Neuromodulation: Technology at Neural Interface Editorial Board Members Conflict of Interest Disclosures

Thomas Abell, MD
Consultant/Advisory Board: Nuvaira, Enterra Medical, Vanda Speaker: Enterra Medical
Main Funding: NIH, GpCRC, Gastric Dysrhythmias
Investigator: Vanda, Neurogastrx, Processa, CinDome (none currently active)

Alaa Abd-Elsayed, MD
Consultant/Advisory Board: Medtronic and Avanos

Magdalena Anitescu, MD, PhD
Consultant/Advisory Board: Boston Scientific, Medtronic
Speaker Programs: Boston Scientific
Leadership Roles: NANS-director at large, board member. INS-director at large, board member, WIN-past chair, ASRA-resident committee liaison, ASRA Cancer Sig-Chair, ASA PBLD committee chair

Giancarlo Barolat, MD
Speaker Programs: Boston Scientific, Nevro
Company Employee: Microleads, DeFuse
Consultant/Advisory Board Income: Galvani Bioelectronics, Medtronic, Microleads, DeFuse
Stock Options: Microleads, DeFuse

Jocelyne Bloch, MD
Speaker Programs: GTX
Consultant/Advisory Board: GTX
Company Employee: GTX
Intellectual Property: GTX
Education/Research Grants: GTX
Stockholder: GTX

Stana Bojanic, BSc, MBBS: Nothing to Disclose

Helen Bronte-Stewart, MD MSE
Speaker Program: Medtronic
Consultant/Advisory Board: Medtronic

Eric Buchser, MD, DEAA
Consultant/Advisory Board Income: Medtronic

Alexios Carayannopoulos, DO, MPH
CEO and Founder of Pain Spine and Rehabilitation Consulting Inc, Boston MA

Jiande Chen, PhD: Nothing to Disclose

William Omar Contreras López, MD, PhD:
Speaker Program and Travel Support: Boston Scientific

Fabián Cremaschi, MD, MSc: Nothing to Disclose

Arthur Cukiert, MD, PhD: Nothing to Disclose
Paresh K. Doshi, MS, MCh: Nothing to Disclose

Ryan S. D’Souza, MD: Nothing to Disclose

Alessandro Dario, MD: Nothing to Disclose

Dirk De Ridder, MD
Speaker Program: Abbott
Consultant/Advisory Board: Abbott
Intellectual Property / Licensing: Burst stimulation IP is licensed to Abbott
Education/Research Grants: Abbott

Catherine DeAngelis, MD, MPH: Nothing to Disclose

Timothy Deer, MD
Consultant/ Advisory Board: Abbott, Axonics, Boston Scientific, Medtronic, Nalu, Nevro, Saluda Medical, Vertiflex, Vertos, Flownix, SpineThera, Cornerloc, Ethos, SPR Therapeutics, Stimgenics, SI Bone, PainTeq
Intellectual Property: Abbott
Education/Research Income: Abbott, Mainstay, Saluda, Vertiflex, Vertos, SPR Therapeutics, Boston Scientific
Stockholder: Ethos
Stock Options Value: Axonics, Bioness, Nalu, Vertos, Vertiflex, Saluda, Spinethera

Laura Demartini, MD
Speaker Programs: Abbott, Boston Scientific,
Consultant/Advisory Board: Boston Scientific

Mike JL DeJongste MD, PhD, FESC: Nothing to Disclose

Stefan De Wachter, MD, PhD
Shareholder: Amber Therapeutics, Minzehealth
Consultant/Advisory Board: Medtronic

Sam Eldabe, MBBS
Consultant / Advisory Board: Abbott, Mainstay, Medtronic, Saluda Medical
Education/Research Grants: Boston Scientific, Medtronic
Stockholder: Electrocore

James J. Fitzgerald, MA, BM, BCh, PhD
Consultant / Advisory Board: Abbott, Medtronic
Education/Research Grants: Abbott

Robert Foreman, PhD: Nothing to Disclose

Tiago da Silva Freitas, MD, PhD: Nothing to Disclose

Christopher Gilligan, MD, MBA
Consultant / Advisory Board: Mainstay Medical, Persica Pharmaceuticals, Iliad Lifesciences, Saluda, Expert Witness
Stock Options: Mainstay Medical
Ownership Interest: Iliad Lifesciences
Peter Goadsby, MD, PhD, DSc  
Consultant/Advisory Income: Aeon Biopharma, Alder Biopharmaceuticals, Amgen, Allergan, Biohaven Pharmaceuticals, Clexio, Eli Lilly, Teva Pharmaceuticals, Electrocore, eNeura, GlaxoSmithKline, MundiPharma, Novartis, Pfizer, Santara Therapeutics, WL Gore, Gerson Lehrman Group, Guidepoint, Impel Neuropharma, Epalex  
Stock Options: Trigemina, Inc.  
Educational/Research: Amgen, Celgene, Eli Lilly (all paid to University)  
Intellectual Property: eNeura- Magnetic Stim for HA (assigned to eNeura; no fees)

Lisa Goudman, PhD, MS: Nothing to Disclose

Jay Grider, DO, PhD, MBA: Nothing to Disclose

Warren Grill, PhD  
Consultant / Advisory Board: Axonics, Boston Scientific, Cala Health, Galvani Bioelectronics, SPR Therapeutics, Hatteras Ventures, Broadview Ventures, Dignify Therapeutics  
Company Employee: NDI Healthcare Fund, SPR Therapeutics, CheckPoint Surgical, Deep Brain Innovations  
Intellectual Property: Galvani Bioelectronics, Deep Brain Innovations  
Education / Research: Boston Scientific, LivaNova/Cyneronics, Medtronic, Dignify Therapeutics, EPIC Medical / Platinum Group Coatings  
Stock Options: Cala Health, Blackfyn, NDI Health Care Fund, SPR Therapeutics, Deep Brain Innovations

Yun Guan PhD, MD  
Speaker Programs: Medtronic  
Consultant / Advisory Board: Medtronic  
Education/Research Income: Medtronic, TissueTech, Inc.

Ashish Gulve, MD  
Speaker Programs: Medtronic, Boston Scientific, Nevro, Mainstay Medical  
Consultant: Medtronic  
Data Safety Monitoring Board or Advisory Board: Medtronic  
Receipt of Equipment, Materials, Drugs, Medical Writing or Gifts: Medtronic and Abbott paid to the Institution

Jon Hagedorn, MD: Nothing to Disclose

Salim Hayek, MD, PhD: Nothing to Disclose

Frank Huygen, MD, PhD  
Speaker Program: Abbott, Boston Scientific, Medtronic, Saluda  
Consultant/Advisory Board: Abbott, Boston Scientific, Saluda, Spinal Modulation  
Education/Research Grants: Abbott, Saluda, Spinal Modulation

Bert (E.A.) Joosten PhD  
Speaker Programs: Medtronic and Saluda Medical  
Consultant/Advisory Board: Medtronic and Saluda Medical  
Education/Research Grants: Medtronic, Abbott and Boston Scientific

Leonardo Kapural, MD, PhD  
Speaker Program Income: Medtronic, Nevro, Abbott, Nalu, Biotronik, Stimgenics  
Consultant/Advisory Board Income: Medtronic, Nevro, Abbott, Nalu, Biotronik, Stimgenics  
Medico/Legal: Medtronic, Nevro, Abbott, Nalu, Biotronik, Stimgenics
Education/Research Income: Biotronik, Nevro, Saluda Medical, Gimer
Stockholder Stock Value: Nalu
Stock Options Value: Nalu

**Zelma Kiss, MD, PhD**: Nothing to Disclose

**Charles Knowles, BChir, MA, PhD**
- Speaker Program Income: Medtronic, Saluda Medical
- Consultant/Advisory Board Income: Medtronic
- Education/Research Income: Medtronic, Saluda Medical

**Shivanand P. Lad, MD, PhD**
Consultant/Advisory Board Income: Medtronic, Abbott, Boston Scientific, Mainstay Medical, Nevro, Higgs Boson Health, Minnetronix Medical, Presidio Medical
Education/Research Income: Abbott, Boston Scientific, Mainstay Medical, Medtronic, Nevro
Stock Options: Higgs Boson Health, Minnetronix Medical, Presidio Medical

**Scott Lempka, PhD**
Consultant/Advisory Board Income: Abbott Neuromodulation, CereGate, and Presidio Medical, Inc.
Stock or Stock Options: CereGate, Hologram Consultants, LLC, Neuronoff, Inc., and Presidio Medical, Inc.

**Robert Levy, MD, PhD**
Consultant/Advisory Board Income: Saluda Medical, Nalu, Mainstay Medical (last compensation received <3 years prior)
Stock Options: Nalu, Saluda Medical

**Bengt Linderoth, MD, PhD**
Speaker Program Income: Boston Scientific, Medtronic, Abbott, Elekta AB Stockholm (Stereotactics)
Consultant/Advisory Board Income: Boston Scientific, Elekta AB, Medtronic

**John Loeser, MD**: Nothing to Disclose

**Guoming Luan, MD, PhD**: Nothing to Disclose

**Andre Machado, MD, PhD**
- Consultant/Advisory Board Income: Abbott, Spinal Modulation:DSMB
- Education/Research Income: Medtronic (fellowship support)
- Stockholder Stock Value: Autonomic Technologies, Cardionomics, Enspire
- Stockholder Stock Value >5%: My wife and I are inventors and our IP is part of the intellectual property base for these companies.
- Intellectual Property / Licensing: Autonomic Technologies, Cardionomics, Enspire

**Sean Mackey MD, PhD**: Nothing to Disclose

**Georgios Matis, MSc, PhD**
Speaker Programs: Boston Scientific
Consultant/Advisory Board: Boston Scientific
Education/Research Grants: Boston Scientific

**Cameron McIntyre, PhD**
Speaker Programs: Boston Scientific
Consultant/Advisory Board Income: Boston Scientific, Surgical Information Sciences, CereGate
Intellectual Property: Boston Scientific, Hologram Consultants, Neuros, Qr8 Health
Stockholder Stock Value: Hologram Consultants, Surgical Information Sciences, CereGate

**Nagy Mekhail, MD, PhD**
Consultant/Advisory Board Income: Abbott, Boston Scientific, Relievant Medsystems, Vivex therapeutics and Solis therapeutics

**Maarten Moens, MD, PhD**
Speaker Programs: Medtronic, Nevro
Consultant/Advisory Board Income: Medtronic
Education/Research Income: Medtronic, Nevro

**Alon Mogilner, MD, PhD**
- Consultant/Advisory Board Income: Medtronic, Abbott, Alpha Omega
- Education/Research Income: Boston Scientific, Medtronic

**Richard North, MD**
Consultant/Advisory Board Income: The charitable nonprofit Neuromodulation Foundation, of which Dr. North is an unpaid officer, has received grant support and income from industry, including Abbott, Boston Scientific, Medtronic, Nevro, Algostim/Nuvecra, and Stimwave. • Stockholder Stock Value >5%: Stimwave (3-owned by spouse)
Medico-Legal Consulting: Stimwave/Stimrelieve

**Turo Nurmikko, MD, PhD**
- Consultant/Advisory Board Income: Nexstim

**Bart Nuttin, MD, PhD**
Speaker Program Income: Medtronic
Intellectual Property: Medtronic
Education/Research Income: Medtronic

**Joseph Pancrazio, PhD**: Nothing to Disclose

**Erika Petersen, MD**
Speaker Programs: Medtronic, Nevro
Consultant/Advisory Board Income: Abbott, Medtronic, Nevro
Education/Research Grants: Medtronic, Nevro, Neuros, ReNeuron
Stock Options: SynerFuse

**Noah Philip, MD**
Grants or Contracts: Device support through VA clinical trial contracts (Wave Neuro), Multisite commercial study, through VA clinical trial contracts. (Neurolief)

**Fabian Piedimonte, MD**
Speaker Programs: Abbott, Medtronic
Consultant/Advisory Board Income: Abbott, Medtronic

**Julie Pilitsis, MD, PhD**
Speaker Programs: Boston Scientific, Medtronic, Abbott
Consultant / Advisory Board: Boston Scientific, Medtronic, Abbott, Karuna Labs, Nevro, Saluda Medical, TerSera; AIM Medical Robotics
Education / Research: Boston Scientific, Abbott, Medtronic, Nevro, TerSera; NIH
Stock Options: Karuna Labs, AIM Medical Robotics

**Heather Pinckard-Dover, MD:** Nothing to Disclose

**Mark Plazier, MD, PhD:**
Consultant / Advisory Board: Boston Scientific, Medtronic, Abbott, Saluda Medical
Payment/Honoraria: Medtronic, Saluda Medical, Abbott, Boston Scientific
Travel Support: Boston Scientific, Abbott, Medtronic,
Expert Testimony: Saluda Medical

**Ela Plow, PhD, PT:** Nothing to Disclose

**Lawrence Poree, MD PhD**
Consultant/Advisory Board Income: Medtronic, Nalu Medical, Saluda Medical
Education/Research Income: Abbott, Saluda Medical
Stock Options : Nalu, Saluda Medical

**Nader Pouratian, MD, PhD**
Speaker Programs: BrainLab
Consultant/Advisory Board Income: Abbott, Boston Scientific
Education/Research Income: Abbott, Boston Scientific, Medtronic

**David Provenzano, MD:**
Consultant/Advisory Board Income: Medtronic, Avanos, Boston Scientific, SI Bone
Education/Research Income: Pain Diagnostics and Interventional Care has received research support from Avanos, Boston Scientific, Medtronic, Nevro, Stimgenics and Abbott

**James Rathmell, MD:** Nothing to Disclose

**Ahmed Raslan, MD:** Nothing to Disclose

**Richard Rauck, MD**
- Speaker Programs: BDSI
- Consultant / Advisory Board: Boston Scientific, Mainstay, BDSI, Saluda
- Education/Research Income: Boston Scientific, Medtronic, Nevro, Bioness, Biogen, Seikagaku, Mainstay, Saluda, SPR Therapeutics

**Marc Russo, MBBS:** Nothing to Disclose

**Oren Sagher, MD:**
Stockholder: Digital Surgery Systems

**Siamak Salavatian, MEng, PhD:**
Owner of Consulting Firm NeuroCardio, LLC
Receipt of Equipment, Materials or Other Services: Presidio and Cardionomic

**Andrei Sdrulla, MD, PhD:** Nothing to Disclose
Eellan Sivanesan, MD: Nothing to Disclose

Konstantin Slavin, MD
Consultant/Advisory Board Income: Boston Scientific, Medtronic, Autonomic Technologies, Bioness, Biotronik, Abbott, NuVention, Stimwave
Stock Options: Stimwave
Stockholder: Thermaquil
Education/Research Income: Boston Scientific, Medtronic, Abbott (fellowship support to institution)

Michael Stanton-Hicks, MBBS, DMED: Nothing to Disclose

Monique Steegers, MD, PhD: Nothing to Disclose

Rod Taylor, MSc, PhD: Nothing to Disclose

Simon Thomson, MBBS
Speaker Programs: Boston Scientific
Consultant/Advisory Board: Boston Scientific

Kyrana Tsapkini, PhD:
Grant Support: YBrain, Inc.
Grant and Support for Travel: NIH/NIA (through R01s)

Ricardo Vallejo, MD, PhD
Speaker Programs: Avanos, Medtronic
Consultant/Advisory Board: Medtronic
Company Employee: CEO of SGX Medical. No commercial product. Performing clinical research
Intellectual Property: No royalties from any IPs
Education/Research Grants: SGX Medical (I am the CEO) sponsors animal research
Stockholder: SGX Medical. I am CEO and shareholder. No commercial product.
Stock Options: SGX medical.

Jan Vesper, MD, PhD
Speaker Programs: Abbott, Autonomic Technologies, UniQuire
Consultant/Advisory Board: Abbott, Boston Scientific
Education/Research Grants: Medtronic- Devices for a funded multicenter RCT study

Kristl Vonck, MD, PhD
Speaker Programs: LivaNova/Cyberonics
Consultant/Advisory Board: LivaNova/Cyberonics, Synergia Medical

Eric Wassermann, MD: Nothing to Disclose

Christopher J. Winfree, MD: Nothing to Disclose