



SUBCORTICAL SURGERY GROUP
11TH ANNUAL MEETING

2024

Advancing Innovation in Subcortical Surgery

THE NEXT FRONTIER

St Julien Hotel
Boulder, Colorado

**Hands-on
Workshops**

August 1

**General
Session**

August 2-3

► Special Section on BCI



REGISTER NOW



Dear Friends and Colleagues:

Welcome to the 11th Annual Meeting of the Subcortical Surgery Group (SSG). Your favorite neurosurgery meeting returns to the St Julien Hotel in Boulder, Colorado August 1-3, 2024. Please join us for this interactive learning experience to collaborate with colleagues who share the common goal of optimizing MIS to the subcortical space and more. This event will inspire, engage, and connect thought-leaders on the most innovative and progressive topics in cranial neurosurgery.

This year's theme, **Advancing Innovation in Subcortical Surgery - The Next Frontier**, presents a diverse didactic agenda across 1½ days. Over 25+ influential Neurosurgery faculty will share their clinical experiences, published evidence, and newest research studies using the MIPS surgical approach and other novel and advanced technologies. "Med-tech-talk" style presentations are sprinkled throughout the program to provide innovation highlights and thoughts on BCI, AI, AR, and robotics today and in the future.

We are excited to also offer 2 hands-on workshops on Thursday, August 1 - the day before the General Session. Attend one or both of the following workshops:

- **Workshop 1 - MIPS: A Deficit Sparing Approach**

This workshop introduces a deficit sparing approach for the subcortical space. It will be centered around evidence-based medicine and the positive results from the ENRICH Trial for surgical treatment of ICH.

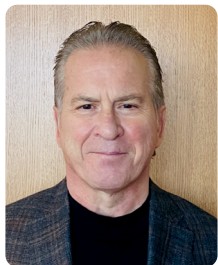
- **Workshop 2 - Welcome Happy Hour & Advances in Intraoperative Imaging and Visualization**

Join us for Happy Hour and chat with expert neurosurgeons about fluorescence guided surgery and ultrasound. Learn how these important innovations optimize surgical workflow efficiencies.

Boulder's iconic Flatirons provide the perfect backdrop. The St Julien Hotel is a beautiful resort, full of family-oriented amenities. It is steps from Pearl Street Mall where visitors stroll the brick-paved pedestrian walkway, linger on restaurant patios, shop, and watch street performers.

I am grateful for the SSG's leadership team, this year's presenters, and 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
System Physician Executive, Endeavor Health Neurosurgery
Bennett-Tarkington Chair of Neurosurgery, NorthShore Hospitals
Clinical Professor of Neurosurgery
University of Chicago Pritzker School of Medicine



COMPREHENSIVE AGENDA

Hands-on Workshops

1. MIPS: A Deficit Sparing Approach

Thursday, August 1 • 12:30pm – 5pm

2. Welcome Happy Hour & Advancements in Intraoperative Imaging and Visualization

Thursday, August 1 • 5pm – 6:30pm

11th Annual Meeting (didactic)

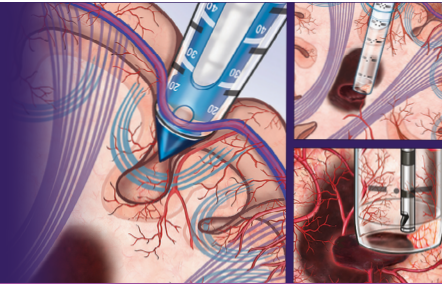
Advancing Innovation in Subcortical Surgery The Next Frontier

Friday, August 2 • 7am – 5:30pm

Saturday, August 3 • 7am – 12pm

MIPS – A Deficit Sparing Approach Workshop 1

Thursday, August 1 | 12:30pm – 5:00pm



Target Audience

Practicing neurosurgeons who have **NOT** attended a MIPS education program

Workshop Description

For neurosurgery, the push toward minimally invasive surgery has continued to expand over the last two decades; however, not all minimally invasive neurosurgery is the same. This program will build your repertoire of surgical techniques by introducing Minimally Invasive Parafascicular Surgery (MIPS), a deficit sparing approach for safe surgical intervention in the subcortical space.

Consistently published clinical and economic evidence affords confidence in patient outcomes when employing the MIPS approach. With over 12 years of evidence and over 250 peer reviewed publications and abstracts, these independent publications show repeated safety, efficiency, and reduced surgical morbidity associated with a wide range of abnormalities.

This growing evidence culminated in the ENRICH Randomized Clinical Trial. ENRICH is the first and only positive clinical trial to provide level 1 evidence supporting surgical intervention for intracerebral hemorrhage.

Join us for an evidence-based workshop highlighting the most up-to-date information surrounding subcortical neurosurgery. Led by expert MIPS educated neurosurgeons and ENRICH investigators, hear their personal experiences with MIPS and learn tips and techniques in a hands-on skills lab.

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

¹Mansour et al., <https://dx.doi.org/10.1016/j.jwneu.2019.08.218>

Explore Key Surgical Outcomes from ENRICH when using MIPS for Clot Evacuation

- ✓ Early Intervention – Is treatment effective within 24hrs?
- ✓ Minimize Iatrogenic Injury – Is there a mortality benefit at 30- & 180-days?
- ✓ Maximize Clot Evacuation – Does MIPS allow for meaningful reduction to EOTV?
- ✓ Minimize Re-Bleeds & Manage Hemostasis – How does ENRICH compare to traditional ICH management?

Faculty



Julian Bailes, MD

Endeavor Health Neurosurgery
*ENRICH Site



Justin Singer, MD

Corewell Health
*ENRICH Site



Mark Bain, MD

Cleveland Clinic
*ENRICH Site



Nicholas Field, MD

Albany Med Health System
*ENRICH Site



Analiz Rodriguez, MD, PhD

UAMS Health
*ENRICH Site



Raghuram Sampath, MD, FAANS, FACS

Kaiser Permanente Centre for Health Research
Northwest Permanente

Agenda

- 12:30 pm Workshop 1 Registration & Lunch
- 1:00 pm Principles of MIPS – ACCESS, REMOVAL & COLLECTION
- 3:00 pm Hands-on Skills Lab Demonstration
- 3:15 pm Hands-on Skills Lab Rotations
- 5:00 pm Workshop 1 Concludes



Welcome Happy Hour & Advancements in Intraoperative Imaging and Visualization Workshop 2

Thursday, August 1, 2024 | 5:00pm – 6:30pm

Target Audience

This happy hour event is open to all neurosurgeons attending the Annual Meeting.

Workshop Description

Intraoperative visualization and tissue differentiation are key principles in cranial neurosurgery. Modern advancements in imaging, such as fluorescence guided surgery (FGS) and ultrasound, support the goal of maximal safe resection. This workshop offers attendees hands-on experience with the latest in intraoperative visualization and imaging technologies. Join us for Happy Hour and chat with expert neurosurgeons to learn how these important innovations optimize surgical workflow efficiencies.

Faculty



Costas Hadjipanayis, MD, PhD
University of Pittsburgh School of Medicine

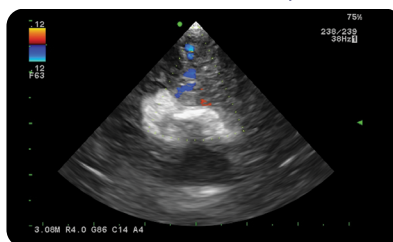


Brad Zacharia, MD
PennState Health

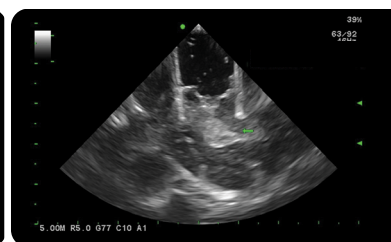
Agenda

- 5:00 pm Workshop 2 Registration & Bar Open
- 5:15 pm Recorded Case Discussion
- 6:00 pm Hands-On Skills Lab
- 6:30 pm Workshop 2 Concludes

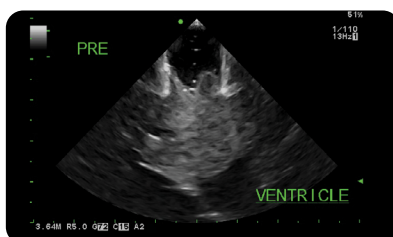
Confirm Vascularity



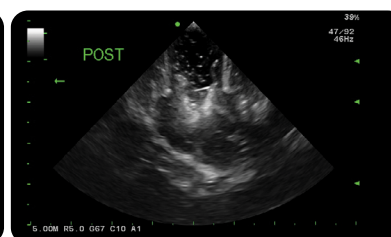
Confirm Lesion Position



Visualize Landmarks



Monitor Resection





Friday, August 2

- 7:00 am **REGISTRATION, EXHIBIT VIEWING, & BREAKFAST**
- 8:00 am **Welcome, Mission, & Advancing Innovation in Subcortical Neurosurgery**
Julian Bailes, MD: Endeavor Health Neurosurgery & SSG President and Chairman
- 8:15 am **Clinical Trials with Stentrode**
J Mocco, MD: Icahn School of Medicine at Mount Sinai
- 8:35 am **CLINICAL, ECONOMIC, & MULTIDISCIPLINARY VIEWPOINTS OF ICH**
- Keynote Presentation: The ENRICH Trial – Surgical Lessons in the 1st Positive ICH Trial**
Mark Bain, MD: Cleveland Clinic
- ENRICH – Healthcare and Hospital Economics of MIPS**
Mitesh Shah, MD: Indiana University Health
- ICH Patient Management through the Lens of the Multidisciplinary Team**
Andrew Demchuk, MD, FRCPC: University of Calgary
- Unanswered Question in ICH – What do We Know about Basal Ganglia & Where Are We Going?**
Mark Bain, MD: Cleveland Clinic
- Endoscopic ICH – SCUBA Technique**
Christopher Kellner, MD: Icahn School of Medicine at Mount Sinai
- 10:20 am **BREAK WITH EXHIBITORS**
- 10:40 am **THE NEUROSURGEON'S ADVANCING ROLE IN ONCOLOGY**
- Improving Our Understanding of GBM Biology – Neurosurgery's Role**
Michael McDermott, MD: Baptist Health Medical Group
- Update on Functional Precision Medicine for Brain Tumors**
Analiz Rodriguez, MD, PhD: UAMS Health
- MIPS and Pediatric Brain Tumors, Advancing Outcomes – Is there a Difference?**
Justin Singer, MD: Corewell Health
- Use of a Multi-Modal Approach in Uncovering New Paths Forward in GBM Research**
Arabinda Das, PhD: The Medical University of South Carolina
- GammaTile Therapy in GBM**
David Jason McCracken, MD: Piedmont
- 12:05 pm **LUNCH WITH EXHIBITORS**
- 12:45 pm **ADVANCES IN MINIMALLY INVASIVE NEUROSURGERY**
- Focused Ultrasound & the Future of Neurosurgery**
Nir Lipsman, MD, PhD: Sunnybrook Health Sciences Centre, Toronto
- A New Approach to Fluorescence-Guided Surgery – The Finishing Touch**
Costas Hadjipanayis, MD, PhD: University of Pittsburgh School of Medicine
- Ultrasound in MIPS – Real Time Visualization**
Brad Zacharia, MD: PennState Health
- 1:50 pm **Structural Preservation to Postoperative Rehabilitation in MIPS**
Ranjeev Bhangoo, MD: Kings College Hospital, London
- 2:10 pm **BRAIN COMPUTER INTERFACE – A NEW EXPLORATION IN NEUROSURGERY**
- Future of BCI – Clinical Progress & Capital Markets**
Neilank Jha, MD: NeuraSeed BCI
- BCI Career & Field Perspective**
Vikash Gilja, PhD: Paradromics – Chief Science Officer

- 2:50 pm **BREAK WITH EXHIBITORS**
- 3:10 pm **Self-Powered Microfluidic Drug Pumps for Brain Applications**
Bruce Gale, PhD & Azur Azapagic, PhD: University of Utah
- Blackrock Technology – Development, Surgical Utilization, & Potential**
Rob Franklin, PhD: Blackrock Neurotech
- Subcortical Deep Micro-Recording – Potential & Implications**
Shadi Dayeh, PhD: University of California San Diego
- The Layer 7 Cortical Interface – A Scalable and Minimally Invasive BCI Platform**
Benjamin Rapoport, MD, PhD: Icahn School of Medicine at Mount Sinai
- Neural Interfaces for CNS Disorders**
Nicolas Vachicouras, PhD: Neurosoft Bio
- BCI Panel Discussion: BCI Commercialization – Benefits, Barriers, Funding, & Breakthroughs**
Moderator: Neilank Jha, MD: NeuraSeed BCI
Panelist: Vikash Gilja, PhD: Paradromics – Chief Science Officer
- 5:20 pm **Day 1 Wrap-Up**
Julian Bailes, MD: Endeavor Health Neurosurgery & SSG President and Chairman
- 5:30 pm **NETWORKING RECEPTION** – Red Garden Terrace, St Julien Hotel

Saturday, August 3

- 7:00 am **BREAKFAST & EXHIBIT VIEWING**
- 8:00 am **Panel Discussion – Complication Avoidance & Management in MIPS**
Moderator: Zachary Litvack, MD, MCR, FAANS, FACS: Swedish Neuroscience
Panelists: Jeroen Coppens, MD: Saint Louis University & Jason Cormier, MD: Acadiana Neurosurgery
- 9:00 am **Lessons Learned Over a Quarter Century & 2,500 Subcortical Surgical Procedures**
“How to Get from Here to There” – Technical and Anatomic Nuances
Amin Kassam, MD: Northwest Community Healthcare
- 9:45 am **Microvascular Dynamics and Functional Implications in MIPS**
Jose Lavrador, MD: Kings College Hospital, London
- 10:05 am **BREAK WITH EXHIBITORS**
- 10:25 am **TECHNOLOGY ADVANCES IN NEUROSURGERY**
- Towards Extreme Eloquence – How Connectomics Can Enhance Brain Tumor Surgery**
Simon Hanft, MD: Westchester Medical Center
- Nanobots for Glioblastoma Resection**
Kimberly Bojanowski Hoang, MD: Emory Winship Cancer Institute
- Working on Navigating the Subcortical Space for Focused Ultrasound Applications using Connectomics**
Lloyd Zucker, MD: Brain & Spine Center of South Florida
- 11:20 am **Comparative Analysis between Tubular Retractor & Open Craniotomy Surgery using Quantitative MRI Tractography**
Chikezie Eseonu, MD: Meritus Health
- 11:35 am **Nuances of MIPS for Hematoma Evacuation & Tentorial Post Radiation Embolized AVM (CEIH) Resection**
Raghuram Sampath, MD, FAANS, FACS: Kaiser Permanente Centre for Health Research – Northwest Permanente
- 11:50 am **Closing Remarks**
Julian Bailes, MD: Endeavor Health Neurosurgery & 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
- MIPS workshop limited to 36 attendees

REGISTER NOW



For questions, contact:
Jennifer Oakley
Oakley Meetings & Events
201.787.7299 (cell)
jennifer@eventsbyoakley.com



Accommodations

Room accommodations are reserved at:



St Julien Hotel
900 Walnut St.
Boulder, CO 80302



The SSG will provide lodging for up to two-nights and meals during the program for attending neurosurgeons. Surgeons who attend the Annual Meeting for the first time and participate in the pre-meeting MIPS workshop will be reimbursed up to \$500 for coach airfare.