



Congress of
Neurological
Surgeons

The 37th ANNUAL MEETING OF THE AANS/CNS SECTION ON DISORDERS OF THE SPINE AND PERIPHERAL NERVES SPINE SUMMIT 2021

July 28-31, 2021
San Diego, California

RELEVANT CONFLICT OF INTEREST DISCLOSURES AND EDUCATIONAL GRANTS

ACCREDITATION

ACCME Accreditation Statement

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 Congress of Neurological Surgeons and the Section on Disorders of the Spine and Peripheral Nerves. The Congress of Neurological Surgeons is accredited by the ACCME to provide continuing medical education for physicians. Credit Designation Statement

AMA Credit Designation Statement(s)

The CNS designates this live activity for a maximum of **28 AMA PRA Category 1 Credits™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

*A maximum of **19.50 AMA PRA Category 1 Credits™** may be earned for Scientific Sessions only

Additional CME Credits can be earned by attending the following:

Special Courses: Attendees will receive a maximum of

- **3.75 AMA PRA Category 1 Credits™** for an eligible half-day Wednesday Special Course.
- **2 AMA PRA Category 1 Credits™** for attending the Wednesday evening Dinner Seminar.
- **2.75 AMA PRA Category 1 Credits™** for an eligible Friday afternoon Special Course.

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RELEVANT CONFLICT OF INTEREST DISCLOSURES

CNS Disclosure Policy

The Congress of Neurological Surgeons controls the content and production of this CME activity and attempts to assure the presentation of balanced, objective information. In accordance with the Standards for Integrity and Independence in Accredited Continuing Education established by the Accreditation Council for Continuing Medical Education (ACCME), speakers are asked to disclose all relationships they have with ineligible companies* over the previous 24 months which may be related to the content of their lecture. Speakers who have disclosed a relationship with an ineligible company whose products may have a relevance to their presentation are listed below.

Any planner, reviewer, or faculty member not on the disclosure list has reported they have nothing to disclose.

All relevant financial relationships listed for these individuals have been mitigated.

**Ineligible companies are those whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients. An ineligible company is not eligible for ACCME accreditation or participation in Joint Providership.*

Reviewers

Individual's Name	Name(s) of Ineligible Company	Nature of Relationship(s)
Maryam Rahman		Nothing to Disclose
Garni Barkhoudarian	Vascular Technologies, Inc., CereVasc, Inc.	Consulting Fee

Planners

Individual's Name	Name(s) of Ineligible Company	Nature of Relationship(s)
Garni Barkhoudarian	Vascular Technologies, Inc., CereVasc, Inc.	Consulting Fee
Nader Pouratian	Abbott Laboratories	Consulting Fee
Ali A. Baaj	DePuy Synthes	Consulting Fee
Sigurd Berven	Medtronic, Inc., Stryker Corporation, Innovasis, Inc., Globus Medical, Inc., Integrity Spine, Camber Spine	Consulting Fee
	Green Sun Medical, Providence Medical	Own Stocks
	Stryker Corporation	Royalty
Shay Bess	K2 Medical Systems, Stryker Corporation	Consulting Fee, Speakers, Bureau
	Medtronic, Inc., DePuy Spine, Inc., NuVasive, Inc., K2 Medical Systems, Stryker Corporation, Globus Medical, Inc., Inc., Orthofix Medical, Inc., Zimmer Biomet, AlloSource (Stryker Corporation), SI-Bone, Inc.	Contracted Research
	NuVasive, Inc., K2 Medical Systems, Stryker Corporation	Receipt of IP, Royalty
Erica Fay Bisson	MiRus, Stryker Corporation, Medtronic, Inc.	Consulting Fee
	NView	Future Stock Options
	MiRus	Own Stocks

Kai-Ming G. Fu	Johnson & Johnson, Globus Medical, Inc., SI-Bone, Inc.	Consulting Fee
Langston T. Holly	Medtronic, Inc.	Royalty
Mark E. Oppenlander	Globus Medical, Inc., Bioventus Surgical	Consulting Fee
John E. O'Toole	TheraCell, Inc.	Own Stocks
	Globus Medical, Inc.	Consulting Fee, Royalty
Paul Park	Globus Medical, Inc.	Consulting Fee, Fees for Non-CME Services, Royalty
Eric A. Potts	Medtronic, Inc.	Consulting Fee, Royalty
John K. Ratliff	Stryker Corporation, Medtronic, Inc., NuVasive, Inc.	Consulting Fee
John H. Shin	CarboFix Orthopedics Ltd, DePuy Synthes, Medtronic, Inc., NuVasive, Inc., Stryker Corporation	Consulting Fee
Robert J. Spinner	Johnson & Johnson, Mayo Medical Ventures	Consulting Fee
Nicholas Theodore	Globus Medical, Inc.	Consulting Fee, Own Stock
	Globus Medical, Inc., DuPuy Synthes	Receipt of IP, Royalty
Juan S. Uribe	NuVasive, Inc.	Consulting Fee, Future Stock options, Own Stock, Royalty
	MISONIX, Inc., SI-Bone, Inc.	Consulting Fee
Corinna Clio Zygourakis	Stryker Corporation	Consulting Fee, Contracted Research
	7D Surgical, Inc.	Consulting Fee

Abstract Reviewers

Individual's Name	Name(s) of Ineligible Company	Nature of Relationship(s)
Victor W. Chang	Globus Medical, Inc.	Consulting Fee
Kenneth M Crandall	Stryker Corporation Spine, Globus Medical, Inc.	Consulting Fee
Langston T. Holly	Medtronic, Inc.	Royalty
Mark Alexander Mahan	Joimax, Inc.	Consulting Fee
Jeffrey Paul Mullin	Medtronic, Inc.	Consulting Fee, Contracted Research
	NuVasive, Inc.	Consulting Fee
Mark E. Oppenlander	Globus Medical, Inc., Bioventus Surgical	Consulting Fee
Wilson Zachary Ray	Globus Medical, Inc., Depuy Synthes, NuVasive, Inc.	Consulting Fee
Alexander E. Ropper	Stryker Corporation, Globus Medical, Inc., Mizuho OSI, Inc.	Consulting Fee
John H. Shin	CarboFix Orthopedics Ltd, DePuy Synthes, Medtronic, Inc., NuVasive, Inc., Stryker Corporation	Consulting Fee
Laura A. Snyder	Globus Medical, Inc., Medtronic, Inc	Consulting Fee
	Biogen	Contracted Research
Khoi Duc Than	Bioventus, DePuy Synthes, Integrity Implants	Consulting Fee
	LifeNet Health, Globus Medical, Inc.	Speakers Bureau

Jay D. Turner	NuVasive, Inc., SeaSpine Holdings	Consulting Fee, Contracted Research
Corinna Clio Zygourakis	Stryker Corporation	Consulting Fee, Contracted Research
	7D Surgical, Inc.	Consulting Fee

Faculty

Individual's Name	Name(s) of Ineligible Company	Nature of Relationship(s)
Simon James Archibald	Integra LifeSciences Corporation	Own Stocks, Salary/Employee
Ali A. Baaj	DePuy Synthes	Consulting Fee
Allan J. Belzberg	AstraZeneca	Consulting Fee
Sigurd Berven	Medtronic, Inc., Stryker Corporation, Innovasis, Inc., Globus Medical, Inc., Integrity Spine, Camber Spine	Consulting Fee
	Green Sun Medical, Providence Medical	Own Stocks
	Stryker Corporation Corporation	Royalty
Shay Bess	K2 Medical Systems, Stryker Corporation	Consulting Fee, Speakers, Bureau
	Medtronic, Inc., DePuy Spine, Inc., NuVasive, Inc., K2 Medical Systems, Stryker Corporation, Globus Medical, Inc., Orthofix Medical, Inc., Zimmer Biomet, AlloSource (Stryker Corporation), SI-Bone, Inc.	Contracted Research
	NuVasive, Inc., K2 Medical Systems, Stryker Corporation	Receipt of IP, Royalty
Mark H. Bilsky	Globus Medical, Inc. , Acromed Depuy Spine	Royalty
Erica Fay Bisson	MiRus, Stryker Corporation, Medtronic, Inc.	Consulting Fee
	NView	Future Stock Options
	MiRus	Own Stocks
Donald John Blaskiewicz	NuVasive, Inc., SeaSpine, Stryker Corporation, Medtronic, Inc.	Consulting Fee
	NuVasive, Inc.	Receipt of IP
	NuVasive, Inc., SeaSpine,	Royalty, Speakers Bureau
Charles L. Branch	Medtronic, Inc., Olympus	Consulting Fee
	Medtronic, Inc.	Royalty
Ernest Braxton	Medtronic, Inc.	Contracted Research, Speakers Bureau
Darrel S. Brodke	Vallum	Consulting Fee
	Amedica	Royalty
Justin M. Brown	NuVasive, Inc.	Royalty

Ali Bydon	NuVasive, Inc.	Consulting Fee
Ali Chahlavi	SeaSpine	Contracted Research, Consulting Fee
Victor W. Chang	Globus Medical, Inc.	Consulting Fee
Jens Chapman	Globus Medical, Inc.	Consulting Fee
Hoon Choi	Globus Medical, Inc.	Consulting Fee
Dean Chou	Globus Medical, Inc.	Consulting Free, Royalty
Domagoj Coric	Spine Wave, Globus Medical, Inc., Stryker Corporation Integrity Implants, Medtronic, Inc., NuVasive, Inc.	Consulting Fee
	Spine Wave, Premia Spine, Pressio Spine, 3Spine	Own Stocks
	Spine Wave, Globus Medical, Inc., Stryker Corporation, Integrity Implants, Medtronic, Inc., RTI Surgical	Royalty
Kenneth M Crandall	Stryker Corporation Spine, Globus Medical, Inc.	Consulting Fee
Mick Perez-Cruet	Thomson MIS	Own Stock
	Orthofix	Speakers Bureau
Andrew T. Dailey	Zimmer Biomet	Consulting Fee, Contracted Research
	Zimmer Biomet, AO North America	Speakers Bureau
Nicolas Dea	Stryker Corporation	Consulting Fee
	Medtronic, Inc.	Own Stocks
Sanjay S. Dhall	DePuy Synthes, Globus Medical, Inc.	Consulting Fee
Benjamin D. Elder	Johnson & Johnson	Consulting Fee
	SI-Bone	Contracted Research
	InjectSense	Future Stock Options
Richard Fessler	Bevenue	Consulting Fee
Charles Fisher	Medtronic, Inc., Stryker Corporation	Consulting Fee
	Medtronic, Inc.	Receipt of IP, Royalty
Richard Frisch	Globus Medical, Inc.	Consulting Fee, Contracted Research, Royalty
Kai-Ming G. Fu	Johnson & Johnson, Globus Medical, Inc., SI-Bone, Inc.	Consulting Fee
Jason Garber	Orthofix, RTI, Centinel Spine	Royalty

	St. Jude Medical, Centinel Spine, Medtronic, Inc.- Neuromodulation	Consulting Fee
Steven D. Glassman	Medtronic, Inc.	Consulting Fee, Receipt of IP, Royalty
	K2M Stryker Corporation	Consulting Fee
	NuVasive, Inc.	Contracted Research
David D. Gonda	Medtronic, Inc., Monteris	Consulting Fee
Michael W. Groff	NuVasive, Inc., Spine Art	Consulting Fee, Royalty
	Biomet Spine	Royalty
Regis W. Haid	Globus Medical, Inc., NuVasive, Inc., SpineWave, Remedy Health, SpineWave	Own Stocks
	Globus Medical, Inc., Medtronic, Inc., Sofamor Danek, NuVasive, Inc.	Receipt of IP, Royalty
James S. Harrop	DOD, Abbvie	Contracted Research
	Depuy, Globus Medical, Inc., Abbvie, Spiderwort	Consulting Fee
Robert F. Heary	Depuy Synthes Spine, Thieme Medical Publishers	Royalty
Christoph Paul Hofstetter	Joimax, Globus, Innovasis, Johnson & Johnson	Consulting Fee
Langston T. Holly	Medtronic, Inc.	Royalty
Wellington Hsu	Stryker Corporation	Royalty
	Medtronic, Inc., Wright Medical, Asahi, Bioventus	Consulting Fee
Maziyar Arya Kalani	Medtronic, Inc., NuVasive, Inc.	Consulting Fee
Charles Kanaly	Globus Medical, Inc.	Consulting Fee, Contracted Research
Adam S. Kanter	NuVasive, Inc.	Future Stock Options, Royalty
	Zimmer Biommet	Royalty
Brian Kelly	SI-Bone	Contracted Research
Tyler R. Koski	NuVasive, Inc., Medtronic, Inc.	Consulting Fee
	NuVasive, Inc.	Own Stock
	NuVasive, Inc., Medtronic, Inc.	Royalty
Frank LaMarca	Johnson and Johnson, Stryker Corporation, Globus Medical, Inc., DePuy Synthes	Consulting Fee
	Globus Medical, Inc.	Royalty

Ilya Laufer	Spinewave, Globus	Royalty
	DePuy Synthes, Brainlab, Medtronic, Inc.	Consulting Fee
Stephane Lavoie	Spineology	Royalty, Consulting Fee
Ronald A. Lehman	Medtronic, Inc., Stryker Corporation Synthes Spine:	Consulting Fee
	Stryker Corporation Synthes Spine:	Contracted Research
	Medtronic, Inc., Inc.	Royalty
Howard Levene	4Web	Consulting Fee
Allan D. Levi	Medtronic, Inc.	Speakers Bureau
Mark Alexander Mahan	Joimax Inc.	Consulting Fee
Gene Massey	Alphatec Spine	Consulting Fee
Camilo A. Molina	Depuy-Synthes, Kuros Biosciences	Consulting Fee
	Augmedics Ltd	Future Stock Options
Thomas E. Mroz	Stryker Corporation	Royalty
Praveen V. Mummaneni	Depuy Synthes, Stryker Corporation, Globus Medical, Inc	Consulting Fee
	Spincity	Own Stocks
	AO Spine, Spineart	Receipt of IP
	Depuy Spine; Spinger Publishers, Thieme Publishers	Royalty
Michael Musacchio	Intrinsic Therapeutics, Inc.	Consulting Fee
Pierce Nunley	Spineology	Contracted Research, Consulting Fee
Tim O'Connor	Misonix	Consulting Fee
	AO Spine Foundation	Contracted Research
David O. Okonkwo	NuVasive, Inc., Zimmer Biomet	Royalty
Mark E. Oppenlander	Globus Medical, Inc. Bioventus Surgical	Consulting Fee
John E. O'Toole	Globus Medical, Inc.	Consulting Fee, Royalty
	Theracell	Own Stocks
Paul Park	Globus Medical, Inc.	Consulting Fee, Fee for Non-CME Services, Royalty
	NuVasive, Inc.	Consulting Fee
Peter G. Passias	Medicrea, Royal Biologics, SpineWave, Terumo	Consulting Fee

	Globus Medical, Inc. , Zimmer Biomet	Speakers Bureau
Alpesh Patel	CTL Amedica, Alphatec Spine, Johnson and Johnson, Depuy Synthes, Ethicon, Inc, Kuros Biosciences	Consulting Fee
	Alphatec Spine	Future Stock Options
	Endoluxe, Cytonics, Nocimed, Tissue Differentiation Intelligence, nView, Spine Biopharma	Own Stocks
	Endoluxe, Cytonics, Nocimed, TissueDifferentiation Intelligence, nView, Spine Biopharma	Royalty
Luiz Pimenta	Alphatec, Inc.	Consulting Fee
Eric A. Potts	Medtronic, Inc.	Consulting Fee, Royalty
Themistocles Protopsaltis	Globus Medical, Inc.	Consulting Fee
Sheeraz Qureshi	Globus Medical, Inc.	Consulting Fee, Speakers Bureau, Royalty, Own Stock
	Stryker Corporation	Receipt of IP, Consulting Fee, Royalty
	Avaz Surgical	Own Stock
	Paradigm Spine	Consulting Fee
Louis Rappoport	Titan Spine, Globus Medical, Inc., Medtronic Inc., Orthofix, 4Web	Consulting Fee
	Orthofix, Globus Medical, Inc.	Contracted Research
	Globus Medical, Inc.	Speakers Bureau
John K. Ratliff	Stryker Corporation, Medtronic, Inc., NuVasive, Inc.	Consulting Fee
Wilson Zachary Ray	Globus Medical, Inc., Depuy Synthes, NuVasive, Inc.	Consulting Fee
Daniel K. Resnick	NIDUS	Future Stock Options
Gerald E. Rodts	Globus Medical, Inc., Medtronic, Inc.	Royalty
Charles A. Sansur	Stryker Corporation, NuVasive, Inc.	Consulting Fee
	Stryker Corporation	Royalty
Jason Savage	Stryker Corporation Spine	Consulting Fee
Daniel M. Sciubba	Medtronic, Inc., Depuy-Synthes, Stryker Corporation, Baxter	Consulting Fee
Christopher I. Shaffrey	Siemans, SI Bone, Medtronic, Inc.	Consulting Fee
	NuVasive, Inc.	Future Stock Options, Own Stock

	Medtronic, Inc., NuVasive, Inc., Zimmer Biomet	Royalty
John H. Shin	CarboFix Orthopedics Ltd, DePuy Synthes, Medtronic, Inc., NuVasive, Inc., Stryker Corporation	Consulting Fee
Walavan Sivakumar	Stryker Corporation	Consulting Fee
	Integra, Zeiss	Speakers Bureau
Konstantin V. Slavin	Medtronic, Inc., Abbott, Boston Scientific, MESI, Stimwave, Karger, Wiley	Consulting Fee
	Medtronic, Inc., Abbott, Boston Scientific, Neuros	Contracted Research
	Vycor medical, Higgs Boson, Neuramodix, Stimwave, Thermaquil	Future Stock Options
Justin S. Smith	Zimmer Biomet, Stryker Corporation NuVasive, Inc., DePuy Synthes	Consulting Fee
	DePuy Synthes/ISSGF, AOSpine, NuVasive, Inc.	Contracted Research
	Carlsmed	Future Stock Options
	Alphatec, NuVasive, Inc.	Own Stock
	Zimmer Biomet, NuVasive, Inc., Thieme	Royalty
Robert J. Spinner	Johnson and Johnson, Mayo Medical Ventures	Consulting Fee
Jeremy Steinberger	Stryker Corporation, Zimmer Biomet	Consulting Fee
Michael Steinmetz	Globus, Stryker Corporation Spine	Consulting Fee
	Zimmer Biomet, Elsevier	Royalty
	Medtronic, Inc. Inc.	Fees for Non-CME Services
Khoi Duc Than	Bioventus, DePuy Synthes, Integrity Implants	Consulting Fee
Nicholas Theodore	Globus Medical, Inc.	Consulting Fee, Own stocks, receipt of IP, Royalty
	DePuy Synthes	Royalty, Own Stock
Antoine Tohmeh	ATEC	Consulting Fee
Vincent C. Traynelis	Medtronic, Inc., NuVasive, Inc.	Consulting Fee
	Medtronic, Inc.	Royalty
Jay D. Turner	NuVasive, Inc., SeaSpine Holdings	Consulting Fee, Contracted Research
Juan S. Uribe	NuVassive, Inc.	Consulting Fee, Future Stock options, Own Stock, Royalty

	MISONIX, Inc., SI-Bone, Inc.	Consulting Fee
	NuVasive, Inc.	Consulting Fee, Future Stock options, Own Stock, Royalty
Alexander R. Vaccaro	Atlas Spine DePuy Synthes, Globus Medical, Inc., Innovative Surgical Design, Medtronic, Inc., NuVasive, Inc., Orthobullets Spine Wave, Inc., Stout Medical, Stryker Corporation- Spine	Consulting Fee
	Advanced Spinal Intellectual Properties, Avaz Surgical, Bonovo Orthopaedics, Computational Biodynamics, Cytonics Dimension Orthotics, LLC, Electrocore Flagship Surgical, FlowPharma, Franklin Bioscience, Globus Medical, Inc., Innovative Surgical Design, Insight Therapeutics, NuVasive, Inc., Paradigm Spine, Parvizi Surgical Innovations, Prime Surgeons, Progressive Spinal Technologies, Replication Medica, Spine Medica, Spinology, Stout Medical, Vertiflex	Own Stocks
	Aesculap, Atlas, Spine, Elsevier, Globus, Jaypee, Medtronic, Inc., SpineWave, Stryker Corporation- Spine, Taylor Franic	Royalty
Ian Valerio	Axogen Inc and Integra Lifesciences Inc	Speakers Bureau
Arnold Vardiman	Globus Medical, Inc.	Contracted Research, Royalty
	Abott, Medtronic, Inc.	Speakers Bureau
Anand Veeravagu	NuVasive, Inc., Stryker Corporation, Surgical Theater, OsteoCentric	Consulting Fee
Alan Villavicencio	Empirical Spine	Contracted Research
Jeffrey Wang	bone biologics, electrocute, surgitech	Own Stocks
	Zimmer biomet, DePuy Synthes, Seaspine	Royalty
Michael Y. Wang	Depuy-Synthes Spine, Medtronic, Inc., Stryker Corporation, Spineology	Consulting Fee
	Depuy-Synthes Spine	Royalty
Robert G. Whitmore	Depuy-Synthes Spine	Consulting Fee
Corinna Clio Zygourakis	Stryker Corporation	Consulting Fee, Contracted Research
	7D Surgical, Inc.	Consulting Fee

Agenda and faculty subject to change

As of July 22, 2021

EDUCATION GRANTS & IN-KIND EQUIPMENT

Commercial Support:

Congress of Neurological Surgeons wishes to recognize and thank the following for providing an educational grant and/or use of equipment (in-kind):

Name of Commercial Supporter	In-Kind	Financial
ATEC Spine	Durable Equipment	Yes
Axogen		Yes
Augmedics	Durable Equipment	
DePuy Synthes Companies	Durable Equipment	Yes
Globus Medical, Inc.	Durable Equipment	Yes
NuVasive, Inc.	Durable Equipment	Yes
Medtronic, Inc.		Yes
Olympus America, Inc.		Yes