



Advanced Fellowship Training in Pediatric Neurosurgery



When your child needs a hospital, everything matters.



Pediatric Neurosurgery Fellowship

The Department of Neurosurgery at Nationwide Children's offers a one-year fellowship with an optional second year, beginning in July of each year. The first-year fellowship program is accredited by the Accreditation Council for Pediatric Neurosurgery Fellowships (ACPNF) and is ideal for candidates looking for diverse, well-rounded training, and want to pursue a career in pediatric neurosurgery. The second year of training allows fellows additional clinical and research experience. Our fellows lead a team of residents and nurse practitioners while learning innovative neurosurgical interventions as well as gaining comprehensive research experience.

Our goal is to provide surgical, clinical and didactic experiences that prepare each fellow to be a board-certified pediatric neurosurgeon comfortable with all aspects of neurosurgery. Program faculty members are board-eligible/certified by the American Board of Pediatric Neurological Surgery.

The program performs approximately 850 surgeries a year and sees some of the most complex, critically ill patients, allowing fellows to receive even more specialized training in endovascular, epilepsy, deep brain stimulation and spasticity operations.

Curriculum

Clinical experience:

- Participation in outpatient clinic for evaluation of new patients and follow-ups
- Scrub in to 250+ operative cases a year, treating...
 - Brain tumors
 - Epilepsy – including deep brain stimulation (DBS)
 - Traumas
 - Craniosynostosis
 - Chiari malformation
 - Spinal dysraphism
 - Vascular and spasticity conditions – including selective dorsal rhizotomy (SDR)
- Patient consultations in our Level-1 trauma center

Academic and Didactic Experience:

- Protected research time with the opportunity to lead and assist in publications
- Attend quality improvement sessions with the option to complete a quality improvement project
- Morning Rounds: 7 a.m. weekdays
- Epilepsy Conference: 3 p.m. Mondays
- Neuropathology Conference: 5 p.m. Tuesdays
- Resident lectures, Trauma Grand Rounds, Neuroradiology Conference, Spine Conference: Wednesdays
- Ohio State University Neurosurgery Grand Rounds: Thursdays
- Multidisciplinary Neuro-Oncology Conference: 7:30 a.m. Fridays
- Opportunity to attend expenses-paid national meetings during fellowship period for the presentation of a paper that emanates from our department
- Opportunity to obtain a master's degree in several areas including Biomedical Education
(Visit che.osu.edu/educational-studies/biomedical-education/ma/ for more information)

Fellows

The Department of Neurosurgery has trained specialized, proficient pediatric neurosurgeons each year since the fellowship began in 2014, all of whom have transitioned to academic and private pediatric neurosurgical positions at various institutions across the United States.

Salary and Benefits

Our fellows are hospital employees, and as such, they are eligible for the same benefits other full-time staff receive, with the exception of paid time off, which is outlined on our website under fellowship benefits.

Application and Interview Process**How many fellows do you take per year?**

- 1

What criteria must you meet to apply?

- Prospective applicants should have completed neurosurgery residency at an ACGME accredited program. Application through SF Match and an interview with our department are required. Interested applicants should apply by sending their curriculum vitae, personal statement, three letters of recommendation, a wallet sized color photograph, and USMLE or COMLEX scores to:

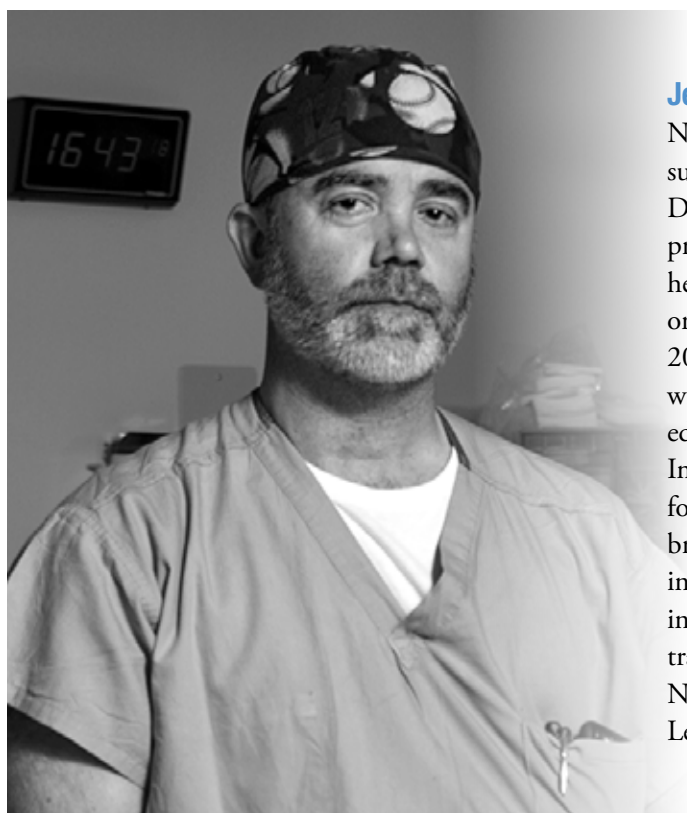
Kate Peacock

Katelyn.Peacock@NationwideChildrens.org

What is the application process?

- Applications will be accepted through the San Francisco Matching Program (SFMatch.org) beginning in June. All applications are reviewed, and if your application meets our selection criteria, you will receive an email inviting you to contact us to schedule your interview. Interviews will occur Aug-November, with the match being completed in December.

Meet Our Faculty



Jeffrey R. Leonard, MD, is chief of Neurosurgery at Nationwide Children's and professor of neurological surgery at The Ohio State University College of Medicine. Dr. Leonard has authored more than 130 publications, presented invited talks nationally and internationally, held leadership positions in several major neurosurgical organizations and received several teaching awards. In 2015, he published the book "Chiari I Malformation" with other leaders in the field, and most recently, in 2019, edited the book "Cerebrospinal Fluid Disorders: Lifelong Implications." Dr. Leonard is internationally recognized for his dedication to improve treatment for childhood brain tumors and has received grant funding for this work in studying their genetic profiles. He has also performed innovative investigations in the field of pediatric head trauma. Spasticity patients from around the country visit Nationwide Children's for the expert care provided by Dr. Leonard and his team.

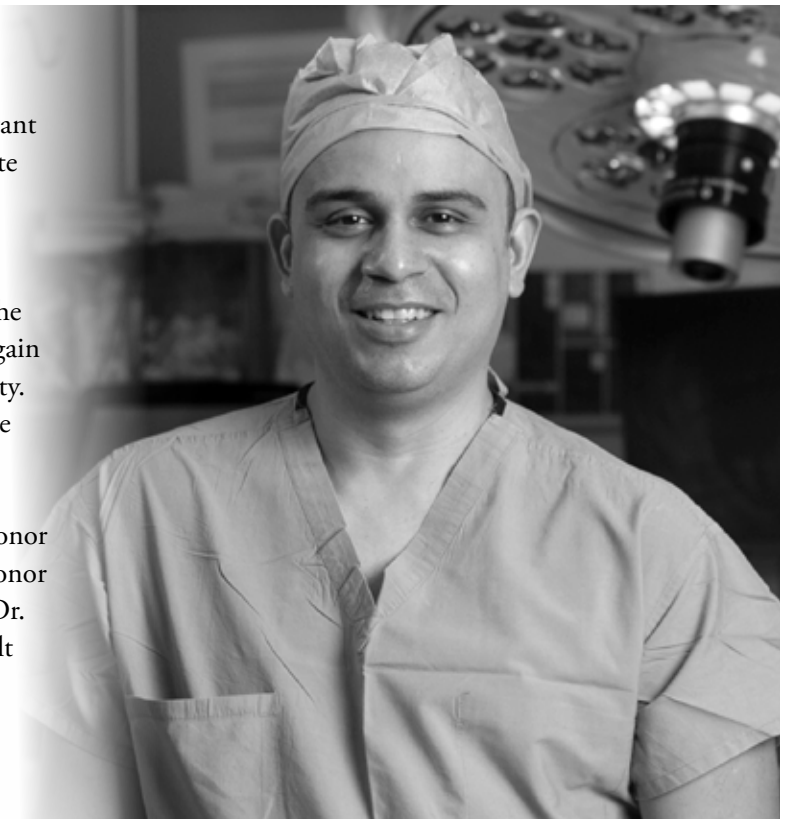
Albert Isaacs, MD, PhD, is a pediatric neurosurgeon at Nationwide Children's Hospital and an assistant professor of Neurological Surgery at The Ohio State University College of Medicine. Dr. Isaacs obtained his Bachelor of Science degree from Carleton University in Ottawa, followed by his medical degree from the University of British Columbia in Vancouver. During residency training in Neurosurgery at the University of Calgary, Dr. Isaacs completed graduate studies in Neuroscience at both the University of Calgary and Washington University School of Medicine in St. Louis. He completed his Pediatric Neurosurgery fellowship at Vanderbilt University's Monroe Carell Jr. Children's Hospital in Nashville. Dr. Isaacs' extensive background and training across various institutions and countries reflect his unyielding commitment to excellence and dedication to mentoring the next generation of neurosurgeons.



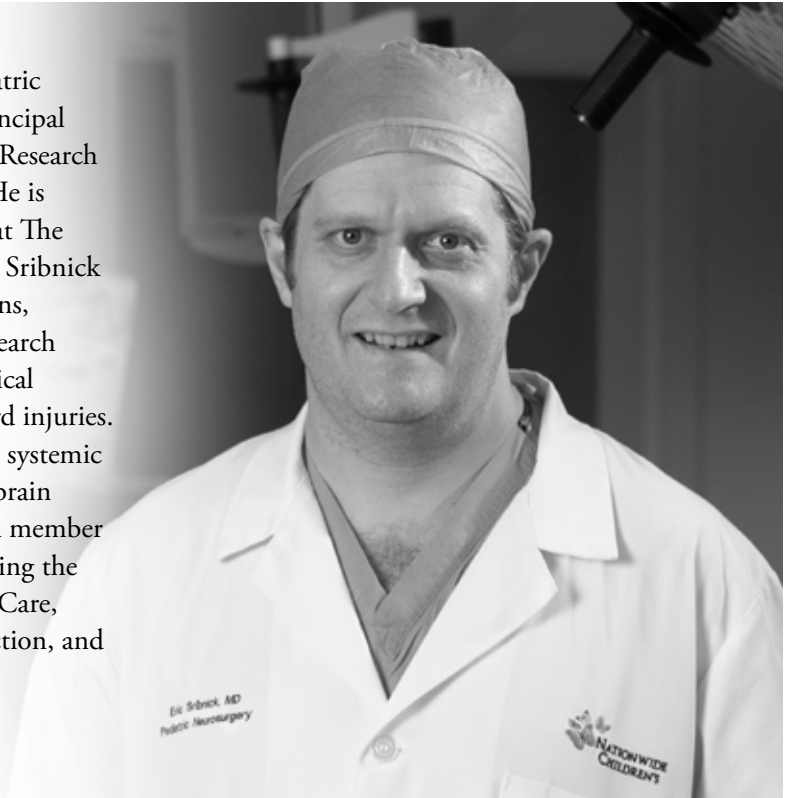


Jonathan Pindrik, MD, is a pediatric neurosurgeon at Nationwide Children's and associate professor of neurological surgery at The Ohio State University College of Medicine. He serves as the associate fellowship director, neurosurgical co-director for the Craniofacial and Epilepsy Surgery Programs, and site principal investigator for the Hydrocephalus Clinical Research Network (HCRN). His primary areas of clinical focus include hydrocephalus, craniofacial surgery and pediatric epilepsy surgery. Dr. Pindrik's research activities are related to his background in mathematics and its applications to hydrocephalus and pediatric epilepsy surgery. He has led or contributed to the publication of more than 35 research manuscripts and book chapters on a variety of topics including endoscopic treatment for hydrocephalus, imaging diagnostics, epilepsy surgery in infants and toddlers, craniometrics, and peripheral nerve surgery. He participates in medical student and resident education, including courses directorship for a clinical elective on pediatric medically intractable epilepsy. In 2022, he was elected to the *Journal of Neurosurgery: Case Lessons* editorial board.

Ammar Shaikhouni, MD, PhD, is a pediatric neurosurgeon at Nationwide Children's and assistant professor of neurological surgery at The Ohio State University College of Medicine. Dr. Shaikhouni graduated from Brown University where he also obtained his graduate and medical degrees. His research work at Brown University, and later at The Ohio State University, helped paralyzed patients gain control of assistive devices using their brain activity. This work was featured in multiple leading science journals and gained national and international attention. Based on his scholarly activity, Dr. Shaikhouni was voted as a member of multiple honor societies by his peers including the engineering honor society and the scientific research honor society. Dr. Shaikhouni's clinical and research focus is on adult and pediatric epilepsy, movement disorders, and stereotactic surgery for gene and drug delivery.



Eric Sribnick, MD, PhD, FAANS, FACS, is a pediatric neurosurgeon at Nationwide Children's and principal investigator in the Center for Pediatric Trauma Research within the Abigail Wexner Research Institute. He is also associate professor of neurological surgery at The Ohio State University College of Medicine. Dr. Sribnick has published more than 90 research publications, book chapters, reviews and case studies. His research and clinical interests focus on surgical and medical interventions for traumatic brain and spinal cord injuries. His basic science laboratory efforts focus on the systemic immune response following a severe traumatic brain injury. Dr. Sribnick serves as an executive board member for multiple neurotrauma-related boards including the AANS/CNS Section for Neurotrauma/Critical Care, AANS/CNS Pediatric Neurological Surgery Section, and the Central Ohio Trauma System.



Michelle A Wedemeyer, MD, PhD, is a pediatric neurosurgeon at Nationwide Children's and a principal investigator at the Steve and Cindy Rasmussen Institute for Genomic Medicine. She is also an assistant professor of Neurological Surgery at The Ohio State University College of Medicine. Dr. Wedemeyer obtained her medical and doctoral degrees at the University of California Irvine. She completed her residency in Neurosurgery at the University of Southern California and her fellowship in Pediatric Neurosurgery at the University of California San Francisco Benioff Children's Hospitals. Dr. Wedemeyer's current pursuits include analysis of the cellular diversity of brain tumors at the single-cell level, characterization of the developing hindbrain to identify novel targets for pediatric brain tumors, and the refinement of methylation-array based classifiers for brain tumors.

World-Class Leadership In Pediatric Neurosurgery

The Department of Neurosurgery at Nationwide Children's provides the best possible care to pediatric patients with neurosurgical needs through advanced surgical techniques and comprehensive management. Treated conditions and pathologies include rare brain tumors, epilepsy, hydrocephalus, craniosynostosis, spasticity and Chiari malformations, as well as urgent interventions for injuries due to trauma or stroke. Through our Rapid Access and Appointment Scheduling, we have established one of the nation's most accessible programs — with appointments available within just a few days for non-emergent cases. But we don't stop there.

Our neurosurgeons collaborate with Neurology, Physical Medicine and Rehabilitation, Plastic and Reconstructive Surgery, Neuro-Oncology and many others to provide comprehensive care and to promote positive outcomes for neurosurgical patients from birth to age 21, and for select adults with congenital neurological disorders.

Faculty are involved nationally and internationally with research and initiatives specific to the field of neurosurgery, publishing multiple academic papers in peer-reviewed journals. We are also training future pediatric neurosurgeons as one of elite institutions recognized by the Accreditation Council for Pediatric Neurosurgical Fellowships (ACPNF).

Key Areas of Focus

- Craniosynostosis and other craniofacial anomalies
- Deep brain stimulation (DBS)
- Epilepsy surgery
- Fetal medicine
- Hydrocephalus
- Neuro-oncology – tumors of the brain and spine
- Neurotrauma
- Peripheral nerve
- Skull base surgery
- Spasticity and selective dorsal rhizotomy (SDR)

Department/Institutional Research Networks and Partnerships

- Advancing Treatment for Pediatric Craniopharyngioma (ATPC) Consortium
- Cerebral Palsy Research Network (CPRN)
- Children's Oncology Group (COG)
- Great Lakes EMSC Research Network (GLEMSCRN)
- Hydrocephalus Clinical Research Network (HCRN)
- Park-Reeves Syringomyelia Research Consortium
- Pediatric Brain Tumor Consortium (PBTC)
- Pediatric Emergency Care Applied Research Network (PECARN)
- Pediatric Epilepsy Research Consortium (PERC)
- Pediatric Trauma Society (PTS)

Funded Neurosurgical Research

Jeff Leonard, MD, Site Principal Investigator, received over \$1M in 2022 for the R01 project, "A Safety and Efficacy Study of AAV2-hAADC for AADC Deficiency," a multi-site study and collaboration with The Ohio State University.

Eric Sribnick, MD, PhD, Principal Investigator, received a K08 award from the National Institute of Neurological Disorders and Stroke (NINDS) for his project, "Reversal of Immunoparalysis Following Traumatic Brain Injury and Systemic Hemorrhage in Juvenile Rat Model."

Ammar Shaikhouni, MD, PhD, Principal Investigator, received an R21 from the National Institute of Mental Health for his project, "Using Intracranial Recording, Stimulation and Computational Modeling to Map Role of the Subthalamic Nucleus in Human Decision Making."

Jonathan Pindrik, MD, Site Principal Investigator for the Hydrocephalus Clinical Research Network, is engaged in the multi-center study, "Endoscopic Versus Shunt Treatment of Hydrocephalus in Infants (ESTHI)," with funding support provided by the NINDS.

For more information:

Program Director

Jeffrey Leonard, MD

Jeffrey.Leonard@NationwideChildrens.org

Phone: (614) 722-2014

Associate Program Director

Jonathan Pindrik, MD

Jonathan.Pindrik@NationwideChildrens.org

Phone: (614) 722-2014

Program Coordinator

Kate Peacock

Katelyn.Peacock@NationwideChildrens.org

Phone: (614) 722-4375



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