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## Program

### **SUNDAY, JANUARY 29**

3:00 pm – 4:00 pm	Registration	Pre-Function Patio del Fauno
5:00 pm – 7:00 pm	Welcome Reception (Guest introductions given during the reception at 6:00 pm)	Ola Deck

### **MONDAY, JANUARY 30**

7:00 am – 12:00 pm	Registration	Pre-Function Patio del Fauno
7:00 am – 9:00 am	Breakfast for Registered Physicians and Registered Guests	Salon Dorado
8:00 am – 8:20 am	Welcoming Remarks Jeffrey Ojemann, MD	Patio del Fauno
8:20 am – 9:33 am	<b>Special Session I (Pnt/C Pnt): Arachnoid Cyst: Untapped Potential</b> <b>Moderator: Christina Notarianni, MD</b>	
8:20 am – 8:40 am	Point: Conservative Care: We Treat Patients Not Pictures Brandon Rocque, MD	
8:41 am – 9:01 am	Counterpoint: Progressive view: Treat the disease, Not the Symptom David Sandberg, MD	
9:02 am – 9:17 am	Q & A	
9:18 am – 9:33 am	Advocacy Update Brandon Rocque, MD	
9:34 am – 10:14 am	<b>Special Session I Continued: Advocacy Abstracts</b> <b>Moderator: Brandon Rocque, MD</b>	
9:34 am – 9:39 am	Abstract #1: Informed Consent in Fetal Surgery: Who is Being Consented and for What? Michael Partington, MD	
9:40 am – 9:45 am	Abstract #2: The Impact of Voluntary Folate Fortification of Corn Masa Flour and Tortilla Products on Pregnancies Complicated by Neural Tube Defects Sandi Lam, MD	
9:46 am – 9:51 am	Abstract #3: Suspected Medical Child Abuse in a Child with a Ventriculoperitoneal Shunt Edward Ahn, MD	
9:52 am – 9:57 am	Abstract #4: Society of MYND: Mentorship of Young Neurosurgical Doctors: Results of a Pilot Project Kimberly Hamilton, MD	
9:58 am – 10:03 am	Abstract #5: Sociodemographic Barriers to Treatment for Elective Pediatric Neurosurgical Disease Hassan Akbari, MD	



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10:04 am – 10:14 am	Q & A	
10:15 am – 10:30 am	Refreshment Break	Pre-Function Patio del Fauno
10:31 am – 12:02 pm	<b>Special Session II: Top Abstracts Topic A: Spine/Congenital</b> <b>Moderator: David Bauer, MD</b>	
10:31 am – 10:39 am	Abstract #6: Long-term Outcomes Among People with Lipomyelomeningocele (LMM): An Analysis from the National Spina Bifida Patient Registry (NSBPR) Mark Dias, MD	
10:40 am – 10:48 am	Abstract #7: Surgical Treatment of Spinal Disease in Achondroplasia – Results from CLARITY (The Achondroplasia Natural History Study) Jeffrey Campbell, MD	
10:49 am – 10:57 am	Abstract #8: Fetoscopic, Three-Miniport Technique for Prenatal Myelomeningocele Repair: Technical Evolution and Outcomes in 60 Consecutive Cases Charles Stevenson, MD	
10:58 am – 11:06 am	Abstract #9: Fourth Ventricle Roof Angle Validation in Pediatric Chiari I Malformation Curtis Rozelle, MD	
11:07 am – 11:15 am	Abstract #10: A Novel Arthrodesis Technique Results in Superior Occipitocervical Fusion Rates Over a 5-year Period Christina Sayama, MD	
11:16 am – 11:24 am	Abstract #11: Unique Radiographic Features in Previously Asymptomatic Patients Presenting with Acute Neurologic Decline and Chiari Type 1 Malformation: A Case Series Renee Reynolds, MD	
11:25 am – 11:33 am	Abstract #12: Development and Validation of a Fast Spine Protocol for Use in Pediatric Patients Albert Tu, MD	
11:34 am – 11:42 am	Abstract #13: The Role of Hydrosyringomyelia in the Surgical Treatment and Functional Outcomes in Pediatric Patients with Intramedullary Spinal Cord Tumors Katie Fehnel, MD	
11:43 am – 12:00 pm	Q&A	
12:00 pm – 12:05 pm	Update from Paul Klimo, MD and adjourn for the day	
12:15 pm – 1:30 pm	<b>Invited Guest Luncheon</b> ( <i>invitation only</i> )	Patio del Fauno West



**TUESDAY, JANUARY 31**

7:00 am – 12:00 pm	Registration	Pre-Function Patio del Fauno
7:00 am – 8:00 am	Fellowship Director's Meeting	Salon Dorado
7:00 am – 9:00 am	Breakfast for Registered Physicians and Registered Guests	Salon Dorado
8:00 am – 10:17 am	<b>Special Session III: Complications Talks/Practice Management</b> <b>Moderator: Anthony Wang, MD</b>	Patio del Fauno
8:00 am – 8:11 am	Complication Talk #1: The Story Starts with Leg Pain and Ends with Three Surgeries and a New Diagnosis Eric Thompson, MD	
8:12 am – 8:23 am	Complication Talk #2: Herniation from CSF Overproduction after Redo ETV Eric Jackson, MD	
8:24 am – 8:35 am	Complication Talk #3: A Challenging Loculated Cystic Lesion: What to Do When the First Two Operations Fail? David Sandberg, MD	
8:36 am – 8:47 am	Complication Talk #4: Beware the Craniosynostotic Ossified Bulging Fontanel Lance Governale, MD	
8:48 am – 8:59 am	Complication Talk #5: Abhaya Kulkarni, MD	
9:00 am – 9:10 am	Q&A	
9:11 am – 9:22 am	Practice Management #1: The Virtual Huddle Bradley Weprin, MD	
9:23 am – 9:34 am	Practice Management #2: What can Neurosurgery Learn from the Commercial Fishing Industry? Anthony Avellino, MD	
9:35 am – 9:46 am	Practice Management #3: Building a Robust Pediatric NeuroSpine Program David Bauer, MD	
9:47 am – 9:58 am	Practice Management #4: Neurosurgery Gone Wrong: Getting Back to Confidence Jeffery Raskin, MD	
9:59 am – 10:07 am	Practice Management #5: Evaluation of a Role for Virtual Neurosurgical Education for Medical Students Over 2 Years of a Global Pandemic Peter Morgenstern, MD	
10:08 am – 10:17 am	Q&A	
10:18 am – 10:36 am	Refreshment Break	Pre-Function Patio del Fauno



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10:37 am – 12:00 pm	<b>General Session IV: Hoffman Lecture</b>	
10:37 am – 10:42 am	Recollections of Dr. Harold Hoffman Mark Souweidane, MD	
10:43 am – 10:48 am	Introduction of Hoffman Lecturer Renee Reynolds, MD	
10:49 am – 11:39 am	<b>Hoffman Lecturer: The Challenges and Opportunities facing US Hospitals- An Experienced Board Member's View</b> Cathy Minehan	
11:40 am – 12:00 pm	Q&A and adjourn for the day	
1:00 pm	Optional Fishing Excursion and Golf Outing <i>(Sign up required in advance)</i>	
7:00 pm – 9:00 pm	<b>Past President's Dinner</b> <i>(Invitation only)</i>	Salon Azul



## **WEDNESDAY, FEBRUARY 1**

7:00 am – 12:00 pm	Registration	Pre-Function Patio del Fauno
7:00 am – 8:00 am	<b>Annual Business Meeting</b> ( <i>Members Only</i> )	Patio del Fauno
7:00 am – 9:00 am	Breakfast for Registered Physicians and Registered Guests	Salon Dorado
8:00 am – 10:28 am	<b>General Session V: Guest and General Abstracts: Tumor/Hydro</b> <b>Moderator: Jay Storm, MD</b>	Patio del Fauno
8:00 am – 8:08 am	Abstract #15: Immune Checkpoint Expression, Mutational Burden, and Replication Stress Response Defects in Pediatric Gliomas: Implications for Potential Immunotherapy Michael Decuyper, MD	
8:09 am – 8:17 am	Abstract #16: Intra-Arterial Drug Delivery with Blood Brain Barrier Disruption in Children with High Grade Glioma and Diffuse Intrinsic Pontine Glioma: Phase I Trial Results and Next Steps Heather McCrea, MD	
8:18 am – 8:26 am	Abstract #17: High Throughput Drug Screening, Animal Avatars, CSF sequencing and Routine Autopsy Supplement DNA, RNA and Methylation Profiling for Pediatric CNS Tumors Jeffrey Greenfield, MD	
8:27 am – 8:35 am	Abstract #18: Results of Phase Ib Trial of Recombinant Polio: Rhinovirus Immunotherapy for Recurrent Pediatric High-Grade Glioma Eric Thompson, MD	
8:36 am – 8:44 am	Abstract #19: Sonodynamic Therapy Using Low Intensity Focused Ultrasound and ALA for Diffuse Intrinsic Pontine Glioma: Rationale, Technical Considerations, and Challenges Hasan Syed, MD	
8:45 am – 8:53 am	Abstract #20: Targeting Alternative Splicing Variants to Stimulate Anti-Tumor Immunity in a Novel Syngeneic Mouse Model of Diffuse Hemispheric Glioma, H3 G34-Mutant Anthony Wang, MD	
8:54 am – 9:14 am	Q&A	
9:14 am – 9:22 am	Abstract #21: Ventriculoperitoneal Shunt Valves Encounter Transient but Repetitive Changes in Position and CSF Pulsations that Lead to a State of Chronic Over Drainage: Benchtop Model Bermans Iskandar, MD	



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9:23 am – 9:31 am	Abstract #22: Evaluating the Safety of Ventriculo-peritoneal (VP) Shunts in Pregnant Patients: Report of 59 Cases from a Large Hospital System Joseph Madsen, MD	
9:32 am – 9:40 am	Abstract #23: Comparing Healthcare Utilization between ETV+CPC and CSF Shunt for the Treatment of Infant Hydrocephalus: A Hydrocephalus Clinical Research Network Study (HCRN) Jay Riva-Cambrin, MD	
9:41 am – 9:49 am	Abstract #24: Surgical Outcomes of CSF Diversion for Post-Hemispherectomy/Hemispherotomy Hydrocephalus based on Shunt Characteristics: An HCRN Study Jonathan Pindrik, MD	
9:50 am – 9:58 am	Abstract #25: The Role of Medical Management in the Treatment of Hydrocephalus Associated with Neonatal Lupus Erythematosus Violette Recinos, MD	
9:59 am – 10:07 am	Abstract #26: Global Cerebrospinal Fluid Mapping Reveals CSF Circulation to Functionally Distinct Brain and Spinal Cord Cell Populations Jennifer Strahle, MD	
10:00 am – 11:30 am	<b>Book Club: The Taste of Sugar by Marisel Vera</b> Hosted and led by: Karen Selboe and Rebecca Weprin	Salon Azul
10:08 am – 10:28 am	Q&A	
10:29 am – 10:45 am	Refreshment Break	
10:46 am – 11:17 am	<b>General Session VI: Research Network Updates</b> <b>Moderator: Renee Reynolds, MD</b>	
10:46 am – 10:51 am	ASAP and CSF Foundation Gerry Grant, MD	
10:52 am – 10:57 am	Park-Reeves Dave Limbrick, MD	
10:58 am – 11:02 am	Pediatric Craniocervical Society/Pediatric Spine Group Doug Brockmeyer, MD	
11:03 am – 11:08 am	Washington Update Katie Orrico, JD	
11:09 am – 11:17 am	Q&A	
11:18 am – 12:00 pm	<b>General Session VII: Presidential Address</b>	
11:18 am – 11:32 am	Introduction: Amy Lee, MD	
11:33 am – 12:00 pm	Presidential Address: Jeffrey Ojemann, MD	
1:00 pm	Optional Golf Tournament ( <i>sign up in advance required</i> )	



## **THURSDAY, FEBRUARY 2**

7:00 am – 12:00 pm	Registration	Pre-Function Patio del Fauno
7:00 am – 9:00 am	Breakfast for Registered Physicians and Registered Guests	Salon Dorado
8:00 am – 9:50 am	<b>Special Session VIII (Pnt/ Cnt Pnt): Epilepsy: VNS vs RNS</b> <b>Moderators: Robert Bollo, MD; Sandi Lam, MD</b>	Patio del Fauno
8:00 am – 8:30 am	Point: VNS Zulma Tovar-Spinoza, MD	
8:30 am – 9:00 am	Counterpoint: RNS Carrie Muh, MD	
9:00 am – 9:20 am	Q & A	
9:20 am – 9:50 am	Difficult Case Discussions <i>Moderators: Sandi Lam, MD and Robert Bollo, MD</i>	
9:51 am – 10:10 am	Refreshment Break	Pre-Function Patio del Fauno
10:11 am – 10:53 am	<b>General Session IX: Master's Talk: What I Have Learned Over the Years</b>	
10:11 am – 10:16 am	Intro: Jeff Ojemann, MD	
10:17 am – 10:47 am	Presenter: T.S. Park, MD	
10:48 am – 10:53 am	Q & A	
10:54 am – 12:38 pm	<b>General Session X: Top Abstracts- Epilepsy/Function</b> <b>Moderator: William Gump, MD</b>	
10:53 am – 11:01 am	Abstract #27: Corpus Callosotomy for Pediatric Epilepsy: Outcomes After Open and LITT Approaches in 113 Patients Matthew Smyth, MD	
11:02 am – 11:10 am	Abstract #28: Corpus Callosotomy for Intractable Epilepsy: A Contemporary Series of Operative Factors and Overall Complication Rate Stephanie Einhaus, MD	
11:11 am – 11:19 am	Abstract #29: Comparison of Long-term Survival of Pediatric Patients with Drug-resistant Epilepsy: Continued Medical Therapy, Vagus Nerve Stimulation, and Cranial Epilepsy Surgery Sandi Lam, MD	
11:20 am – 11:28 am	Abstract #30: Endoscopic Hemispherotomy and Corpus Callosotomy: Outcomes, Technical Pearls, and Pitfall Neena Marupudi, MD	



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| 11:29 am – 11:37 am | Abstract #31: Magnetic Resonance-guided Stereotactic Laser Ablation Surgery in the Pediatric Population: Effect of Institutional Case Volumes and Learning Curves on Practice Patterns and Patient Outcomes<br>Elsa Arocho Quinones, MD |              |
| 11:38 am – 11:46 am | Abstract #32: Multimodal, Multidisciplinary Stereo-EEG Planning<br>Ian Mutchnik, MD   |              |
| 11:47 am – 11:55 am | Abstract #33: A Standardized Approach to MRI-guided Stereotactic Laser Corpus Callosotomy: Technical Description and Pediatric Case Series<br>Kai Miller, MD  |              |
| 11:56 am – 12:04 pm | Abstract #34: Categorical Encoding of Voice by Human Superior Temporal Cortex in Children and Adolescents<br>Taylor Abel, MD  |              |
| 12:05 pm – 12:13 pm | Abstract #35: Safety of Stereoelectroencephalography (SEEG) in Toddlers Under Two Years of Age: A Case Series<br>Carrie Muh, MD   |              |
| 12:14 pm – 12:22 pm | Abstract #36: Near Infrared Spectroscopy Monitoring in Pediatric Abusive Head Trauma<br>Shih-Shan Chen, MD  |              |
| 12:23 pm – 12:38 pm | Q&A   |              |
| 6:30 pm – 9:30 pm   | <b>Annual Dinner</b>  | West Veranda |





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**FRIDAY, FEBRUARY 3**

7:00 am – 9:00 am	Breakfast for Registered Physicians and Registered Guests	Salon Dorado
8:00 am – 10:24 am	<b>General Session XII: General Abstracts (Lightning Round): Basic Science/Craniosynostosis</b> <b>Moderator: Violette Recinos, MD</b>	
8:00 am – 8:06 am	Abstract #37: Exploring the Electrophysiological Basis of a Novel Mechanism for the Social Perception of Attention - The “Mind Beam” Hypothesis Kelly Collins, MD	
8:07 am – 8:13 am	Abstract #38: Dysregulation of Axon Guidance Factors Influence the Development Human Cerebral Cavernous Malformations Edward Smith, MD	
8:14 am – 8:20 am	Abstract #39: Laboratory Studies of a Novel Diffusion Flow Zwitterion-Coated Ventricular Catheter That Prevents Proximal Shunt Catheter Obstruction Michael Muhonen, MD	
8:21 am – 8:27 am	Abstract #40: Thermal Effects on the Brain from Stimulation – The Curse of Joule and Siberian Peat Fires Steven Schiff, MD	
8:28 am – 8:34 am	Abstract #41: Automated Tubular Structure Segmentation Modeling: Methods and Potential Applications Jason Blatt, MD	
8:35 am – 8:41 am	Abstract #42: Structural and Functional Imaging Connectivity in Children with Hydrocephalus and Neonatal Brain Injury - From a Systematic Review to a Prospective Clinical Cohort Carolina Sandoval-Garcia, MD	
8:41 am – 8:50 am	Q&A	
8:51 am – 8:57 am	Abstract #43: Ventral Dorsal Cervical Rhizotomy to Manage Upper Extremity Hypertonia Jeffery Raskin, MD	
8:58 am – 9:04 am	Abstract #44: Laparoscopic Repositioning of Peritoneal Catheter for Treatment of Sterile Abdominal Cerebrospinal Fluid Pseudocysts Brett Whittemore, MD	
9:05 am – 9:11 am	Abstract #45: Is Routine, Early Imaging After Endoscopic Third Ventriculostomy Necessary? David Harter, MD	
9:12 am – 9:18 am	Abstract #46: Neurosurgical-omics: Artificial Intelligence from Prototype to Practice Daniel Donoho, MD	



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| 9:19 am – 9:25 am   | Abstract #47: Categorizing the Venous Anatomy of Craniopagus Twins<br>Andrew Kobets, MD   |                              |
| 9:26 am – 9:36 am   | Q&A   |                              |
| 9:37 am – 9:43 am   | Abstract #48: Pediatric Intracranial Infections During the COVID-19 Pandemic<br>Jessie Winer, MD  |                              |
| 9:44 am – 9:50 am   | Abstract #49: The Duke Gene Therapy Experience – A Multicenter Phase 2 Trial Assessing the Effectiveness of Gene Therapy for AADC Deficiency<br>Matthew Vestal, MD        |                              |
| 9:51 am – 9:57 am   | Abstract #50: Spring Assisted Cranioplasty: The Lumps No One Talks About<br>Ruth Bristol, MD  |                              |
| 9:58 am – 10:04 am  | Abstract #51: Optic Disc Edema in Syndromic and Non-Syndromic Craniosynostosis<br>Kelly Mahaney, MD   |                              |
| 10:05 am – 10:11 am | Abstract #52: Remote Assessment of Surgically Actionable Craniosynostosis Using Caregiver Provided Photographs<br>Patrick McDonald, MD                                    |                              |
| 10:12 am – 10:24 am | Q & A   |                              |
| 10:25 am – 10:45 am | Refreshment Break   | Pre-Function Patio del Fauno |
| 10:46 am – 12:05 pm | <b>General Session XIII: General Abstracts 2 (Lightening Round) - Tumor</b><br><b>Moderator: Todd Hankinson, MD</b>   |                              |
| 10:46 am – 10:52 am | Abstract #53: Plasma Extracellular Vesicles as Carriers of Tumor-Derived Mirnas in CNS Tumors<br>Elias Rizk, MD   |                              |
| 10:53 am – 10:59 am | Abstract #54: Does Hippocampal Atrophy Correlate with Neurocognitive Outcomes in Pediatric Brain Tumor Patients One Year Following Proton Radiotherapy?<br>Toba Niazi, MD |                              |
| 11:00 am – 11:06 am | Abstract #55: Recent Biological Insights and their Translation Towards Clinical Trials for Childhood Craniopharyngioma<br>Todd Hankinson, MD                              |                              |
| 11:07 am – 11:13 am | Abstract #56: Length of Stay and Readmission with Elective Tumor Resection in Children<br>Paul Klimo, MD  |                              |
| 11:14 am – 11:20 am | Abstract #57: Surgical Management of Large and Giant Craniopharyngiomas in Children<br>Michael Levy, MD   |                              |



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- 11:21 am – 11:27 am Abstract #58: Human Stem Cell Models to Tackle Brain Cancer  
Jignesh Tailor, MD
- 11:28 am – 11:34 am Abstract #59: Clinical and Molecular Characterization of Pleomorphic  
Xanthoastrocytoma with and without Anaplastic Features: Case Series from a  
Single- Institution Pediatric Population  
Karl Balsara, MD
- 11:35 am – 11:41 am Abstract #60: Durability of CSF Diversion for Persistent Hydrocephalus Following  
Posterior Fossa Tumor Resection: Endoscopic Third Ventriculostomy vs.  
Ventriculoperitoneal Shunting  
Michael Dewan, MD
- 11:42 am – 11:48 am Abstract #61: Use of Tranexamic Acid in Brain Tumor Surgery  
Will Gump, MD
- 11:49 am – 11:55 am Abstract #62: Inactivation of PP2A/STRN4 Enhances Cellular Senescence and  
Sensitizes Radiotherapy in p53 Mutant Medulloblastoma  
Winson Ho, MD
- 11:55 am – 12:05 pm Q & A
- 12:06 pm – 12:15 pm **General Session XIV: Closing Remarks and Adjournment**