



10th
Annual
Meeting
of the SSG

Celebrating a DECADE of Progress

Minimally Invasive Parafascicular Surgery

July 20 - 22, 2023 | St Julien Hotel | Boulder, CO



MIPS

REGISTER NOW



Dear Friends and Colleagues:

Welcome to the 10th Annual Meeting of the Subcortical Surgery Group. Your favorite neurosurgery meeting will return to the St Julien Hotel in Boulder, Colorado July 20 – 22, 2023. Please join us as we celebrate a DECADE of progress on our mission to optimize Minimally Invasive Parafascicular Surgery through collaborative research and technology applications that have proven to be better for the patient, the hospital, and the surgeon.

Highlights over the DECADE

- ENRICH met its primary endpoint using MIPS and is the world's first positive RCT for ICH
- Over 40,000 MIPS cases of the subcortical space completed in both tumor and vascular applications
- Over 200 clinical papers, posters and abstracts published by over 500 unique authors
- 1st book published on subcortical neurosurgery and channel-based approaches
- Hemorrhagic Stroke Guidelines updated to recognize potential benefit with MIS, as well as establish patient inclusion parameters
- Subcortical MIPS has shown to reduce risk of brain injury and lower morbidity and complications in an independent meta-analysis by Mansour, et. al
- Integration of new technologies for subcortical tumor resection allowed patients greater extent of resection through enhanced tissue differentiation
- Advanced tissue harvest techniques are showing promise for maintenance of tumor microenvironment and subsequent therapeutic development

This year's theme, **Celebrating a DECADE of Progress - MIPS**, presents a diverse agenda across 1½ days. Over 20 presenters to include Chairs of Neurosurgery will share their clinical experiences, published evidence, and newest research studies using MIPS and advanced technologies.

We are excited to offer 2 hands-on workshops on Thursday, July 20 – the day before the meeting. Attend one or both of the following workshops:

- **Workshop 1 – MIPS: A Deficit Sparing Approach**
- **Workshop 2 – Upgrading to the Modern-Day Neurosurgical OR**

I am grateful for the SSG's leadership team, this year's presenters and the supporting vendors. Without their support, this meeting would not be possible. I thank the membership of the SSG for the honor to serve as your President. I hope this meeting exceeds your expectations.

Regards,



Julian E. Bailes, Jr., MD

President, Subcortical Surgery Group

Bennett-Tarkington Chair

Department of Neurosurgery, NorthShore University Health System

Co-Director, NorthShore Neurological Institute

Clinical Professor of Neurosurgery, University of Chicago Pritzker School of Medicine



Comprehensive 2½ Day Event

Two Hands-on Workshops

1. MIPS: A Deficit Sparing Approach

Thursday, July 20, 2023 • 11am – 3:30pm

2. Upgrading to the Modern-Day Neurosurgical OR

Thursday, July 20, 2023 • 4pm – 6pm

Annual Meeting (didactic)

10th Annual Meeting of the SSG

Celebrating a DECADE of Progress – MIPS

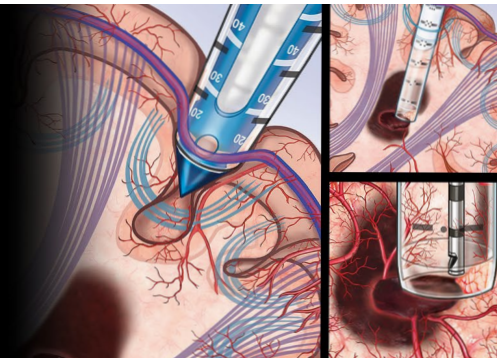
Friday, July 21 • 7am – 5pm

Saturday, July 22 • 7am – 12pm

MIPS: A Deficit Sparing Approach

Workshop 1

Thursday, July 20, 2023 | 11am – 3:30pm



Target Audience

Neurosurgeons who have **NOT** attended a MIPS education program

Workshop Description

For neurosurgery, the push toward minimally invasive approaches has continued to expand over the last decade. Not all minimally invasive neurosurgery is the same. Through modern advancements in neurosurgical technology and refined microsurgical techniques, neurosurgeons now have more appropriate surgical options in subcortical intervention. This education program aims to assist you in building your repertoire of surgical techniques by introducing a deficit sparing approach for the subcortical space, known as MIPS: Minimally Invasive Para-fascicular Surgery. It is designed to provide current evidence-based medicine, personal surgeon experiences, and a hands-on skills workshop. By attending this workshop, you too can increase in surgical efficiency, build consistent improvement in clinical outcomes over historical measures, and develop your practice further by becoming a leader in minimally disruptive subcortical neurosurgery.

Meta-Analysis on MIPS Data Suggests¹

- ✓ MIPS technologies reduce parenchymal injury as compared to traditional retraction
- ✓ Lower surgical morbidity and post-operative complications as compared to traditional retraction
- ✓ Consistency in clinical outcomes for tumor resection across studies
- ✓ An economic impact through shorter hospital stays as noted in several studies

^{*}Mansour et al., <https://dx.doi.org/10.1016/j.wneu.2019.08.218>

Faculty



Gustavo Pradilla, MD

Associate Professor of Neurosurgery
Emory University School of Medicine
Chief of Neurosurgery Service
Grady Memorial Hospital



Ronald Young II, MD

Neurosurgeon
Delray Medical Center



Justin Singer, MD

Director of Vascular Neurosurgery Program
Spectrum Health



Jeroen Coppens, MD

Associate Professor, Division of Neurosurgery
Saint Louis University School of Medicine

Agenda

- 11:00am Workshop 1 Registration & Lunch
- 11:30am Principles of MIPS: ACCESS, REMOVAL, and COLLECTION
- 1:15pm Hands-on Skills Lab Demonstration
- 1:30pm Hands-on Skills Lab Rotations
- 3:30pm Workshop 1 Concludes

Upgrading to the Modern-Day Neurosurgical OR

Workshop 2

Thursday, July 20, 2023 | 4pm – 6pm



Target Audience

Neurosurgeons interested in enhancing their current OR setting for subcortical surgery

Workshop Description

Subcortical neurosurgery is expanding and evolving at a rapid pace. Today's operating rooms need advanced technologies to support this highly technical field of medicine and improve safety and efficacy for patients. This workshop offers attendees hands-on experience with modern technologies that can enhance efficiency and performance in the OR. Attendees will choose two in-depth sessions led by your peers. The final 45 minutes of the workshop allows for independent exploration.

Agenda

- 4:00pm Workshop 2 Registration & Selection of Labs to Explore
- 4:15pm Lab Rotation 1 (*Select 2 of 5*)
- 4:45pm Lab Rotation 2 (*Select 2 of 5*)
- 5:15pm Independent Exploration
- 6:00pm Workshop 2 Concludes

Lab Rotations

Lab 1 – MIPS ICH Evacuation using UpSurgeOn Model

Utilize techniques described in the ENRICH clinical trial to master minimally invasive parafascicular access and removal of hemorrhagic stroke. Recently developed highly-realistic simulation models provide attendees opportunity to experience subcortical ICH evacuation in a safe space. Explore the newest offerings in neurosurgery skills practice and education.

Lab 2 – Improving the Odds of Maximal Safe Resection

Intraoperative tissue differentiation is a key principle in gaining maximal safe resection. Gain hands-on experience with multiple technologies to improve your ability to safely gain GTR.

- Couple automated resection with Fluorescence and 5ALA
- Practice MIS skills with the latest ultrasound technology for improved intraoperative real time visualization

Lab 3 – Exceeding the Standard: Superior Tissue Collection in the Adapted Neurosurgical OR

Learn how simple methods and improvements to your existing OR set-up can impact precision medicine and patient care. Attendees will gain an introduction to a modern-day solution in tissue collection and preservation through automation. Discuss with leaders in pre-clinical research, neuro-oncology research, and clinical application.

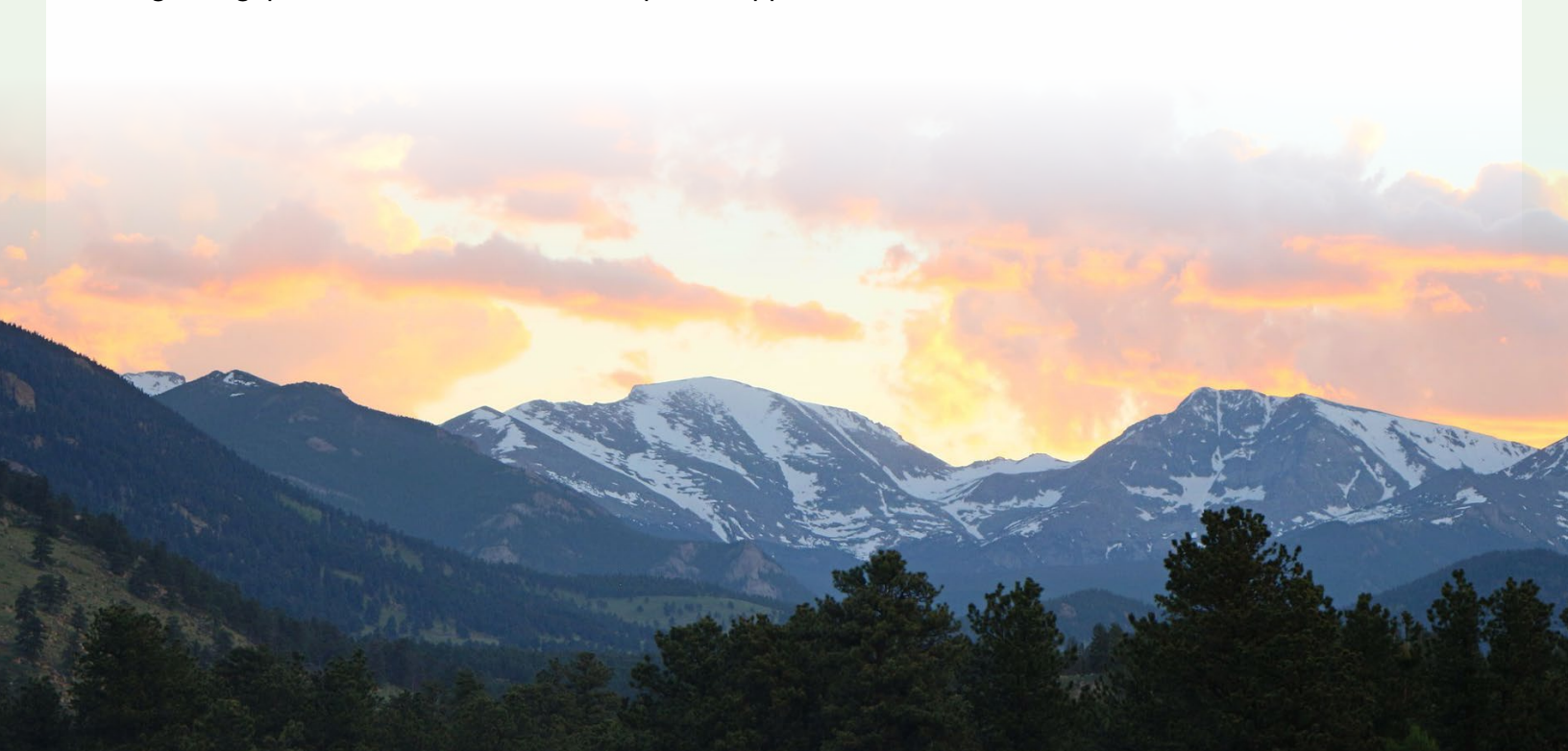
- What is on the horizon for patients?
- Engage in demonstrations to convert your OR for advanced tissue collection and preservation.

Lab 4 – Holographic Visualization – The Final Frontier of Medical Imaging

- Experience holographically rendered 3D imaging utilizing a state-of-the-art head mounted display and highly advanced PACS integrations
- Explore the potential of augmented reality-based image guidance and holographic patient registration
- Discover the concept of holographic multi-user sharing and immersive remote collaboration for anatomical education as well as surgery

Lab 5 – Connectomics

Explore the latest techniques for precision network surgery through practical use of structural and functional mapping to achieve greater onco-functional balance. This session will focus on interactive case reviews to bridge the gap between the esoteric to true patient application.





Celebrating a DECADE of Progress

Minimally Invasive Parafascicular Surgery

Friday, July 21

7:00 am **REGISTRATION, EXHIBIT VIEWING & BREAKFAST**

8:00 am **Welcome, Mission, and a Decade of MIPS Accomplishments**

Julian Bailes, MD: NorthShore University Health System & SSG President and Chairman

8:15 am **MIPS VASCULAR CLINICAL TRIALS**

Keynote Presentation: ENRICH Trial – Study Design, Trial Results & Next Steps

Gustavo Pradilla, MD: Emory University School of Medicine

ENRICH Plus Furthering the Science – Neuroprotective Agent Trial in ICH

J. Marc Simard, MD: University of Maryland School of Medicine

Intraventricular Hemorrhage – New Pilot Study with Promise

Brian Howard, MD: Emory University School of Medicine

9:40 am **PRIMARY & SECONDARY TUMOR SURGICAL APPLICATIONS + THE ROLE OF THE NEUROSURGEON IN ONCOLOGY**

MIPS for Primary Brain Tumor – 2 Year Series at Kings Hospital

Christos Soumpasis, MD: Kings Hospital, London

10:15 am **BREAK WITH EXHIBITORS**

10:35 am **How the Neurosurgeon Uniquely Meets the Unmet Need in Today's Precision Medicine Era**

Henry Brem, MD: Johns Hopkins Medicine

Functional Precision Medicine Clinical Paradigm for High Grade Glioma

Analiz Rodriguez, MD, PhD: UAMS Health

11:35 am **Announcing the PRESERVE GBM Study – Improving Our Understanding of the Biology of GBM**

Manmeet Ahluwalia, MD, MBA: Miami Cancer Institute

12:05 pm **LUNCH WITH EXHIBITORS**

12:50 pm **5ALA Technology & Photodynamic Therapy Evolving GBM Treatment Options**

Constantinos Hadjipanayis, MD, PhD: UPMC

1:20 pm **MIPS Approach to Primary and Secondary Tumors vs Conventional – Is there a Difference?**

Justin Singer, MD: Spectrum Health

1:50 pm **Focused Ultrasound & the Future of Neurosurgery**

Nir Lipsman, MD, PhD: Sunnybrook Health Sciences Centre, Toronto

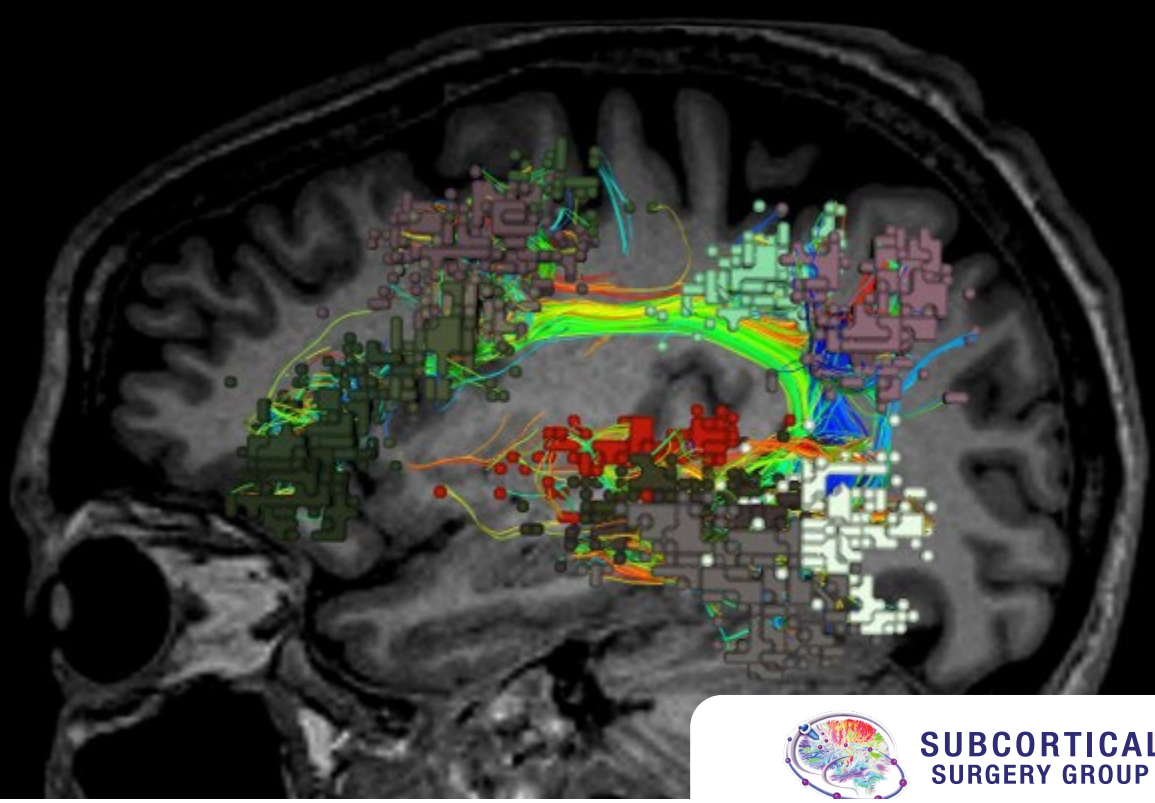
2:20 pm **Laser Interstitial Thermal Therapy – A MIS Approach to Primary & Secondary Brain Tumors**

Gene Barnett, MD: Cleveland Clinic

- 2:45 pm **BREAK WITH EXHIBITORS**
- 3:05 pm **Improving Understanding of Brain Tumors through Biological Preserved Tissue**
Arabinda Das, PhD: The Medical University of South Carolina
- 3:35 pm **BrainPath Exoscope Use in Pediatric Neurosurgery – Outcomes & Novel Uses Outside the Head**
Ramin Eskandari, MD: The Medical University of South Carolina – Shawn Jenkins Children’s Hospital
- 3:50 pm **The Learning Curve to MIPS – Tips, Techniques, & Straight Talk on Complications**
Moderator – Ronald Young II, MD: Delray Medical Center
Panelists – Gustavo Pradilla, MD: Emory University School of Medicine & Justin Singer, MD: Spectrum Health
- 4:50 pm **Day 1 Wrap-Up**
Julian Bailes, MD: NorthShore University Health System & SSG President and Chairman
- 5:00 pm **NETWORKING RECEPTION**
Red Garden Terrace, St Julien Hotel

Saturday, July 22

- 7:00 am **BREAKFAST & EXHIBIT VIEWING**
- 8:00 am **BRAIN COMPUTER INTERFACE – A NEW EXPLORATION IN NEUROSURGERY**
An Overview of the Opportunities & Barriers in BCI
Julian Bailes, MD: NorthShore University Health System & SSG President and Chairman
Fully Implanted Endovascular Brain Computer Interface
J. Mocco, MD: Icahn School of Medicine at Mount Sinai
- 8:45am **Keynote Presentation: Personalized Brain Mapping**
Michael Sughrue, MD: Prince of Wales Hospital, Australia
- 9:45 am **BREAK WITH EXHIBITORS**
- 10:10 am **Neuroendoscopic Lavage**
Erin Kiehna, MD: Novant Health
- 10:25 am **Holographic Visualization – The Final Frontier of Medical Imaging**
Osamah Choudhry, MD: NYU Langone Health
- 10:40 am **Use of Tubular Retractors to Access Deep Brain Lesions - The Johns Hopkins Experience**
Raj Mukherjee, MD, MPH: Johns Hopkins Medical Institutions
- 10:55 am **The Use of GammaTile Brachytherapy in the Treatment of Upfront & Recurrent Brain Tumors**
Jay McCracken, MD: Piedmont Atlanta Hospital
- 11:15 am **Immediate Biological Preservation of Tumor & Advanced Organoid Development for Oncology Analysis**
Tomas Garzon-Muvdi, MD, MSc: Emory University School of Medicine
- 11:35 am **Improving Neurosurgical Outcomes by Leveraging the Power of AI**
Daniel Donoho, MD: George Washington University School of Medicine and Health Sciences
- 11:50 am **Summary Points & Questions**
Julian Bailes, MD: NorthShore University Health System & SSG President and Chairman
- 12:00 pm **MEETING ADJOURNED**



**SUBCORTICAL
SURGERY GROUP**

Click the button or scan the QR code to Register

- No cost for neurosurgeons to attend
- Workshops are limited to 36 attendees

REGISTER NOW



For questions, contact:

Jennifer Oakley
Oakley Meetings & Events
201.787.7299 (cell)
jennifer@eventsbyoakley.com

