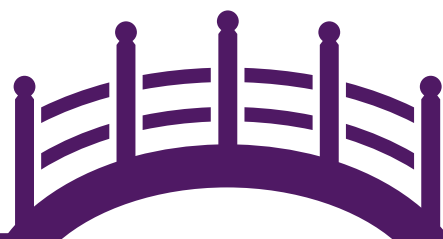


# SPINAL CSF LEAK: BRIDGING THE GAP

“Past, Present, & Future”



**November 2-3, 2024**



# AGENDA

**DAY 1**

*All times listed are Mountain Time*

## **REGISTRATION**

**7:30–8:15am**

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## **WELCOME & INTRODUCTIONS**

Dr. Andrew Callen and Jen MacKenzie

**8:15–8:30am**

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## **Keynote speaker: Perspectives on a career in spinal CSF leak and the importance of the patient-physician relationship**

Dr. Linda Gray

**8:30–8:45am**

## **PATIENT PRESENTATION & OVERLAPPING SYNDROMES**

### **Patient talk: Challenges to clinical diagnosis**

Dr. Jodi Blaszyk

**8:45–9:00am**

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### **Physician talk: Classic presentation of spinal CSF leak symptoms**

Dr. Jill Rau

**9:00–9:15am**

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### **Physician talk: Atypical presentation of spinal CSF leak symptoms**

Dr. Deborah Friedman

**9:15–9:30am**

# AGENDA

**DAY 1**

*All times listed are Mountain Time*

**Physician talk: Rethinking the clinical presentation of SIH in CSF-venous fistulas**

**9:30–9:45am**

Dr. Andrew Callen

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**Physician talk: Overlapping syndromes in spinal CSF leak**

**9:45–10:00am**

Dr. Ilene Ruhoy

**Coffee Break** ☕

**10:00–10:10am**

## CHALLENGES IN DIAGNOSIS

**Patient talk: Perspectives on diagnosis from a physician with a spinal CSF leak**

**10:10–10:25am**

Dr. Tasha Haiduk

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**Physician talk: Refining MR protocols and why they are used**

**10:25–10:40am**

Dr. Niklas Lützen

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**Physician talk: The diagnosis of SIH, from old to new understandings**

**10:40–10:55am**

Dr. Ian Mark

# AGENDA

**DAY 1**

*All times listed are Mountain Time*

## MYELOGRAPHY: FROM CONSENT TO CONCLUSION

**Patient talk: The myelography experience from the patient's point-of-view** 10:55–11:10am

Sarah Berry

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**Physician talk: DSM: What, when, why, and how?** 11:10–11:25am

Dr. Niklas Lützen

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**Physician talk: dCTM: What, when, why, and how?** 11:25–11:40am

Dr. Lalani Carlton Jones

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**Physician talk: Photon Counting CT: What, when, why, and how?** 11:40–11:55am

Dr. Ajay Madhavan

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**Q&A from morning sessions** 11:55–12:15pm

*Moderators: Dr. Samantha Petrucci and Isaac Brodsky*

**Lunch**

**12:15–1:00pm**

# AGENDA

**DAY 1**

*All times listed are Mountain Time*

## THE IMPORTANCE OF COMMUNICATION

**Patient talk: How to minimize miscommunications when advocating for your care**

**1:00–1:15pm**

Aubrey Bolan

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**Physician talk: DSM: Communicating with patients during their spinal CSF leak journey**

**1:15–1:30pm**

Dr. Mark Mamlouk

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**Patient talk: Intersectionality and navigating diagnosis**

**1:30–1:45pm**

Asia Gibson

## EPIDURAL BLOOD AND FIBRIN GLUE PATCHING

**Physician talk: Patching basics**

**1:45–2:00pm**

Dr. Ian Carroll

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**Patient talk: The patching experience from the patient's point-of-view**

**2:00–2:15pm**

Kristen Friese

# AGENDA

**DAY 1**

*All times listed are Mountain Time*

**Coffee Break** ☕

**2:15–2:25pm**

## ADDRESSING THE COGNITIVE AND EMOTIONAL BURDEN OF THE SPINAL CSF LEAK JOURNEY

**Patient talk: Physical and emotional wellbeing while living with a spinal CSF leak** **2:25–2:40pm**  
Leah Leavitt

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**Physician talk: Palliative care** **2:40–2:55pm**  
Dr. Katherine Morrison

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**Patient talk: Mental health and the emotional toll of missed and mis-diagnosis** **2:55–3:10pm**  
Dr. John Reiman

## THE EVOLUTION OF PATIENT ADVOCACY AND CAREGIVING

**Spinal CSF Leak Foundation 10 year anniversary: The Foundation over the years** **3:10–3:25pm**  
Dr. Connie Deline, Andrea J. Buchanan,  
and Jen MacKenzie

# AGENDA

**DAY 1**

*All times listed are Mountain Time*

**Patient talk: The evolution of patient advocacy in spinal CSF leak**

Linda Pohuski

**3:25–3:40pm**

**Patient talk: Caregiving in the context of spinal CSF leak**

Darren Jackson

**3:40–3:55pm**

**End of day Q&A session**

*Moderators: Dr. Marius Birlea and Jen MacKenzie*

**3:55–4:25pm**

## HONORING CONNIE RIM

**Honoring Connie Rim**

Jodi Ettenberg

**4:25–4:30pm**

**END OF DAY 1**

# AGENDA

**DAY 2**

*All times listed are Mountain Time*

## **WELCOME REMARKS**

**8:15–8:25am**

Dr. Andrew Callen and Jen MacKenzie

## **TREATMENTS FOR THE SPECTRUM OF DURAL DEFECTS**

### **Physician talk: Basics of surgery for spinal CSF leaks: What, why, & how?**

**8:25–8:40am**

Dr. Peter Lennarson

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### **Physician talk: Updates and challenges in spinal CSF leak surgery**

**8:40–8:55am**

Dr. Wouter Schievink

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### **Patient talk: The surgical experience from the patient's perspective**

**8:55–9:10am**

Jeremy Marks

## **CSF-VEIN FISTULAS AND TREATMENTS THEREOF**

### **Physician talk: CSF-venous fistulas: The known and the unknown**

**9:10–9:25am**

Dr. Peter Kranz



# AGENDA

**DAY 2**

*All times listed are Mountain Time*

**Physician talk: CSF-venous fistulas: Why or why not to embolize?**

**9:25-9:40am**

Dr. Eike Piechowiak

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**Physician talk: CSF-venous fistulas: Why or why not to use glue?**

**9:40-9:55am**

Dr. Mark Mamlouk

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**Physician talk: CSF-venous fistulas: Why or why not to surgically repair?**

**9:55-10:10am**

Dr. Vinay Deshmukh

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**Patient talk: CSF-venous fistula treatments from the patient's point-of-view**

**10:10-10:25am**

Laura Tietz

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**Coffee Break** ☕

**10:25-10:40am**

## POST-DURAL PUNCTURE HEADACHE

**Physician talk: Iatrogenic spinal CSF leaks: The known and unknown**

**10:40-10:55am**

Dr. Andrew Callen

# AGENDA

**DAY 2**

*All times listed are Mountain Time*

**Physician talk: Spinal CSF leaks and pregnancy** 10:55–11:10am  
Dr. Samantha Petrucci

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**Patient talk: Perspectives of PDPH** 11:10–11:25am  
Julie Schmitz, MSN, CRNA, ACNP

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**Physician talk: Surgery for PDPH: Blebs and  
needle holes** 11:25–11:40am  
Dr. Jürgen Beck

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**Q&A from morning sessions** 11:40–12:20pm  
*Moderators: Dr. Lalani Carlton Jones  
and Kyle Spawn*

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**Lunch** 12:20–1:20pm

## THE IMAGING NEGATIVE SIH PATIENT: HOW WE DO IT

**Physician talk: The imaging negative brain in  
SIH: What we've learned** 1:20–1:35pm  
Dr. Wouter Schievink

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**Physician talk: The imaging negative brain in  
SIH: How I do it** 1:35–1:50pm  
Dr. Peter Kranz

# AGENDA

**DAY 2**

*All times listed are Mountain Time*

**Physician talk: The imaging negative brain in  
SIH: How I do it**

Dr. Ian Carroll

**1:50–2:05pm**

**Coffee Break** ☕

**2:05–2:20pm**

## TREATMENT CONSIDERATIONS & POST-TREATMENT CARE

**Physician talk: MCAS, post-viral concerns,  
hEDS, POTS, & other conditions that may  
impact spinal CSF leak treatment & healing**

Dr. Ilene Ruhoy

**2:20–2:35pm**

**Patient talk: Navigating concurrent  
conditions while deferring treatment**

Jodi Ettenberg

**2:35–2:50pm**

**Physician talk: Rebound intracranial  
hypertension: The known and unknown**

Dr. Simy Parikh

**2:50–3:05pm**

# AGENDA

**DAY 2**

*All times listed are Mountain Time*

**Physical therapy in the context of spinal CSF leak** **3:05–3:20pm**  
Nicole Frost, BAppSci (Physio) Hons

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**Patient talk: Logistics of care and aftercare** **3:20–3:35pm**  
Jen MacKenzie

## CLOSING Q&A AND REMARKS

**Closing Q&A** **3:35–4:20pm**  
*Moderators: Dr. Andrew Callen and Aubrey Bolan*

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**CLOSING REMARKS** **4:20–4:30pm**

**END OF CONFERENCE**

# SPEAKERS

**BIOS**

*Listed alphabetically*

**Jürgen Beck, MD** is the Chair of the Department of Neurosurgery at the Neurocenter, University of Freiburg, Germany. His extensive surgical expertise encompasses brain and spinal tumors, vascular conditions, skull base pathologies, minimally-invasive surgeries for spinal CSF leaks (SIH and cPDPH), and he and his team are also actively developing non-invasive diagnostic methodologies for spinal CSF leak, including phase-contrast MRI, novel biomarkers, and infusion testing. He is developing a horizontal human-to-human (H2H) translational research program that places the neurosurgical operating room at its core. This program includes initiatives in neuro-oncological molecular imaging (CAST), quantum-magnetic imaging, translational research laboratories, and specialized programs for intracerebral hemorrhage and vasospasm. He is the founder of the first interdisciplinary SIH boards in Switzerland and Germany and serves as the chair of the CSF-section of the European Association of Neurosurgical Societies (EANS).

**Sarah Berry, PhD ABD** is a technology industry researcher, product strategist, and user experience professional, specializing in developing digital tools and online platforms for businesses. A former medical sociologist, her prior academic research and teaching at McGill University examined systemic barriers to health care, socio-cultural experiences of health and illness, and biosocial approaches to mental health care. She has an ongoing spinal CSF leak that was first diagnosed in 2019.

**Aubrey Bolan** has suffered from two debilitating occurrences of spontaneous intracranial hypotension. She most recently developed multiple CSF-venous fistulas, which were successfully embolized in late 2023. Since her recovery, she has served on the Board of Directors for the Spinal CSF Leak Foundation.

**Jodi Blaszyk, PsyD** is a clinical psychologist in forensic practice. She acquired a spinal CSF leak in 2018. In May 2023, the leak was found and repaired. Based on her lived experience with a leak, she created ADAPT, a mental framework

to help patients navigate the many challenges of leak life and to promote resiliency.

**Andrea J. Buchanan**, the first executive director of the Spinal CSF Leak Foundation, is a New York Times bestselling author whose latest book is the novel *Five-Part Invention*. Her memoir *The Beginning of Everything*, about her experience with spinal CSF leak, was a finalist for the 2019 PEN/E.O. Wilson Award for Literary Science Writing. Her other work includes the internationally bestselling *The Daring Book for Girls*, and nine other books.

**Andrew Callen, MD (Course Director)** is an Associate Professor of Neuroradiology at the University of Colorado School of Medicine, where he is also the Director of the CSF Leak Program. Dr. Callen is also a member of the medical advisory board of the Spinal CSF Leak Foundation.

**Lalani Carlton Jones, MA, MBBS, MSc, MRCS, FRCR** is a Consultant Neuroradiologist at Guys and St Thomas's, The Evelina Childrens and Kings College Hospitals in London, practicing in adult and paediatric neuroradiology and spinal intervention. She has a specialist interest in spinal CSF leaks, leading a multisite multidisciplinary service which receives widespread referrals and has authored new techniques in the field. She is an avid medical educator, holding national and international educational roles and has been the recipient of several prestigious awards for her work including the British Society of Neuroradiologists Trainer of the Year. She lectures widely in neuroradiology education with her main passion in educating others on the topic of CSF leak.

**Ian Carroll, MD, MS** collaborated with Stanford's Neuroradiology and Neurology Headache divisions to create the Stanford CSF Leak Headache Program. He is board-certified in four different specialties: Headache Medicine, Addiction Medicine, Pain Medicine, and Anesthesiology, with a

# SPEAKERS

**BIOS**

*Listed alphabetically*

primary focus on spinal CSF leaks. He has spoken at numerous national meetings on CSF leaks and other topics, has conducted visiting professorships at Johns Hopkins University, Vanderbilt University, Yale University, University of California at Davis Medical Center, and others.

**Connie Deline, MD** is a Canadian family physician living in the USA who co-founded the Spinal CSF Leak Foundation in 2014, with the lived experience of a patient with SIH. Her personal mission statement “striving to close the gaps between what is and what ought to be” has driven all of her efforts, even her culinary ones.

**Vinay Deshmukh, MD, FACS** is an Associate Professor of Neurosurgery at MedStar Georgetown University Hospital. His career, spanning over twenty years, began at Carolina Neurosurgery and Spine Associates (CNSA) where he served on the Board of Directors and was Vice-Chair of the Department of Neurosurgery. At MedStar Health, he has developed a highly respected clinical and research based practice focusing on cerebrovascular and skull base surgery, minimally invasive spine surgery, and spontaneous CSF leaks. His leadership roles include serving as the Neurosurgical Director of the MedStar Spine Governance Council and Co-Director of the MGUH CSF Leak Center.

**Jodi Ettenberg, BCL, LLB** is a former lawyer turned writer and photographer and the recipient of numerous awards from the Society of American Travel Writers and North American Travel Journalism Association for her work on her site, Legal Nomads. After a decade of writing around the world, she sustained a spinal CSF leak in 2017 that is ongoing. Jodi now writes about curiosity, resilience, and disability. Her work has been featured in The New York Times, BBC Travel, CNN, The Guardian, and more. She also sits on the Board of Directors of the Spinal CSF Leak Foundation and was named one of the most influential health advocates of 2023 by VeryWell Health.

# SPEAKERS

**BIOS**

*Listed alphabetically*

**Deborah I. Friedman, MD, MPH** is a neurologist specializing in Headache Medicine and Neuro-Ophthalmology and the owner of Yellow Rose Headache and Neuro-Ophthalmology in Dallas, Texas. She was the founding director of the Headache and Facial Pain Program and Cerebrospinal Fluid Dynamics Program at the University of Texas Southwestern Medical Center. She is Board Certified in Neurology and Headache Medicine and is a Fellow of the American Academy of Neurology, the American Headache Society, the American Neurological Association, and the North American Neuro-Ophthalmology Society, where she was also the past President. She is the President-elect of the Southern Headache Society. She has published over 130 articles in peer-reviewed journals and 28 book chapters. Her key interests are intracranial pressure disorders, cluster headache and migraine.

**Kristen Friese** is an ACSM certified personal trainer who graduated from Pepperdine University with a psychology major, sports medicine minor, and pre-health track. In her six years of working in her field, she has specialized in clients with chronic illnesses, including one Kristen herself has: Ehlers-Danlos Syndrome. Her spinal CSF leak symptoms began when she was 14 years old, and she received the diagnosis of spinal CSF leak twelve years later, when she was 26. Kristen has undergone four rounds of patching over the course of a year, and is waiting for her fifth after a recent seal that lasted 11 months.

**Nicole Frost, BAppSci (Physio) Hons** is a Physiotherapist (Physical Therapist) at Flex-Ability Physio and the Network Lead of Connected Health Alliance, an EDS Society endorsed Network of Excellence providing coordinated multidisciplinary care for patients with complex needs related to Ehlers-Danlos Syndromes and other symptomatic hypermobility spectrum disorders. Nicole also provides professional mentoring and training for clinicians working with patients with symptomatic hypermobility disorders and is Facilitator of the EDS ECHO Multidisciplinary Team Practice Australasia professional development program. She is a founding Director of Spinal CSF Leak Australia, a recently formed charity to advocate for improved care



options for patients with spinal CSF leaks in Australia. Nicole has published a number of articles on CSF leaks and other neurological presentations associated with symptomatic hypermobility disorders.

**Asia Gibson** was first diagnosed with intracranial hypotension in August 2019 after many doctors appointments. Though still leaking, she moved into intracranial hypertension shortly thereafter, caused by cerebral venous sinus thrombosis. By October 2019, she was treated and sealed by an epidural blood patch, and has since returned to an upright active life with few limitations. Now taking full advantage of her mobility and health again, Asia splits her time between NYC and Georgia. Asia has served on the Spinal CSF Leak Foundation's Patient Advisory Panel for Research since 2021, and hopes to continue spreading awareness and advocating for others experiencing this life-altering health condition.

**Linda Gray, MD** began her career at Duke Medical Center in neuroradiology and has been on faculty at Duke in Neuroradiology for 37 years. She initially ran the residency-training program, then in 2002 when CT fluoroscopy came to fruition, she initiated CT fluoroscopic guided pain management and pioneered CT interventions along the spinal axis including central cervical epidurals extending from C1-2 and throughout the cervical, thoracic and lumbar spine. In 2006, she initiated a program in CT fluoroscopic guided interventions for the treatment of spontaneous intracranial hypotension. She has mentored at least 40 neuroradiologists and 30 institutions throughout the United States, Europe and Australia in the performance of these procedures and has initiated the concept of CSF pressure problems as a secondary cause of migraine headaches throughout the headache community. She is now an invited speaker on the subject, giving multiple lectures throughout the year.

**Tasha Haiduk, MD** is an ER doctor who lives and works in a small mountain town in British Columbia. She graduated from University of British Columbia

medical school, and completed her Family Medicine and Emergency Medicine residencies through University of Calgary. She developed a spinal CSF leak in 2019 after spinal surgery for a benign spinal tumour. Prior to leaking she enjoyed surfing, skiing, kiteboarding, mountain biking, running, yoga and more. She is happy to have regained some of these activities back since the start of her difficult health journey.

**Darren Jackson** works as a director of digital marketing in Palm Beach Gardens, Florida, and spent over three years as a full-time caregiver for his beloved wife, Connie Rim, who battled the challenges of a spinal CSF leak. During this time, he gained deep insights into the complexities of caregiving, navigating both the emotional and practical aspects of supporting a loved one through chronic pain.

**Peter Kranz, MD** is an Associate Professor of Radiology and the Division Chief of Neuroradiology at Duke University Medical Center. He currently serves as President Elect of the American Society of Spine Radiology. He has extensive clinical and research experience in the diagnosis and treatment of Spontaneous Intracranial Hypotension (SIH), including expertise in clinical management, imaging, treatment, and post-treatment considerations, and is considered an international expert in the field of spinal CSF leaks. He has authored or co-authored >100 manuscripts in the peer-reviewed medical literature, with a focus on SIH and image-guided spine procedures. He has served as faculty at Duke University since 2009.

**Leah Leavitt's** leak journey began in 2013 when she woke up with a spontaneous CSF leak. After living with the condition for 4 years, she received successful treatment, only to encounter a new challenge—7 years of rebound intracranial hypertension. She is now recovering and finding stability as she navigates her new normal. She lives in Salt Lake City, Utah with her husband and 3 dogs.

# SPEAKERS

**BIOS**

*Listed alphabetically*

**Peter Lennarson, MD** received his medical degree from the University of Wisconsin, before completing his residency in Neurological Surgery at the University of Iowa. After serving in the United States Air Force he began his academic career in neurosurgery at the University of Nebraska before moving on to Colorado. Dr Lennarson is currently an Associate Professor of Neurological Surgery at the University of Colorado School of Medicine, Anschutz Medical Campus where he serves as the director of the CU CSF Dynamics Surgical Program as well as the Neurosurgery Trauma Program.

**Niklas Lützen, MD** is the Section Head for spontaneous intracranial hypotension and a neuroradiologist at the University Hospital Freiburg in Germany. His clinical research interests include multiple sclerosis, and the glymphatic system, in addition to spontaneous intracranial hypotension and interventional procedures thereof.

**Jen MacKenzie** experienced spinal CSF leak symptoms for many years until her leak was found and surgically repaired in early 2023. After volunteering in other capacities, she currently serves as the Acting Executive Director for the Spinal CSF Leak Foundation.

**Ajay Madhavan, MD** is a neuroradiologist at the Mayo Clinic in Rochester, MN. He completed his medical training at the University of Minnesota in Minneapolis, followed by radiology residency and a neuroradiology fellowship at Mayo Clinic in Rochester. His clinical interests include diagnosis and management of patients with spinal CSF leaks, spine interventional procedures, and advancements in CT and MRI.

**Mark Mamlouk, MD** is the neuroradiology lead and director of the Spinal CSF Leak Program of The Permanente Medical Group at Kaiser Permanente in Northern California. He is a volunteer assistant clinical professor of neuroradiology at the University of California, San Francisco.

# SPEAKERS

**BIOS**

*Listed alphabetically*

**Ian Mark, MD, MSM** is a neuroradiologist at Mayo Clinic in Rochester, MN. He completed his residency at Mayo Clinic, where he was chief resident, and subsequent neuroradiology fellowship at UCSF, where he was chief fellow. He is part of the spine intervention group at Mayo Clinic with a particular focus on SIH and various types of myelography for CSF leaks. His research focuses on developing novel diagnostic tools for the detection of SIH.

**Jeremy Marks** is an entrepreneur and business leader with over 30 years of experience spanning technology, project management, recruiting, and real estate. As Founder and CEO of multiple companies, he has spearheaded innovation in industries from talent acquisition to healthcare and real estate investment. Jeremy holds a Bachelor's in Finance from Miami University and an MBA from Arizona State University's W.P. Carey School of Business. He resides in Scottsdale, AZ, with his wife Julie and their three sons: Sammy, Andrew, and Matthew.

**Katherine Morrison, MD** is an Associate Professor at the University of Colorado School of Medicine. In 2011, after a career in primary care, she completed a fellowship in palliative care at San Diego Hospice. Since 2013 she has worked clinically for the University of Colorado's Inpatient Palliative Care service. She helped develop the interdisciplinary Master of Science in Palliative Care as well as the ACGME AIRE Community Hospice and Palliative Medicine virtual fellowship and is currently the co-director of the fellowship program. She is certified in Heart Math, Nature and Forest Therapy and EQi.

**Simy Parikh, MD** is a headache medicine specialist and director of Headache Medicine at Emory Healthcare and Program Director of the Post-Graduate Advanced Headache Diagnosis & Management Certificate Program at Thomas Jefferson University. Dr. Parikh graduated with a Bachelor of Arts from Harvard University and earned her Doctor of Medicine degree from Virginia Commonwealth University. She completed a residency in

# SPEAKERS

**BIOS**

*Listed alphabetically*

Neurology at Boston Medical College and a fellowship in headache medicine at the Jefferson Headache Center. She currently serves on a medical advisory board of the Spinal CSF Leak Foundation and as a section editor for Current Pain and Headache Report with the goal of raising clinical awareness of headache disorders and spontaneous spinal CSF leak.

**Samantha Petrucci, MD, PhD** is an Assistant Professor of Neuroradiology at CU Anschutz. She received her PhD in Neuroscience and MD from the University of Illinois. She completed an intern year in General Surgery at the University of Minnesota. This was followed by Radiology Residency and Neuroradiology Fellowship at UCSF, where she received extensive training in image-guided spine interventions. She is proud to partner with Dr. Callen to conduct clinical care, minimally invasive spine procedures, and ongoing research through the University of Colorado CSF Leak Program

**Eike Piechowiak, MD** is a specialist in radiology with a focus on diagnostic and invasive neuroradiology, and has been head physician at the University Institute for Diagnostic and Interventional Neuroradiology at Inselpital in Bern since 2022. He heads the MRI perimeter of Neuroradiology and is responsible for diagnostic procedures and minimally invasive imaging-guided interventions on the spine. His main research interests are imaging and interventional therapies for CSF leaks, as well as minimally invasive treatment and diagnostics of ischemic stroke.

**Linda Pohuski** was diagnosed with intracranial hypotension in 2010. In December of 2019, she had surgery for a CSF-venous fistula and is now leak-free. Linda previously served as Co-Chair of the Volunteer and Awareness Committee for the Spinal CSF Leak Foundation. She believes in awareness and advocacy, and has shared her leak story with residents, physicians, and ER Nurses at several conferences in Alabama.

# SPEAKERS

**BIOS**

Listed alphabetically

**Jill Rau, MPsych, MD, PhD, FRCPC, FAHS** is the Director of Headache Medicine at the Bob Bové Neuroscience Institute at HonorHealth in Scottsdale, AZ and an Assistant Clinical Professor of Neurology at the University of Arizona College of Medicine - Phoenix. She is the current Chair of the American Headache Society CSF Dynamics Special Interest Section, a member of the Medical Advisory Board of the Spinal CSF Leak Foundation, and Chair of the Registry Advisory Board and principal investigator for the upcoming ileak registry<sup>SM</sup>. She was a past recipient of the American Headache Society Clinical Fellowship Award and is excited about furthering the understanding, diagnosis and treatment of CSF disorders and engaging others in these endeavors.

**John Reiman, PhD** has over 30 years of experience working as an Oregon-licensed trauma psychotherapist with individuals from all walks of life. After 14 months of life-dismantling symptoms, two CSF-venous fistulas were successfully surgically treated in September of 2022.

**Ilene Ruhoy, MD, PhD** is a board-certified neurologist who serves as the Medical Director of the Chiari EDS Center at Mount Sinai South Nassau. She is also the founder of a pediatric and adult neurology private practice in Seattle, WA which has a unique focus on chronic and complex illness. She has been the co-editor of *Integrative Neurology*, a textbook published by Oxford Press and of *Preventive Neurology*, a special issue of the *Seminars in Neurology* series published by Thieme Medical. She is currently the co-editor of *Neurology and Connective Tissue*, a special issue in the *Frontiers in Neurology* journal. Dr. Ruhoy is also the author of *Invisible No More*, a book to be published by St. Martin's Press in June, 2025.

**Wouter Schievink, MD** was born and raised in Amsterdam, the Netherlands, where he attended the University of Amsterdam School of Medicine. Following his neurosurgery residency at the Mayo Clinic in Rochester, Minnesota and a fellowship at the Barrow Neurological Institute in Phoenix, Arizona he has

# SPEAKERS

**BIOS**

*Listed alphabetically*

been an attending neurosurgeon at Cedars-Sinai Medical Center in Los Angeles, California. He is a Professor of Neurosurgery and director of the microvascular neurosurgery program. He has treated patients with spontaneous spinal CSF leaks since 1991 and he established the Cedars-Sinai CSF leak program in 2001.

**Julie Schmitz, CRNA, ACNP** received her Master of Science in Nurse Anesthesia from Columbia University. She sustained multiple spinal CSF leaks and an arachnoid bleb after her labor epidural in 2022. She is still undergoing treatment and hopes to find peace through purpose by sharing her story and spreading awareness on the devastating impact of chronic CSF leaks.

**Laura Tietz, PharmD, RPh** is a former pediatric hospital pharmacist who specialized in general pediatrics and neonatology. She had to leave the workforce in 2016 due to chronic illness. Laura was formerly the editor-in-chief for the blog for the social media group previously known as The Unchargeables. She developed her first leak, a CSF-venous fistula, while assembling a play kitchen for her daughter for Christmas in 2020. She has since been disabled by many more fistulas and is mostly bedridden and housebound. Laura enjoys reading when her brain allows and writing when she is able to be upright. She is a fierce advocate for spinal CSF leak patients.

# COURSE PLANNING

**The Course Planning Committee for the 2024 Spinal CSF Leak:  
Bridging the Gap Conference are as follows:**

Dr. Andrew Callen (**Course Director**)

Dr. Marius Birlea

Dr. Lalani Carlton Jones

Jen Mackenzie

Andrea J. Buchanan\*

Jodi Ettenberg+

*\*until June 2024*

*+from June 2024 - present*



# CME ACCREDITATION

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 The University of Colorado School of Medicine and the Spinal CSF Leak Foundation. The University of Colorado School of Medicine is accredited by the ACCME to provide continuing medical education for physicians.

The University of Colorado School of Medicine designates this live activity for a maximum of **14.25 AMA PRA Category 1 Credit(s)**<sup>™</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Evaluations for the Spinal CSF Leak: Bridging the Gap will be provided electronically using Survey Monkey with the ability to claim CME credit.

At the end of the course, registered physicians should visit the link or QR code below to take the evaluation survey. You **MUST** complete the survey before **5 pm on November 17th** to get credit and claim your certificate.

<https://www.surveymonkey.com/r/SpinalCSFLeak2024>



Your CME Certificate will be emailed on **Monday, November 18th**. Please contact Andrew Callen ([andrew.callen@cuanschutz.edu](mailto:andrew.callen@cuanschutz.edu)) for any questions pertaining to the evaluation.

# DISCLOSURES

## Disclosure of Relevant Financial Relationships to Learners

Spinal CSF Leak: Bridging the Gap | November 2-3, 2024, Aurora, CO

Name	Ineligible Company	Relationship
Andrew Callen	Eli Lilly	Consultant
Ian Mark	GE Healthcare, Lantheus	Research Support Recipient
Deborah I. Friedman	AbbVie	Speaker
Deborah I. Friedman	Amneal, Eli Lilly, Impel, Satsuma, Theranica, Lundbeck	Advisor
Deborah I. Friedman	Pfizer	Independent Contractor
Deborah I. Friedman	Tonix	Consultant
Jill Rau	AbbVie	Speaker
Jill Rau	Lundbeck	Advisor
Simy Parikh	AbbVie	Advisor
Juergen Beck	B. Braun	Consultant

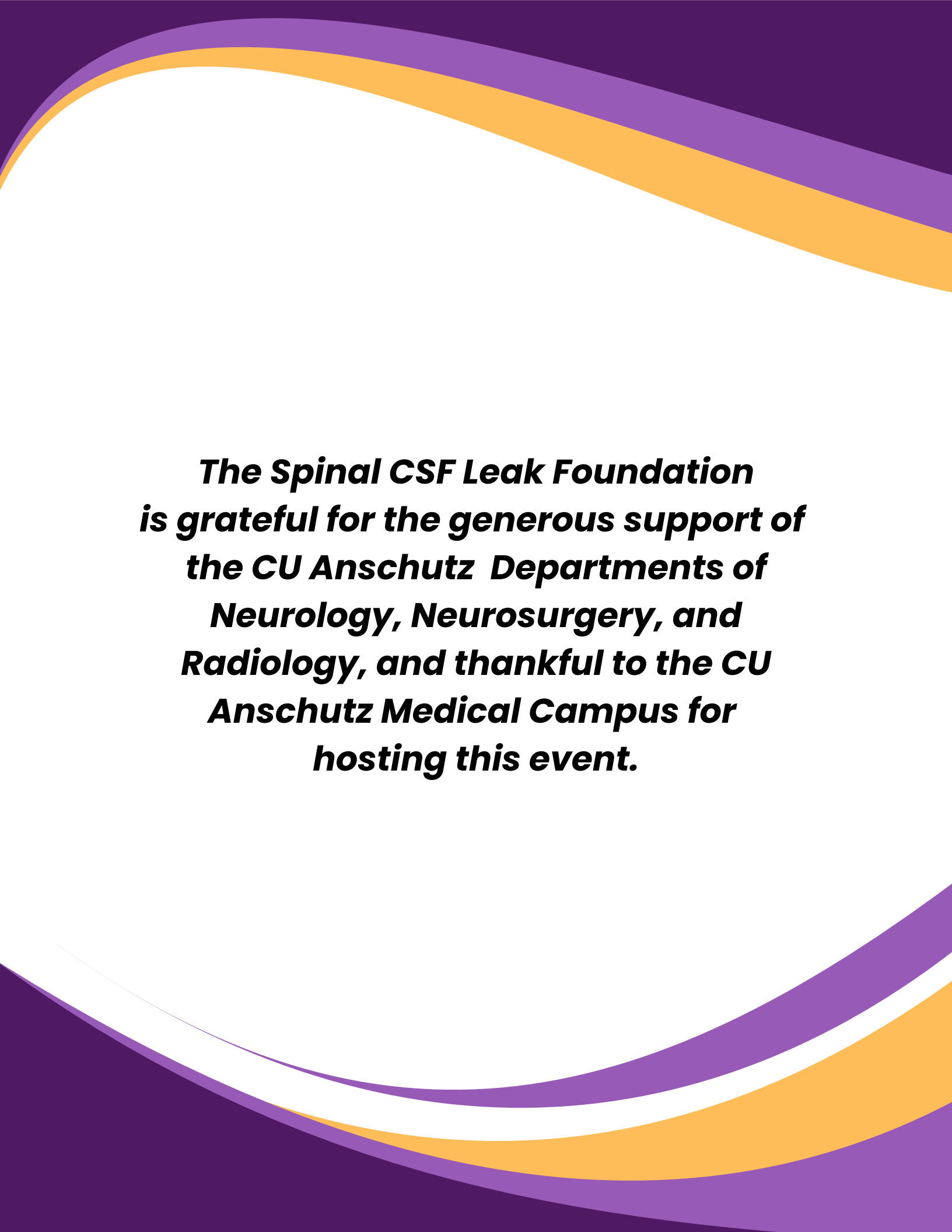
All of the relevant financial relationships listed for these individuals have been mitigated.

All of the other planners, faculty, or individuals in control of content for this educational activity have no relevant financial relationship(s) to disclose with ineligible companies.

### Definitions

An **ineligible company** is any entity whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients.

**Relevant financial relationships** are financial relationships of any amount occurring in the past 24 months with ineligible companies if the educational content an individual can control is related to the business lines or products of the ineligible company.



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