SUBCORTICAL SURGERY GROUP

# 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





SUBCORTICAL SURGERY GROUP Dear Friends and Colleagues:

Welcome to the 11<sup>th</sup> 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

#### 11<sup>th</sup> Annual Meeting (didactic)

#### Advancing Innovation in Subcortical Surgery The Next Frontier

Friday, August 2 • 7am – 5pm 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 Suggests<sup>1</sup>

- $\checkmark$  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
- $\checkmark$  An economic impact through shorter hospital stays as noted in several studies

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

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

- ✓ Early Intervention Is treatment effective within 24hrs?
- ✓ Minimize latrogenic 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



Mark Bain, MD Cleveland Clinic \*ENRICH Site



Analiz Rodriguez, MD, PhD UAMS Health



Justin Singer, MD Corewell Health \*ENRICH Site



Nicholas Field, MD Albany Med Health System \*ENRICH Site

#### 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



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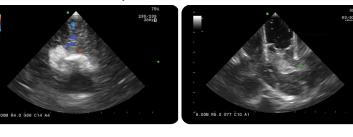
Brad Zacharia, MD PennState Health

## Agenda

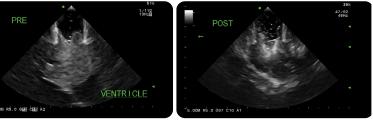
- 5:00 pm Workshop 2 Registration & Bar Open
- 5:15 pm Recorded Case Discussion
- 6:00 pm Hands-On Skills Lab
- 6:30 pm Workshop 2 Concludes

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## 11<sup>TH</sup> ANNUAL MEETING Advancing Innovation in Subcortical Surgery THE NEXT FRONTIER



#### 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, ECONOMIC, & MULTIDISCIPLINARY VIEWPOINTS OF ICH

Keynote Presentation: The ENRICH Trial – Surgical Lessons in the 1<sup>st</sup> Positive ICH Trial Mark Bain, MD: Cleveland Clinic

ENRICH – Healthcare and Hospital Economics of MIPS TBD

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

#### 10:00 am BREAK WITH EXHIBITORS

#### 10:20 am THE NEUROSURGEON'S ADVANCING ROLE IN ONCOLOGY

Cortical-Subcortical Functional Preservation & Rehabilitation in Neuro-Oncology Ranjeev Bhangoo, MD: Kings College Hospital, London

Improving Our Understanding of GBM Biology – Neurosurgery's Role Michael McDermott, MD: Baptist Health Medical Group

**Understanding Genetic & Biological Make-Up of Meningiomas through Circular RNA** Kyle Wu, MD: The Ohio State University – Wexner Medical Center

Update on Functional Precision Medicine for Brain Tumors Analiz Rodriguez, MD, PhD: UAMS Health

MIPS Approach to Primary and Secondary Tumors vs Conventional – Is there a Difference? Justin Singer, MD: Corewell Health

#### 12:00 pm LUNCH WITH EXHIBITORS

#### 12:45 pm ADVANCES IN MINIMALLY INVASIVE NEUROSURGERY & ADJUVENT THERAPIES

Clinical & Workflow Advances in Fluorescence Guided Surgery Costas Hadjipanayis, MD, PhD: University of Pittsburgh School of Medicine

Gamma Tile Therapy in GBM David Jason McCracken, MD: Piedmont

#### 1:45 pm BRAIN COMPUTER INTERFACE - A NEW EXPLORATION IN NEUROSURGERY

Future of BCI – Clinical Progress & Capital Markets Neilank Jha, MD: NeuraSeed BCI

Clinical Trials with Stentrode J Mocco, MD: Icahn School of Medicine at Mount Sinai

Engineering Design of Brain Microfluidic Devices Azur Azapagic, PhD: University of Utah | Bruce Gale, PhD: University of Utah

2:45 pm	BREAK WITH EXHIBITORS
3:05 pm	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
4:55 pm	Day 1 Wrap-Up Julian Bailes, MD: Endeavor Health Neurosurgery & SSG President and Chairman
5:00 pm	NETWORKING RECEPTION Red Garden Terrace, St Julien Hotel

## Saturday, August 3

7:00 am	BREAKFAST & EXHIBIT VIEWING
8:00 am	MIPS Panel Discussion: The Learning Curve to MIPS – Tips, Techniques, & Straight Talk on Complications Jason Cormier, MD: Acadiana Neurosurgery Zachary Litvack, MD, MCR, FAANS, FACS: Swedish Neuroscience
8:50 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
9:35 am	TECHNOLOGY ADVANCES IN NEUROSURGERY
	Broad Noninvasive Applications of Focused Ultrasound Lloyd Zucker, MD: Brain & Spine Center of South Florida
	Focused Ultrasound & the Future of Neurosurgery TBD
10:10 am	BREAK WITH EXHIBITORS
10:30 am	Artificial Intelligence in Neurosurgery TBD
	Personalized Brain Mapping with Connectomics Michael Ivan, MD: University of Miami Health System
	<b>Ultrasound in MIPS - Real Time Visualization</b> Brad Zacharia, MD: PennState Health
	Nanobots for Glioblastoma Resection Kimberly Bojanowski Hoang, MD: Emory Winship Cancer Institute
11:35 am	Nuances of MIPS for Hematoma Evacuation & Tentorial Post Radiation Embolized AVM (CEIH) Resection Raghuram Sampath, MD: Kaiser Permanente
11:50 am	Closing Remarks Julian Bailes, MD: Endeavor Health Neurosurgery & SSG President and Chairman
12:00 pm	MEETING ADJOURNED



#### 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



## Accomodations

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.