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

## Thomas Abell, MD

Consultant/Advisory Board: Censa, Nuvaira

# 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

## Jeff Arle, MD, PhD, FAANS

Speaker Programs: Boston Scientific, LivaNova/Cyberonics

Consultant/Advisory Board Income: Medtronic, Boston Scientific, Saluda Medical

Education/Research Income: Boston Scientific, Medtronic, Abbott

# Tipu Aziz, MD, MBBS

Speaker Programs: Boston Scientific, Medtronic, Abbott

Consultant/Advisory Board Income: Medtronic

Education/Research Income: Boston Scientific, Medtronic, Abbott

#### 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

Jin Woo Chang, MD, PhD: Nothing to Disclose

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

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, Flowonix, 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

Sean L. Francis, MD: Nothing to Disclose

<u>Tiago da Silva Freitas, MD, PhD:</u> Nothing to Disclose

# Peter Goadsby, MD, PhD, DSc

Consultant/Advisory Income: Aeon Biopharma, Alder Biopharmaceuticals, Amgen, Allergan, Biohaven Pharmaceutials, 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

# 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

#### Robert Gross, MD, PhD

• Consultant/Advisory Board Income: Medtronic

• Education/Research Income: Boston Scientific, Medtronic

#### Yun Guan PhD, MD

Speaker Programs: Medtronic

Consultant / Advisory Board: Medtronic

Education/Research Income: Medtronic, TissueTech, Inc.

# Magdy Hassouna, MD, PhD

- Speaker Programs Medtronic
- Education / Research: Medtronic

# 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

#### Kendall Lee, MD, PhD

Speaker Program Income: Medtronic, NaviNetics

Consultant/Advisory Board Income: Medtronic, NaviNetics

Medico-Legal Consulting: Medtronic, NaviNetics

Education/Research Income: Medtronic, NaviNetics, Abbott, Cala Health

Intellectual Property / Licensing: Medtronic, NaviNetics

Stockholder: NaviNetics

Company Employee: NaviNetics

## 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/Nuvectra, 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

# Noah Philip, MD

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

#### Erika Petersen, MD

Speaker Programs: Medtronic, Nevro

Consultant/Advisory Board Income: Abbott, Medtronic, Nevro Education/Research Grants: Medtronic, Nevro, Neuros, ReNeuron

Stock Options: SynerFuse

# 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

# **<u>Heather Pinckard-Dover, MD:</u>** Nothing to Disclose

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

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

Ali Rezai, MD: Nothing to Disclose

#### Edgar Ross, MD

Speaker Program: Bioness, Medtronic

Consultant/Advisory Board Income: Bioness, Biotronik, Medtronic

Education/Research Income: Mainstay Medical, Medtronic

Marc Russo, MBBS: Nothing to Disclose

#### Oren Sagher, MD:

Stockholder: Digital Surgery Systems

#### Michael Saulino, MD, PhD

Speaker Program Income: Medtronic, Flowonix, Ipsen, SPR Therapeutics

Consultant/Advisory Board Income: Medtronic Education/Research Income: Medtronic, Bioness

#### Ashwini Sharan, MD, FACS

Speaker Program: Medtronic, Cerebral Therapeutic, Neuspera, Neurotargetting

Consultant/Advisory Board: Medtronic

Company Employee: Cerebral Therapeutic, Neuspera, Neurotargetting Stockholder Stock: Cerebral Therapeutic, Neuspera, Neurotargetting

# Konstantin Slavin, MD

Consultant/Advisory Board Income: Boston Scientific, Medtronic, Autonomic Technologies,

Bioness, Biotronik, Abbott, Nuvectra, 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

#### Takaomi Taira, MD

Speaker Program Income: Insightec

Rod Taylor, MSc, PhD: Nothing to Disclose

# Simon Thomson, MBBS

Speaker Programs: Boston Scientific

Consultant/Advisory Board: Boston Scientific

# 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