory Planning: Is There a Role for Augmented Reality Navigation?

Ira Bowen; Virendra Rajendrakumar Desai; Christian A. Amm

274 The 100 Most Cited Articles on Invasive Neuromodulation: A Bibliometric Analysis of the Current State of the Literature

Matthew Holt; Eric Robinson; Saarang Patel; Nathan A. Shlobin

275 Physiologically Controlled (Closed-Loop) Spinal Cord Stimulation in Sensorimotor Control: Implications for Utility in Movement Disorders

Brooke Elberson; Jeff Kramer; Lalit Venkatesan; Dave Mugan; Erika A. Petersen

276 Cervical Spinal Cord Stimulation for Facial Pain: Literature Review and Report of Three Cases

Julie Mayeku; Isabel L. Bauer; Kristin Nosova; Robert Wagner Bina

277 Focused Ultrasound Treatment: Understanding the Perspective of Neurologists and Essential Tremor Patients

Katie Gant; Patrick O'Neal; Cyril J. Ferrer; Augusto Grinspan

278 Efficacy and Safety of Transcranial Magnetic Stimulation (TMS) and Electroencephalogram (EEG) in Epilepsy: A Systematic Review & Meta-Analysis

Katryna Dahlberg; Rishi Ramesh; Keyvon Rashidi; Mehmet Kadipasaoglu; Matthew Hogan; Timea Hodics; Brandy Ma

279 Gamma Knife versus Linear Accelerator Thalamotomy for Essential Tremor and Parkinsons Disease: A Systematic Review and Meta-Analysis

Renuka Chintapalli; Ausaf A. Bari; Stephano Chang

280 History and Future Prospects of Thalamotomy

Kazuki Sakakura; Daniel Wolfson; Nathan J. Pertsch; Sepehr Sani

281 Homunculus Interruptus: A Case of Multi-Modality Mapping and Stereotactic Thermal Ablation of an Inter-Effector Region of M1 Without Motor Deficit

Noah Bryson; Michael A. Jensen; Evan Gordon; Phillip Demarest; Lawrence Eisenman; Nico Dosenbach; Kai Miller; Peter Brunner; Jon Timothy Willie

282 Mood and Cognitive Effects of Deep Brain Stimulation for Essential Tremor

Anthony Bishay; Alexander Lyons; Daniel Habib; Natasha Hughes; Helen Qian; Jessica Summers; Tyler Joseph Ball; Kaltra Dhima; Sarah Bick; Dario J. Englot

283 Non-Selective Lumbosacral Ventral-Dorsal Rhizotomy for Management of Lower-Limb Hypertonia in Non-Ambulatory Cerebral Palsy

Sunny Abdelmageed; Mahalia Dalmage; James Mossner; Robin Trierweiler; Timothy Krater; Jeffrey Steven Raskin

284 Seizure-freedom with Anterior Nucleus of the Thalamus (ANT) Deep Brain Stimulation (DBS) For Drug-Resistant Epilepsy: A Single Centers Ongoing Experience

Jan Tobias Hachmann; Kenichiro Ono; Kathryn L. Holloway; Sandra Dewar; Paul Koch

285 The Role of STN-dIPFC Communication in Working Memory Function

Kate Dembny; David P. Darrow; Alexander Herman; Theoden Netoff; Seth Koenig

286 Toward Visual Neurorestoration: Generating Electric Fields Along the Human Optic Nerve

Jonathon Cavaleri; Benjamin Ghiam; Pooyan Pahlavan; Timothy Silliman; Connie Huang; Kevin Wu; Jack Yu Tung Lo; Gabriel Zada; Gianluca Lazzi; Darrin J. Lee; Kimberly K. Gokoffski

287 Underutilization of Surgical Intervention for Young Adult Patients with Focal Drug Resistant Epilepsy

Isabel L. Bauer; Kristin Nosova; Robert Wagner Bina

288 Evaluation of a New Stereoelectroencephalography - Guided Radiofrequency Ablation System: ex vivo Lesion Characterization

Mary McNeil; Maria Vomero; Maria Porto Cruz; Samuel Ong; Kridner Debra; Dave Rosa; Camilo Diaz-Botia; Aura Kullmann

289 Deep Brain Stimulation of the VIM Modulates Inhibitory Control in a Patient with Holmes Tremor

Lana Fahsah; Joseph Samir Neimat; Nelleke van Wouwe; Laura Dixon; Peter Hedera; Victoria Holiday; Travis Stewart; Rofyontsa Shanti; Jessi Kane

290 Occipital Nerve Stimulation in the Pediatric Occipital Headache Population: A Case Series and Literature Review

James Mossner; Nour Bassam Saleh; Maryam Nour Shahin; Joshua M. Rosenow; Jeffrey Steven Raskin

291 Interim Report of 2-Year Real-World Outcomes for Deep Brain Stimulation for Parkinsons Disease and Disabling Tremor from a Large Global Registry

Ines Muro; Alireza Gharabaghi; Ramiro Alvarez; Alfons Schnitzler; Lyndahl Himes; Devyani Nanduri; Mike Frassica; Sergiu Groppa

292 Closed-Loop Spinal Cord Stimulation: A Novel Therapeutic Approach for Myoclonus: A Case Report

Atish Patel; Lalit Venkatesan

293 Auditory Attention Decoding using Epidural Electrodes Demonstrates the Feasibility of a Minimally Invasive Smart Hearing Aid

Desmond Mehta; Vishal Choudhari; Siavash Shams; Nima Mesgarani

294 Identifying Electrical Biomarkers of Anxiety through Stereoelectroencephalography

Raja Niranjani Jani; Philip Ostrov; Joseph Samir Neimat

295 Initial Experience with ZAP-X Stereotactic Radiosurgery for Trigeminal Neuralgia

Michael Chaga; Timothy Chen; Wenzheng Feng; Darra Conti; MaRhudelyn Rodrigo; Harshal Shah; Shabbar F. Danish; Sean Munier

296 Personalized Optimization of Deep Brain Stimulation Parameters for Gait Enhancement in Parkinsons Disease: A Data-Driven Approach

Hamid Fekri Azgomi; Kenneth Louie; Jessica Bath; Jannine Balakid; Jacob Marks; Doris D. Wang

297 The American Society of Stereotactic and Functional Neurosurgery Social Media Team: Implementation and Outcomes

Nathan A. Shlobin; Jacob Hanson; Ahmad Ozair; Sufyan Ibrahim; Ataollah Shahbandi; Basel Musmar; Shabbar F. Danish; Sharona Ben-Haim; Chengyuan Wu

298 VIM Exhibits Wider Therapeutic Window than GPI and STN in Movement Disorder DBS

Danika Lea Paulo; Graham Walter Johnson; Derek Doss; Jackson Allen; Hernan FJ Gonzalez; Robert Shults; Rui Li; Tyler Joseph Ball; Sarah Bick; Travis Hassell; Saramati Narasimhan; Pierre D'Haese; Peter Konrad; Benoit Dawant; Dario J. Englot

300 Laser Interstitial Thermal Therapy (LITT) For Refractory Epilepsy Associated with Periventricular Nodular Heterotopia (PVNH) - Report of Two Cases and Systematic Review of the Literature

Jan Tobias Hachmann; Paul Koch; Kathryn L. Holloway

301 Neuromodulation: Scientific Breakthrough or Political Casualty

William K. Blanks; Jonathan H. Sherman; Brian Yagi

302 Repeat Laser Interstitial Thermal Therapy (LITT) Amygdalohippocampectomy for Persistent Mesial Temporal Lobe Epilepsy: A Systematic Review

Jan Tobias Hachmann; Kathryn L. Holloway; Paul Koch

303 Spinal Cord Stimulation in the Treatment of Secondary Dystonia: A Clinical and Mechanistic Review

Brooke Elberson; Jeff Kramer; Lalit Venkatesan; Dave Mugan; Erika A. Petersen

304 Spinal Cord Stimulation for Copper Deficiency Neuropathy: A Review and Case Series

Heather Pinckard-Dover; Mathew Dudich; Saaman Ghodsi

305 Comparison of Deep Brain Stimulation and Bilateral Pallidotomy for Status Dystonicus: A Systematic Review and Meta-Analysis

James Kelbert; Diego Tonathiu Soto Rubio; Jacob Saunders; Robert Wagner Bina

306 How Closely Does the Canthal Meatus Line Approximate the AC/PC Plane; a Statistical Description Using Brainlab Based CT/MRI Merged Models

Eric Hargreaves; Dana Dolce; Shabbar F. Danish

307 Co-utilization of Frameless and MRI-Guided Stereotaxy Improves Accuracy and Efficiency of Intraoperative MRI Utilization in Stereotactic Neurosurgical Procedures

Kelsey Templeton; Brianna Carusillo Theriault; John Edwards Dugan; Veronica Chiang; Jason L. Gerrard

308 Comparison of Neuromodulation Procedures for Epilepsy Control: A Single-Center Experience

Varun Rao; Cassandra Anderson; Genaro DeLeon; Michael Ulloa; Thomas C. Witt; Kunal Gupta

309 Responsive Neurostimulation for treatment of Acute Status Epilepticus in Setting of Bilateral Epilepsy Partialis Continua

Vishal Chandulal Patel; Jan Hachmann; Kenichiro Ono; Paul Koch

310 Combined GPi+VIM Deep Brain Stimulation for Tremor-Predominant Parkinsons Disease

Anshit Goyal; Nerea Martin del Campo; Luis Perez; Philip Tipton; Ryan J. Uitti; Erik Middlebrooks; Sanjeet Singh Grewal

311 Development of a Percutaneous Balloon Rhizotomy Kit for Trigeminal Neuralgia

Sherri Ann Sinks; Sarah Bick; Tyler Joseph Ball; Paul Moore; Ryan Austerman; Dario J. Englot

312 Evaluating ChatGPT 3.5 for Patient Education Regarding DBS for Parkinsons Disease

Abhijeet Sambangi; Angeleah Carreras; Shreya Ghosh; Erica Sais; Adrija Sircar; Daniel J. Campbell; Chengyuan Wu; Caio M. Matias; Kevin Hines

313 Genetic and Molecular Markers of Cortical Brain Biopsy in Normal Pressure Hydrocephalus: A Scoping Review

Rishika Bhojanapalli; James Kelbert; Robert Wagner Bina

314 Neurostimulation in Children with Drug Resistant Epilepsy: Strategies in Deep Subcortical and Thalamic Targeting

Melissa LoPresti; Maryam Nour Shahin; Derek George; Elysa Widjaja; Jeffrey Steven Raskin

315 Post-Operative Delirium in Awake versus Asleep Deep Brain Stimulation Surgery for Parkinsons Disease (PD)

Nicole Perez; Allen Guo; Pranav Nanda; Gabrielle A. White-Dzuro; R. Mark Richardson

316 Uncovering the Impact of Metabolic Syndrome on Resection Outcomes for Patients with Drug Resistant Epilepsy: A Propensity-Matched Cohort Study

Nikita Das; Akshay Sharma; Jingdi Shen; Maxime Munyeshyaka; Deborah Vegh; William E. Bingaman; Daniel Rotroff; Lara Jehi

317 Acute Improvement of Epileptiform Discharges with Thalamic Stimulation

Sisira Yadala; Viktoras Palys

318 The Retrograde Insertion of Paddle Spinal Cord Stimulation

Ahmed Awad; Molly Murray; Peter Pahapill

319 The Effect of Lead Location in Centromedian Nucleus on the Power of Oscillations Detected in an Epileptic Patient Receiving Deep Brain Stimulation

Bornali Kundu; Kousalya Velagapudi; Komal Ashraf; Andrew S. Youkilis

320 Radiosurgical Treatment of Trigeminal Neuralgia in Patients with Complex Brain Tumors and Surgical Histories: A Literature Review and Case Series

Khaled Taghlabi; Robert McManus; Raiyan Talukder; Sibi Rajendran; Taimur Hassan; Lokeshwar Sai Santosh Bhenderu; Ahmed Elbushra Ahmed Doomi; Robert C. Rostomily; Edward Butler; Bin S. Teh; Amir H. Faraji

321 Read My Lips – The Effect of Clear Versus Standard Masks on Patient Communication During Awake Deep Brain Stimulation Surgery: A Randomized Clinical Trial

Chesney Oravec; Sidish Srinivas Venkataraman; Rebecca Calafiore; Robert Kyle Townsend; Jacob Brendle; Muneera Kapadia; Carol Kittel; Mustafa Siddiqui; Adrian Walter Laxton; Stephen B. Tatter; Amber Kimball-Hsu; Wesley Hsu

322 Unilateral/bilateral and Staged Deep Brain Stimulation for Movement Disorders: A Correlative Analysis of Fmri Activation and Review of Clinical Outcomes

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

323 Complex Craniofacial Pain Syndrome Treated by High Cervical Closed Loop Spinal Cord Stimulation

Brooke Elberson; Erika A. Petersen

324 Musician's Dystonia Treated by Unilateral Deep Brain Stimulation of the Globus Pallidus Interna and Ventral Intermediate Nucleus

Brooke Elberson; Tuhin Virmani; Erika A. Petersen

325 Current Perspectives on Deep Brain Stimulation for Treatment-Resistant Depression: A Systematic Review Network Meta-Analysis and Health Economic Evaluation

Katherine Kabotyanski; Sandesh Reddy; Samad Hirani; Nisha Giridharan; Mohammed Ahmed Hasen; Nicole Provenza; Garrett P. Banks; Sanjay Mathew; Wayne Goodman; Sameer A. Sheth

326 Direct MRI Guided Multiplex Radiofrequency Thermal Ablation as an Alternative to Laser Interstitial Thermal Therapy for Medial Temporal Lobe Epilepsy

Salil Bhole; Jon Timothy Willie

327 Prevalence and Management of Epilepsy in the Unhoused: A Scoping Review

Annemarie Campbell Pico; Katja Klosterman; Priya Ramaiah; Robert Wagner Bina

328 Sensing Deep Brain Stimulation in Movement Disorders: A Systematic Review

Christian Lopez Ramos; Beck Shafie; Molly Joyce; Maryam Nour Shahin; Alexander Rockhill; Delaram Safarpour; Daniel Cleary; Kim J. Burchiel; Ahmed M.T. Raslan

329 Combining DBS On-Device Recordings with Behavioral Data from Wearables for Chronic Neurobehavioral Analysis in Real-World Environments

Gabriel Reyes; Sandy Reddy; Samad Hirani; Ajay Gandhi; Anthony Allam; Nisha Giridharan; Garrett P. Banks; Mohammed Ahmed Hasen; Eric Storch; Wayne Goodman; Nicole Provenza; Sameer A. Sheth

330 Directional Stimulation of the Cuneiform Nucleus Improves Levodopa-Resistant Freezing of Gait in Patients with Parkinsons Disease: Preliminary Results in Two Patients

Jaskeerat Gujral; Suraj Oruganti; Michael Baumgartner; Shikha Singh; Liming Qiu; Gustavo Campos; Susanna Howard; Stephano Chang; Kevin Davis; James D. Guest; Letitia Fisher; Brian R. Noga; Eva Widerstrom Noga; Ihtsham ul Haq; Corneliu Luca; Jonathan R. Jagid; Iahn Cajigas

331 Clinical effectiveness of Spinal Cord Stimulation in the Treatment of Movement Disorders: Opportunities for Closed-loop Therapy

Erika A. Petersen; Jeff Kramer; Lalit Venkatesan; Dave Mugan; Brooke Elbersen

332 Assessing the Role of Pneumocephalus in Deep Brain Stimulator Electrode Targeting Accuracy

Somnath Das; Georges Bouobda Tsema; Adeel Ilyas; Matthew Saifi Parr; Nicole Bentley; Marshall Holland

333 Connectomics of Deep Brain Stimulation in Dystonia: Can We Predict Benefit?

Vyshak Chandra; Chance Fleeting; Aashay Patel; Joshua Wong; Justin D. Hilliard; Kelly D. Foote

335 Effectiveness and Safety of Motor Cortex Stimulation for the Treatment of Post-Stroke Pain: A Systematic Review and Meta-analysis

Niels Pacheco; Martha Isabel Vilca-Salas; Gustavo A. Quispe-Villegas; Milagros Niquen-Jimenez; Irving Calisaya-Madariaga; Fernando Canazas-Paredes; Jared Shless; Melissa Ming Jie Chua; John David Rolston

336 Deep Brain Stimulation Modulates Oscillatory Beta Dynamics and Quantified Movement Kinematics in Parkinsons Disease: A Case Study

Erin Radcliffe; Drew Kern; Daniel Kramer; John Thompson

337 Feasibility of Magnetic Resonance-Guided Focused Ultrasound Thalamotomy for Essential Tremor Patients with Low Skull Density Ratio

Sarah Blitz; Patrick Ray Ng; Melissa Ming Jie Chua; David J. Segar; G. Rees "Rees" Cosgrove

338 Automated Reconstruction of the Dentato-Rubro-Thalamic Tract Using a Clinically Feasible DWI Protocol

Alexandra Kammen; Yuan Li; Jonathan Cavaleri; Roberto Martin del Campo-Vera; Shivani Sundaram; Arthur Shao; Selena Zhang; Adith Swarup; Miguel Parra; Ryan Chung; Spencer Kellis; Xenos Mason; Christi Heck; Charles Y. Liu; Yonggang Shi; Brian Lee

339 Theoretical Advantages of a Posterior Trajectory for Subthalamic DBS

Cameron C. McIntyre; Angela Noecker

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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Per the ACCME Standards for Integrity and Independence in Accredited Continuing Education, all NON-CME sessions at the 2024 ASSFN Biennial Meeting will be held in a separate room from accredited continuing education.

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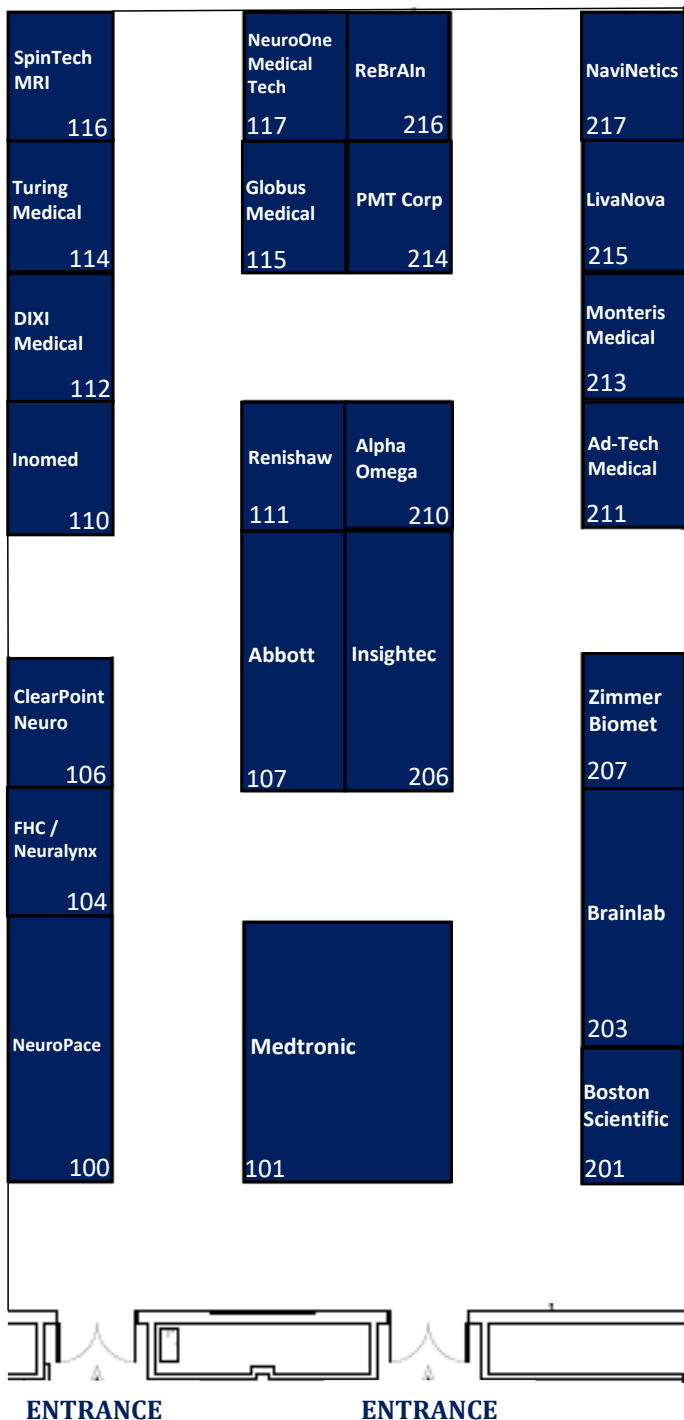


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EXHIBIT HALL MAP



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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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programmer

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