Dr. John Jane, Sr.
Neuroscience Lectureship Series

SEATTLE SCIENCE FOUNDATION

FIRST ANNUAL SPINAL NAVIGATION, EMERGING TECHNOLOGIES & SYSTEMS INTEGRATION

SATURDAY, DECEMBER 3

Seattle Science Foundation
550 17th Avenue
James Tower, Suite 600
Seattle, Washington 98122

CME CONTINUING MEDICAL EDUCATION

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SSF SEATTLE SCIENCE FOUNDATION

COURSE DESCRIPTION

The 1st Annual Spinal Navigation, Emerging Technologies and Systems Integration Course is an advanced training course held for neurosurgeons and orthopaedic surgeons who treat spinal conditions. Nationally recognized speakers will focus on provocative topics and in-depth debates regarding spinal navigation and robotics application in spine surgery. They will also provide hands-on workshops in state-of-the-art lab facilities. The design is to gain knowledge and experience of the new modalities in spine surgery, addressing both the guidelines and controversies of the field, as well as attaining hands-on exposure and training in the cadaver lab.

NEEDS STATEMENT

As spine surgery and associated technology continues to rapidly advance, methods of improving patient outcomes through surgical interventions and perioperative imaging modalities remain controversial. Due to the vast new technologies available, there remains a tremendous need for continued education in the training of current and future spinal surgeons regarding knowledge and surgical application in the field. By educating providers in the field, the 1st Annual Spinal Navigation, Emerging Technologies and Systems Integration Course will provide didactic lectures and hands-on surgical training led by national experts, with the focus on improvement in patient care, as well as surgical outcomes, with the use of spinal navigation and robotics.

INTENDED AUDIENCE

The 1st Annual Spinal Navigation, Emerging Technologies and Systems Integration Course is intended for neurosurgeons, orthopaedic surgeons, and allied healthcare professionals who treat surgical spinal conditions.

CME INFORMATION

Accreditation with Commendation
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 Swedish Medical Center and the Seattle Science Foundation. Swedish Medical Center is accredited by the ACCME to provide continuing medical education for physicians.

AMA PRA Category 1 Credits™
Swedish Medical Center designates this live activity for a maximum of 8 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

ACKNOWLEDGMENTS

FEATURED FACULTY

Nicholas Boulis, M.D.
Emory University

Ken Catchpole, Ph.D.
Medical University of South Carolina

Jens Chapman, M.D.
Swedish Neuroscience Institute

Doniel Drazin, M.D.
Swedish Neuroscience Institute

Charles Fisher, M.D., MHSc
University of British Columbia and Vancouver General Hospital

Roger Härtl, M.D.
Weill Cornell Brain & Spine Center

J. Patrick Johnson, M.D.
Cedars-Sinai Medical Center

Terrence Kim, M.D.
Cedars-Sinai Medical Center

Virginie Lafage, Ph.D.
Surgimap

Ilya Laufer, M.D.
Memorial Sloan Kettering Cancer Center

Isador Lieberman, M.D., M.B.A.
Texas Back Institute

Prof. Dr. Bernhard Meyer
Technical University of Munich

Rod J. Oskouian, Jr., M.D.
Swedish Neuroscience Institute

Tiffany Perry, M.D.
Cedars-Sinai Medical Center

David W. Polly, Jr., M.D.
University of Minnesota

Rajiv Sethi, M.D.
Virginia Mason Medical Center

Kris Siemionow, M.D.
University of Illinois

David Simon
Medtronic ST Neurosurgery

R. Shane Tubbs, Ph.D., PA-C
Seattle Science Foundation

Michael Wang, M.D.
University of Miami

AGENDA

7:30 a.m.	Breakfast & Registration
7:45 a.m.	What is the Seattle Science Foundation? Rod J. Oskouian, Jr., M.D.
7:55 a.m.	Welcome, Introductions, Course Overview and Survey J. Patrick Johnson, M.D. & Doniel Drazin, M.D.

PART 1: IMAGE GUIDED SPINE SURGERY

8:10 a.m.	Cost Effectiveness of Navigation Charles Fisher, M.D., MHSc
8:25 a.m.	Accuracy and Learning Curves with Navigation Bernhard Meyer, M.D., Ph.D.
8:40 a.m.	Radiation Exposure in Image-Guided Spine Surgery Jens Chapman, M.D.
8:55 a.m.	Are Indications Needed or Just Navigate Everything? J. Patrick Johnson, M.D.
9:10 a.m.	Navigating the Cervical Spine: Considerations of the Anatomy R. Shane Tubbs, Ph.D., PA-C
9:25 a.m.	MIS and Navigation: Pros and Cons Roger Härtl, M.D.
9:40 a.m.	Navigation in Spinal Deformity: Pearls David Polly, M.D
9:55 a.m.	Spine Trauma Navigation: Key Concepts Terrence Kim, M.D.
10:10 a.m.	Navigation in Spine Tumor Surgery Ilya Laufer, M.D
10:25 a.m.	Lumbar Plexus Visualization and the Lateral Approach Rod Oskouian Jr., M.D.
10:35 a.m.	Break & Exhibits

PART 2: EMERGING TECHNOLOGIES

10:45 a.m.	Mazor Robotics and the SpineAssist Experience Isador Lieberman, M.D., M.B.A.
11 a.m.	O-Arm 2.0 David Simon
11:15 a.m.	Integrated Global Alignment (iGA) Platform (NuvaMap OR and Bendini) Rajiv Sethi, M.D.
11:30 a.m.	SurgiMap Virginie Lafage, Ph.D.
11:45 a.m.	Augmented Reality in Spine Surgery, Current Status and Future Directions Kris Siemionow, M.D.
11:55 p.m.	Break & Pick-Up Lunch
12:10 p.m.	Novel Stem Cell Therapies in the Spine (Working Lunch) Nicholas Boulis, M.D.

PART 3: SYSTEMS INTEGRATION

12:50 p.m.	Human Factors and Systems Integration in Spine Surgery Ken Catchpole, Ph.D.
1:05 p.m.	Learning Curves in Image Guided Spinal Surgery: A Human Factors Analysis Showing Surgeon Expertise Decreases Flow Disruptions Doniel Drazin, M.D.
1:20 p.m.	Principles of LEAN and the Toyota Production System to Spine Surgery Rajiv Sethi, M.D.

PART 4: THINK TANK

1:30 p.m.	Introduction: Think Tank Doniel Drazin, M.D.
1:35 p.m.	Establishment of Databases for Navigation/ Emerging Technology Research-Related Purposes Doniel Drazin, M.D.
1:45 p.m.	Industry Issues with Emerging Technologies David Simon
1:55 p.m.	When and How Should Spine Surgeons Embrace Emerging Technologies Michael Wang, M.D.
2:05 p.m.	Results of Navigation Survey: Steps Toward the Future Terrence Kim, M.D.
2:15 p.m.	Break, Exhibits and Change for Lab

PART 5: HANDS-ON EXPERIENCE

2:30 p.m.	Hands-on BioSkills Lab Rotations (15 minute rotations)
	Station 1: Lateral and Deformity Pearls
	Station 2: Cervical Spine Pearls
	Station 3: Minimally Invasive, Percutaneous, PSIS Pin
	Station 4: Lumbar Deformity and Sacral Screw Navigation
	Station 5: Robotics - Mazor
	Station 6: Laminectomy, Facetectomy, Osteostomies Made Easy
	Station 7: Synaptive Experience
	Station 8: VITOM Experience
	Station 9: Mini-Mobile Navigation Unit
5 p.m.	Course Wrap-Up & Feedback All Faculty
5:15 p.m.	Adjourn

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REGISTRATION FORM

REGISTRATION INFORMATION:

Pre-registration is required as space is limited. The discounted "Advanced Registration" deadline is November 21, 2016. Registrations will only be processed and confirmed when accompanied by full payment.

If using the registration form, please mail or fax it to:

Seattle Science Foundation

550 17th Avenue, James Tower, Suite 600

Seattle, WA 98122

Fax: (206) 732-6599

Cancellation: To receive a refund, notice of cancellation must be received no later than November 28, 2016.

If you have special needs, please contact us at (206) 732-6500.

REGISTER ONLINE

seattlesciencefoundation.org

This program is endorsed by: **iSCAS**

FIRST ANNUAL SPINAL NAVIGATION, EMERGING TECHNOLOGIES & SYSTEMS INTEGRATION

Saturday, December 3, 2016

NAME _____ TITLE/CREDENTIALS _____

ADDRESS _____

CITY/STATE/ZIP _____

PHONE _____ FAX _____

EMAIL _____

SPECIALTY _____

Registration Fees	Advanced Registration	After November 21
M.D. or D.O.	___ $280	___ $310
Allied Health Professionals	___ $180	___ $210
Medical Student	___ $50	___ $50
Resident/Fellow	___ $50	___ $50

___ Check enclosed, payable to Seattle Science Foundation.

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