PROGRAMME

Hydrocephalus Society

International Society for Hydrocephalus and Cerebrospinal Fluid Disorders

WORLD CONGRESS HYDROCEPHALUS 2026

31 July-3 August

São Paulo, Brazil

hydrocephalus-meeting.com

Become a Member Now

The Hydrocephalus Society is an open community that encourages collaboration, partnerships and networking between all professionals related to the field of Hydrocephalus and CSF Disorders.

As a member of the Hydrocephalus Society, you will join a community of peers that fosters an environment of cooperation and works towards ensuring ethical, high-quality care for patients, and increasing awareness regarding Hydrocephalus and CSF disorders on a global scale.

Hydrocephalus Society members enjoy several benefits related to personal and professional development, as well as to the creation of opportunities for collaborations and partnerships.

The benefits we offer to our members are the following:

EDUCATION	DISCOUNTS	PROFESSIONAL DEVELOPMENT & NETWORKING
• Exclusive access to the video minutes of all Hydrocephalus World Congresses • Exclusive access to the recordings of the Hydrocephalus Society Global Webinar Series (2021,2022,2023,2024,2025, 2026) • Exclusive access to all abstract books of previous Hydrocephalus World Congresses	• Significant Members' discount for the Annual Hydrocephalus World Congress • Special Discount for scientific paper publications at the Fluids & Barriers of the CNS Journal with impact factor 6.2	• Observership opportunities in high volume Hydrocephalus departments • Right to participate and vote at the General Assembly of the Hydrocephalus Society • Right to be elected as Board Director • The chance to host the Hydrocephalus World Congress in your country • Access (by request) to the Members' Directory of the Society

Hydrocephalus Society
International Society for Hydrocephalus and Cerebrospinal Fluid Disorders

READY TO JOIN? VISIT THE HYDROCEPHALUS SOCIETY WEBSITE

ishcsf.com

Friday, 31 July 2026			
	GRAND BALLROOM III		
12:00-16:00	**EDUCATIONAL SEMINAR ON NEUROENDOSCOPY**		
12:00-12:45	**PART 1: NEUROANATOMY**		
12:45-14:00	**PART 2: NEUROENDOSCOPY**		
14:00-14:30	***Coffee Break***		
14:30-16:00	**PART 3: CASE STUDIES - VP OR ENDOSCOPY?**		
16:00-16:20	**Industry Sponsored Seminar**		

Saturday, 1 August 2026			
	GRAND BALLROOM I - II	GRAND BALLROOM III	JARDIM
07:00-08:00	*Registrations*		
08:00-08:50	OPENING OF THE CONGRESS		
08:50-09:20	SESSION 1: HAKIM LECTURE		
09:20-10:20	SESSION 2: REHABILITATION AND SOCIAL IMPACT	SESSION 3: ADULT HYDROCEPHALUS	SESSION 4: TECHNICAL ADVANCES IN TREATMENT AND DIAGNOSIS
10:20-11:00	*Coffee Break & Exhibition*		
11:00-12:20	SESSION 5: YOUNG INVESTIGATORS AWARDS I		
12:20-13:10	Hydrocephalus Society Annual General Meeting		
13:10-13:15	Fluids and Barriers of the CNS Update		
13:15-14:20	Industry Sponsored Lunch Seminar		
14:20-15:30	SESSION 6: ADULT HYDROCEPHALUS	SESSION 7: TECHNICAL ADVANCES IN TREATMENT AND DIAGNOSIS	SESSION 8: NEUROIMAGING
15:30-16:15	*Coffee Break & Exhibition*		
16:15-17:45	SESSION 9: ADULT HYDROCEPHALUS	SESSION 10: PEDIATRIC HYDROCEPHALUS	SESSION 11: YOUNG INVESTIGATORS SPECIAL SESSION

Sunday, 2 August 2026			
	GRAND BALLROOM I - II	GRAND BALLROOM III	JARDIM
08:30-09:20	SESSION 12: JOINT ROUND TABLE: THE HEART OF THE MATTER: INTEGRATING PATIENT ADVOCACY INTO NEUROSURGICAL EXCELLENCE		
09:20-10:50	SESSION 13: YOUNG INVESTIGATORS AWARDS II		
10:50-11:20	*Coffee Break & Exhibition*		
11:20-12:40	SESSION 14: THE BIG DATA ERA IN HYDROCEPHALUS: AI TOOLS AND LARGE COHORTS	SESSION 15: ADULT HYDROCEPHALUS	SESSION 16 ORAL FLASH PRESENTATIONS OF E-POSTERS
12:45-14:00	Industry Sponsored Lunch Seminar		
14:00-15:10	SESSION 17: YOUNG INVESTIGATORS AWARDS III		
15:10-15:50	*Coffee Break & Exhibition*		
15:50-17:10	SESSION 18: HYDROCEPHALUS SOCIETY-EANS JOINT SESSION: SPONTANEOUS INTRACRANIAL HYPOTENSION (SIH) – A COMMON CSF DISORDER	SESSION 19: ADULT HYDROCEPHALUS	SESSION 20: INTRACRANIAL PRESSURE

Monday, 3 August 2026			
	GRAND BALLROOM I - II	GRAND BALLROOM III	JARDIM
08:00-09:30	SESSION 21: ADULT HYDROCEPHALUS	SESSION 22: EXPERIMENTAL HYDROCEPHALUS	SESSION 23: TECHNICAL ADVANCES IN TREATMENT AND DIAGNOSIS
09:20-10:20		SESSION 25: NEUROIMAGING	SESSION 26: PEDIATRIC HYDROCEPHALUS
09:30-10:20	SESSION 24: INPH GUIDELINES UPDATE		
10:20-11:00	*Coffee Break & Exhibition*		
11:00-12:30	SESSION 27: INTRACRANIAL PRESSURE	SESSION 28: ORAL PRESENTATIONS - VARIOUS TOPICS	SESSION 29: ORAL PRESENTATIONS - VARIOUS TOPICS
12:35-13:40	Industry Sponsored Lunch Seminar		
13:40-15:30	SESSION 30: ADULT HYDROCEPHALUS	SESSION 31: ORAL FLASH PRESENTATIONS OF E-POSTERS	SESSION 32: ORAL PRESENTATIONS - VARIOUS TOPICS
15:30-16:30	CLOSING OF THE CONGRESS		

Friday, 31 July 2026

GRAND BALLROOM III

12:00-16:00	**EDUCATIONAL SEMINAR ON NEUROENDOSCOPY** Chairs: **Giorgio Palandri & Fernando Gomes Pinto**
12:00-12:45	**Part 1: Neuroanatomy**
12:00-12:15	Surgical anatomy of the lateral ventricles **Wen Hung Tzu**
12:15-12:30	Neuroanatomy of the cistern **Leila Maria Da Roz**
12:30-12:45	Craniometric landmarks for ventricular neuroendoscopy-microsurgical anatomy of ventricular approaches **Eduardo Carvalhal Ribas**
12:45-14:00	**Part 2: Neuroendoscopy**
12:45-13:00	Neuroendoscopy in the treatment of hydrocephalus: Principles and indications **Alberto Feletti**
13:00-13:15	Neuroendoscopy training process in models **Christian Diniz Ferreira**
13:15-13:30	Endoscopic ventricular anatomy-what we need to know **Koshiro Nishikuni**
13:30-13:45	Neuroradiological insights into ventricular anatomy using cross-sectional imaging **Leandro Lucato**
13:45-14:00	Endoscopic third ventriculostomy in adults: Patient selection and clinical outcomes **Mark Hamilton**
14:00-14:30	***Coffee Break***
14:30-16:00	**Part 3: Case Studies-VP or Endoscopy?**
14:30-14:50	Case Study 1 **Alberto Feletti**
14:50-15:10	Case Study 2 **Christian Diniz Ferreira**
15:10-15:30	Case Study 3 **Koshiro Nishikuni**
15:30-16:00	Discussion
16:00-16:20	**Industry Sponsored Seminar**

Saturday, 1 August 2026

GRAND BALLROOM I - II

07:00-08:00 Registrations

08:00-08:50 OPENING OF THE CONGRESS
Chairs: **Giorgio Palandri & Fernando Gomes Pinto**

08:00-08:10 Welcome address by the hydrocephalus society president
Giorgio Palandri

08:10-08:20 Welcome address by the congress president
Fernando Gomes Pinto

08:20-08:30 Welcome address
Mara Gabrilli, *Senator*

08:30-08:40 Welcome address
Dr. **Eleuses Paiva,** *Secretary of Health of the State of São Paulo*

08:40-08:50 Welcome address
Prof. Dr. **Carlos Gilberto Carlotti Jr**

GRAND BALLROOM I - II

08:50-09:20 SESSION 1: HAKIM LECTURE
Chairs: **Mark Hamilton & Michael Williams**

08:50-09:20 Normal Pressure Hydrocephalus: Dos and don'ts - Lessons learnt from 5000+ cases
Uwe Kehler

GRAND BALLROOM I - II

09:20-10:20 SESSION 2: REHABILITATION AND SOCIAL IMPACT
Chairs: **Ahmed Toma & Richard Edwards**

09:20-09:30 Pre-operative prehabilitation for NPH: the concept
Fernanda Martins

09:30-09:40 Urological implications of NPH
Carlos Ricardo Doi Bautzer

09:40-09:50 Physiatric and multiprofessional rehabilitation for NPH
Linamara Battistella

09:50-10:00 Socioeconomic determinants and territorial disparities in congenital hydrocephalus: the impact of income and social protection policies
Barbara Bonatti

10:00-10:10 Hydrocephalus association patient-powered interactive engagement registry (HAPPIER)
Samantha Lanjewar

10:10-10:20 Discussion

	GRAND BALLROOM III
09:20-10:20	**SESSION 3: ADULT HYDROCEPHALUS** Chairs: **Rodolfo Casimiro Reis & Eric Schmidt**
09:20-09:30	12-month cognitive and functional outcomes following ventriculoperitoneal shunting for iNPH in the PENS trial **Nickolas Dasher & Michael Williams**
09:30-09:40	Genome-wide association study of Normal Pressure Hydrocephalus in an expanded FinnGen cohort identifies novel genetic risk variants **Joel Rasanen**
09:40-09:50	CSF outflow resistance as a mechanobiological marker in Normal Pressure Hydrocephalus **Alexandra Vallet & Eric Schmidt**
09:50-10:00	Home ICP monitoring in shunted NPH: Valve settings and body position during daily life **Simon Malpas**
10:00-10:10	Brain pathology modifies three-year shunt surgery outcomes in iNPH: A prospective registry study **Anti Luikku**
10:10-10:20	Safety and efficacy of endovascular shunting for Normal Pressure Hydrocephalus: 180-day results from a prospective, multicenter single-arm study **Pedro Lylyk & Adel Malek**
	JARDIM
09:20-10:20	**SESSION 4: TECHNICAL ADVANCES IN TREATMENT AND DIAGNOSIS** Chairs: **Carolyn Harris & Chris Carswell**
09:20-09:30	Does shunt drainage correlate with headaches in hydrocephalus? Interim results from a longitudinal study using wearable, noninvasive shunt flow monitors in patients with chronic headaches **Chad Webb**
09:30-09:40	Chronic Post dural puncture headaches: The leak we sometimes find - A bicentric Surgical findings study **Amir El Rahal**
09:40-09:50	Real-time visualization of cerebrospinal fluid flow in shunts: A wearable, non-invasive thermal imager for shunt function assessment **Chad Webb**
09:50-10:00	Two years' experience with home based ICP monitoring; efficacy and clinical value **Peter Heppner**
10:00-10:10	Remote digital cognitive testing is feasible in iNPH and can identify disease specific deficits **Chris Carswell**
10:10-10:20	Volumetric predictors of ventriculomegaly in vestibular schwannoma: A pilot MRI study **Adela Bubenikova**
10:20-11:00	***Coffee Break & Exhibition***

	GRAND BALLROOM I - II
11:00-12:20	**SESSION 5: YOUNG INVESTIGATORS AWARDS I** Chairs: **Fernanda Martins & Fabian Fluerenbrock**
11:00-11:10	Sheep rumination induces increase in intracranial pressure pulse amplitude **Martina Roncoroni**
11:10-11:20	Long-term effects of cerebrospinal fluid shunting on quality of life in idiopathic Normal Pressure Hydrocephalus **Fabio Torregrossa**
11:20-11:30	Functional outcomes following shunt surgery in idiopathic Normal Pressure Hydrocephalus patients with and without Alzheimer's disease neuropathology **Rosa Sahlstrom**
11:30-11:40	Integrating Postural ICP Mapping and Ophthalmic Biomarkers for the Predictive Modelling of Shunt Performance in Idiopathic Intracranial Hypertension. **Hannah Eskender**
11:40-11:50	Dynamic shifts in cerebrospinal fluid biomarkers and baseline androgen profiles in idiopathic Normal Pressure Hydrocephalus **Adela Bubenikova**
11:50-12:00	Digital biomarkers in Normal Pressure Hydrocephalus: instrumented Timed Up and Go for assessing and predicting shunt response **Arianna Vignaroli**
12:00-12:10	Investigating genetic factors in Normal Pressure Hydrocephalus: a case-control whole exome sequencing study **Gianna Fote**
12:10-12:20	Discussion
12:20-13:10	**Hydrocephalus Society Annual General Meeting**
13:10-13:15	**Fluids and Barriers of the CNS Update**
13:15-14:20	**Industry Sponsored Lunch Seminar**

	GRAND BALLROOM I - II
14:20-15:30	**SESSION 6: ADULT HYDROCEPHALUS** Chairs: **Benjamin Elder & Chifumi Iseki**
14:20-14:30	Cost analysis of NPH treatment: What healthcare managers need to know **Rodolfo Casimiro Reis**
14:30-14:40	NPH patient journey in a center of excellence: Does it make a difference **Fernando Hakim**
14:40-14:50	Social determinants of health in idiopathic Normal Pressure Hydrocephalus care pathways: A single center 10-year experience **Mark Luciano**
14:50-15:00	Traditional imaging measures in idiopathic Normal Pressure Hydrocephalus: A secondary analysis of the PENS trial **Mark Luciano**

15:00-15:10 Artificial intelligence classification algorithm to detect the presence of the DESH sign in Normal Pressure Hydrocephalus: A diagnostic tool.
Isabella Lacoutoure-Silgado

15:10-15:20 Complications after shunt surgery for idiopathic Normal Pressure Hydrocephalus: optimal timing of postoperative imaging
Aslan Lashkarivand

15:20-15:30 12-month gait and balance outcomes following ventriculoperitoneal shunting for iNPH in the PENS trial
Naomi Abel

GRAND BALLROOM III

14:20-15:30 **SESSION 7: TECHNICAL ADVANCES IN TREATMENT AND DIAGNOSIS**
Chairs: **Raphael Bertani & Carolyn Harris**

14:20-14:30 Shunt obstruction and the pathway to data-informed improved catheter design
Carolyn Harris

14:30-14:40 Toward data-driven optimization of patient-specific shunt settings
Fabian Fluerenbrock

14:40-14:50 AI-based segmentation and setting detection of shunt valve settings in CT scans
Amir El Rahal

14:50-15:00 Therapeutic role of venous sinus stenting in pediatric idiopathic intracranial hypertension
Petr Skalicky

15:00-15:10 A new paradigm in personalised shunting: artificial intelligence for position prediction in patients with cerebrospinal fluid dynamic disorders
Emalee Burrows

15:10-15:20 What predicts success in endoscopic third ventriculostomy? A systematic review
Giovanna Trevisan

15:20-15:30 Telemetric intracranial pressure waveform analysis to optimise shunt function in Normal Pressure Hydrocephalus
Arjun Alhuwalia & Punyaslok Mishra

JARDIM

14:20-15:30 **SESSION 8: NEUROIMAGING**
Chairs: **Karin Kockum & Shigeki Yamada**

14:20-14:30 Longitudinal changes in periventricular lesion volume are associated with ventricular morphology changes in Normal Pressure Hydrocephalus of the pens trial
Shimeng Wang

14:30-14:40 Detangling orthostatic headaches in spontaneous intracranial hypotension: A matter of CSF acceleration
Katharina Wolf

14:40-14:50 Intracranial arterial, venous and CSF volume change interaction during cardiac cycle in chronic hydrocephalus patients versus healthy elderly volunteers
Kimi Owashi

14:50-15:00	Methodological analysis of the PENS trial: An automatic pipeline for calculating Evan's index and callosal angle for NPH **Shimeng Wang**
15:00-15:10	Methodological analysis of the PENS trial: An automatic pipeline for measuring corpus callosum arching **Shimeng Wang**
15:10-15:20	Automated calculation of a quantitative DESH score in T1-weighted brain MRI for reproducible radiological assessment of hydrocephalus **Sara Qvarlander**
15:20-15:30	AI-assisted analysis of brain parenchyma deformation and strain in patients with spontaneous intracranial hypotension **Amir El Rahal**
15:30-16:15	***Coffee Break & Exhibition***

	GRAND BALLROOM I - II
16:15-17:55	**SESSION 9: ADULT HYDROCEPHALUS** Chairs: **Madoka Nakajima & Ignacio Jusue Torres**
16:15-16:25	Invited talk on post-traumatic hydrocephalus **Saul Almeida da Silva**
16:25-16:35	Plasma p-tau217 reflects cognitive decline in idiopathic Normal Pressure Hydrocephalus patients with comorbid Alzheimer's disease pathology **Chihiro Kamohara**
16:35-16:45	Cognitive trajectories after shunt surgery in idiopathic Normal Pressure Hydrocephalus: a domain sensitive framework for defining cognitive impairment and treatment response **Lisa Healy**
16:45-16:55	The effect of ventriculoperitoneal shunt (VPS) in patients with idiopathic Normal Pressure Hydrocephalus (iNPH) who did not undergo a tap test: Preliminary results of a prospective cohort study **Rodolfo Casimiro Reis**
16:55-17:05	What continuous catheter recordings reveal about telemetric snapshot ICP monitoring **Sang Ho Kim**
17:05-17:15	Tiered, mechanistically-anchored framework for idiopathic Normal Pressure Hydrocephalus **Eric Schmidt**
17:15-17:25	Impact of Alzheimer's disease biomarkers and DESH score on tap test response in idiopathic Normal Pressure Hydrocephalus **Yunfan You**
17:25-17:35	The impact of CSF diversion on frailty and functional independence in Normal Pressure Hydrocephalus: A 24-month prospective study **Samuel Jeffery**

17:35-17:45 Reversible DESH in Normal Pressure Hydrocephalus: Longitudinal volumetric changes and evidence of pseudoatrophy reversal after shunting
Fernando Hakim

17:45-17:55 Transcranial Doppler in Normal Pressure Hydrocephalus: A Systematic Review and Meta-Analysis of Diagnostic, Prognostic, and Monitoring Applications
Alexandra Ramos

GRAND BALLROOM III

16:15-17:55 **SESSION 10: PEDIATRIC HYDROCEPHALUS**
Chairs: **Francesca Pappafava & Fernando Pinto**

16:15-16:25 Fetal neurosurgery for the treatment of hydrocephalus
Sergio Cavalheiro

16:25-16:35 Neurokids Project in Brazil
Nelci Zanon

16:35-16:45 Elevated pressure - impaired neural stem cell differentiation potentially disrupting ventricular zone genesis
Spencer Sabahat

16:45-16:55 Temporal evolution and predictive modeling of congenital hydrocephalus in Brazil (2010-2024)
Barbara Bonatti

16:55-17:05 Insights from patient-driven gene discovery approach for congenital hydrocephalus studies: the role of DIP2A in brain development and congenital hydrocephalus
Engin Deniz

17:05-17:15 Thirteen years of surgical bundles against pediatric shunt infection: meta-regression, dose-response, and external validation across 12,020 procedures
Leonardo Cadorin de Araujo

17:15-17:25 Mortality from congenital hydrocephalus in brazil: Ecological analysis and temporal projections (1996–2030)
Barbara Bonatti

17:25-17:35 Zwitterionic surface modification reduces astrocyte–microglia co-culture cell adhesion on ventricular shunt catheters in a flow model
Amirhoessein Shahriari

17:35-17:45 Evaluating the incidence and risk factors for ventriculo-peritoneal shunt sepsis in a rural hospital in South Africa
Patrick Lekgwara

17:45-17:55 Preliminary use of a novel, programmable, CSF flow-regulating device in the management of complex pediatric and transitional hydrocephalus
Richard Edwards

	JARDIM
16:15-17:30	**SESSION 11: YOUNG INVESTIGATORS SPECIAL SESSION** Chairs: **Fabian Fluerenbrock & Linda D'Antona**
16:15-16:35	Designing a sustainable clinical career: Lessons from leadership and research **Karin Kockum**
16:35-16:55	The reversible brain: How Normal Pressure Hydrocephalus guided my career and revealed the power of multidisciplinary brain recovery **Fernando Gomes Pinto**
16:55-17:05	Insights on work and research philosophy **Bryn Martin**
17:05-17:30	Discussion

Sunday, 2 August 2026

GRAND BALLROOM I - II

08:30-09:20 **SESSION 12: JOINT ROUND TABLE: THE HEART OF THE MATTER: INTEGRATING PATIENT ADVOCACY INTO NEUROSURGICAL EXCELLENCE**
Moderator: **Michael Williams**

08:30-09:20 **Roundtable Discussion:**
Giorgio Palandri, *Hydrocephalus Society*
Juergen Beck, *European Association of Neurosurgical Societies-EANS*
Samantha Lanjewar, *Hydrocephalus Association*
Taiji Tsunemi, *Japanese Movement Disorders Society*

GRAND BALLROOM I - II

09:20-10:50 **SESSION 13: YOUNG INVESTIGATORS AWARDS II**
Chairs: **Carolyn Harris & Fernando Gomes Pinto**

09:20-09:30 Spatiotemporal characterization of choroid plexus organoid development
Celine Tran

09:30-09:40 Proximal revision free survival of ventricular shunt catheters following prophylactic flushing with noninvasive proximal flushing device: A multi-center experience
Ricardo Domingo Cabreja

09:40-09:50 Prevalence of mortality among iNPH patients undergoing ventriculoperitoneal shunting and its predictors
Derrick Obiri-Yeboah

09:50-10:00 Mitigating valve artifacts in post-shunt surgery MRI of the PENS trial using a 3D diffusion model
Shimeng Wang

10:00-10:10 Cortical auditory evoked potentials as neurophysiological markers of functional status and surgical response in idiopathic Normal Pressure Hydrocephalus
Sandro Matas

10:10-10:20 Frailty does not alter postoperative improvement after shunting in idiopathic Normal Pressure Hydrocephalus
Helen Hasanen

10:20-10:30 Assessing cognitive change with cerebrospinal fluid removal in NPH using the NPH-Cognitron, a novel 12-test digital cognitive battery
Alexander Hayes

10:30-10:40 A novel ageing population in neurosurgery: Late-midlife outcomes of individuals first shunted in infancy over 50 years ago
Arjun Ahluwalia

10:40-10:50 A germinal matrix hemorrhage CX3CR1GFP/+CCR2RFP/+ dual-reporter mouse model provides insights into central versus peripheral contributions to the cellular immune responses underlying hydrocephalus induction
Gio Jison

10:50-11:20 ***Coffee Break & Exhibition***

	GRAND BALLROOM I - II
11:20-12:40	**SESSION 14: THE BIG DATA ERA IN HYDROCEPHALUS: AI TOOLS AND LARGE COHORTS** Chairs: **Daniele Rigamonti & Shigeki Yamada**
11:20-11:30	Strategy for implementation of AI tools in clinical practice: Lessons learned from the imaging perspective **Karin Kockum**
11:30-11:40	Diagnostic accuracy of smart device–based Gait-AI and imaging-AI DESH index for iNPH (Hakim's disease): A proposed next standard **Shigeki Yamada**
11:40-11:50	Is iNPH truly a reversible dementia? How proteomic profiles inform strategic shunting in the complex brain **Arianna Vignaroli**
11:50-12:00	Impact of endoscopic fornical manipulation on cognitive outcome: A prospective analysis of 60 intraventricular procedures **Riccardo Valiera**
12:00-12:10	Deep learning for cerebrospinal fluid flow segmentation in phase-contrast MRI of hydrocephalus patients **Kimi Owashi**
12:10-12:20	Diagnostic performance and clinical relevance of AI imaging diagnosis of Idiopathic Normal Pressure Hydrocephalus: A systematic review and meta-analysis **Anna Murat**
12:20-12:30	When a complication becomes a learning opportunity **Daniele Rigamonti**
12:30-12:40	Discussion

	GRAND BALLROOM III
11:20-12:40	**SESSION 15: ADULT HYDROCEPHALUS** Chairs: **Giorgio Palandri & Laurence Watkins**
11:20-11:30	Brain sagging resolution after cranioplasty in hemicraniectomy patients **Amir El Rahal**
11:30-11:40	Biomarkers and microbiome signatures in idiopathic Normal Pressure Hydrocephalus: Results from a pilot study **Zeljka Maglica**
11:40-11:50	Cerebrospinal fluid and plasma biomarker profiles in idiopathic Normal Pressure Hydrocephalus compared with Alzheimer's and Parkinson's disease **Francesca Pappafava**
11:50-12:00	Functional MRI reveals expanded and reorganized motor networks in idiopathic Normal Pressure Hydrocephalus **Ondrej Bradac**
12:00-12:10	External ventricular drainage strategies: Bolt vs tunnelled catheters and automated vs passive drainage — A retrospective cohort study **Arjun Ahluwalia**

12:10-12:20 Unveiling the man behind Normal Pressure Hydrocephalus: The unpublished archives of Dr. Salomón Hakim
Fernando Hakim

12:20-12:30 Heterogeneous cortical volume loss in perisylvian structures in idiopathic Normal Pressure Hydrocephalus
Rafael Bertani

12:30-12:40 The early-stage iNPH therapeutic window: When radiological hallmarks precede clinical expression
Alexandra Ramos

JARDIM

11:20-12:40 **SESSION 16: ORAL FLASH PRESENTATIONS OF E-POSTERS**
Chairs: **Naomi Abel & Ahmed Toma**

11:20-11:25 Age-related variation in iCP wave amplitude across hydrocephalic conditions
Sumeet Pimple & Kalkidan Mengesha

11:25-11:30 Impact of concomitant neurodegeneration on clinical outcomes in Normal Pressure Hydrocephalus
Juan Daniel Ramirez Munoz

11:30-11:35 Hydrocephalus in neurocysticercosis: From obstruction to inflammation—A heterogeneous and surgically challenging spectrum
Edgar M. Carrasco

11:35-11:40 Etiology of hydrocephalus among patients treated in a referral center over the last 10 years (2015-2025)
Joao Pedro Craco Lorentz

11:40-11:45 Does shunt revision lead to improvement in patients with iNPH evidenced by gait objective assessment
Derrick Obiri-Yeboah

11:45-11:50 Biomarker signature predicting response to cerebrospinal fluid diversion, complementing clinical–radiological assessment in hydrocephalus
Francesco Tuniz & Cristina Cuppone

11:50-11:55 A systematic review of Normal Pressure Hydrocephalus presentation in patients under 60 years of age
Henrique Miter

11:55-12:00 CSF biomarkers for differential diagnosis and surgical prognosis in Normal Pressure Hydrocephalus
Hao Xu

12:00-12:05 The effect of ventriculoperitoneal shunt (VPS) on anxiety and depression symptoms among patients with idiopathic Normal Pressure Hydrocephalus (iNPH) – Preliminary results of a case series
Rodolfo Reis

12:05-12:10 Outcomes of single-incision, laparoscopic placement of a fully subcutaneous short peritoneal catheter (SLAPS) for ventriculoperitoneal shunt in Normal Pressure Hydrocephalus: A single-center cohort subanalysis
Raphael Bertani

12:10-12:15	Invasive preoperative investigations and decision-making in idiopathic Normal Pressure Hydrocephalus **Giovanni Grasso**
12:15-12:20	Digital Gait Biomarkers for Normal Pressure Hydrocephalus: Using Smartphone Fitness Data to Track Disease and Recovery **Ahmed Toma**
12:20-12:25	Ventriculoperitoneal shunts vs endoscopic surgery in patients with neurocysticercosis-induced hydrocephalus: A systematic review and meta-analysis **Pedro Tadao Hamamoto Filho**
12:25-12:30	Reintervention and complication rates after cerebrospinal fluid shunting for intracranial arachnoid cysts: A systematic review and meta-analysis **Paula Seixas**
12:30-12:35	Large volume LP v prolonged CSF drainage in predicting likely response to shunt insertion in iNPH: A single centre comparison of assessing different diagnostic methods on the same patients **Eva Rosito**
12:35-12:40	Mini-mental state examination as a cognitive indicator after the tap test in Normal Pressure Hydrocephalus **Vitoria Pinheiro**
12:45-14:00	**Industry Sponsored Lunch Seminar**

GRAND BALLROOM I - II

14:00-15:10 SESSION 17: YOUNG INVESTIGATORS AWARDS III
Chairs: **Ignacio Jusue Torres & Giorgio Palandri**

14:00-14:10	Brain volume changes after targeted closure of spinal CSF leak in spontaneous intracranial hypotension **Federico Cagnazzo**
14:10-14:20	Automatic clinical concept extraction for the early diagnosis of idiopathic Normal Pressure Hydrocephalus: A natural language processing approach **Emalee Burrows**
14:20-14:30	AI-assisted quantification of brain shifts and volume changes in Spontaneous intracranial hypotension **Amir El Rahal**
14:30-14:40	Synergistic value of the ALPS index and CSF tau-profiles for optimized multimodal stratification of shunt responsiveness in suspected Normal Pressure Hydrocephalus **Cristina Cuppone**
14:40-14:50	Severity grading score predicts surgical intervention in iNPH patients with shunt-related chronic subdural hematoma **Emilie Skytoen**
14:50-15:00	Comprehensive MRI volumetric analysis of fluid and parenchymal compartments in idiopathic Normal Pressure Hydrocephalus **Gabriel Semione**
15:00-15:10	Invasive ICP monitoring for suspected shunt under-drainage: Defining clinically useful ranges and thresholds **Sang Ho Kim**

15:10-15:50 ***Coffee Break & Exhibition***

	GRAND BALLROOM I - II
15:50-17:10	**SESSION 18: HYDROCEPHALUS SOCIETY-EANS JOINT SESSION: SPONTANEOUS INTRACRANIAL HYPOTENSION (SIH) – A COMMON CSF DISORDER** Chairs: **Katharina Wolf & Michael Williams**
15:50-16:05	Impact on patients and health care system **Diogo Edelmuth**
16:05-16:20	Imaging and endovascular cure **Federico Cagnazzo**
16:20-16:35	Surgical cure for all leaks **Florian Volz**
16:35-16:50	NPH, IIH, and SIH-CSF and cognition **Juergen Beck**
16:50-17:10	Discussion

	GRAND BALLROOM III
15:50-17:10	**SESSION 19: ADULT HYDROCEPHALUS** Chairs: **Fernando Hakim & Diego Alejandro Quintero**
15:50-16:00	Breaching trust **Daniele Rigamonti**
16:00-16:10	Health-related quality of life after shunting in idiopathic Normal Pressure Hydrocephalus: a meta-analysis of patient-reported outcomes **Henrique Hideki Kohayagawa Saito**
16:10-16:20	Change in tinetti score following high-volume CSF drainage is associated with progression to ventriculoperitoneal shunting in suspected Normal Pressure Hydrocephalus **Samuel Jeffery**
16:20-16:30	Digital gait analysis reveals multisegmental gait phenotypes in Normal Pressure Hydrocephalus before and after lumbar puncture using a standardized Hakim protocol **Juan Daniel Ramirez Munoz**
16:30-16:40	Ventricular cannulation-associated intracerebral hemorrhage in adult ventriculoperitoneal shunt: A retrospective cohort study **Xuhao Fang**
16:40-16:50	Neurofluids flow dynamics evolution in chronic hydrocephalus patients who improved after shunt **Kimi Owashi**
16:50-17:00	Normal Pressure Hydrocephalus; Unraveling a syndrome **Neil Graff-Radford**
17:00-17:10	Escaping the multi-shunt paradigm: Neuroendoscopy in multiloculated hydrocephalus **Guilherme Adabo**

	JARDIM
15:50-17:10	**SESSION 20: INTRACRANIAL PRESSURE** Chairs: **Fabian Fluerenbrock & Bryn Martin**
15:50-16:00	Computer vision pipeline for posture estimation and pressure synchronization in chronic sheep trials **Martina Roncoroni**
16:00-16:10	Utility of intracranial pressure monitoring in idiopathic intracranial hypertension patients with refractory headaches: An 8-year single-surgeon, specialized-center retrospective study **Mark Luciano**
16:10-16:20	Lumbar puncture opening pressure and continuous ICP monitoring: Concordance and clinical implications in idiopathic intracranial hypertension **Mark Luciano**
16:20-16:30	Greater obesity severity is associated with worse patient-reported outcomes after ventricular shunting for idiopathic intracranial hypertension **Sana Murtaza**
16:30-16:40	Comparative effectiveness of venous sinus stenting and ventricular shunting for idiopathic intracranial hypertension: A phenotype-stratified, propensity-matched cohort study **Mark Luciano**
16:40-16:50	Complete resolution of papilledema and visual outcomes in venous sinus stenting versus shunting for intracranial hypertension: A sistematic review and meta-analysis **Andre Pina**
16:50-17:00	Reduced risk of shunt revision with programmable vs fixed-pressure valves in iNPH: A systematic review and meta-analysis **Luiz Fernando Carvalho**
17:00-17:10	Trans-stenotic pressure gradient thresholds in venous sinus stenting: A bibliometric analysis of their origin and evidentiary basis **Luis Flavio Fabrini Paleare**

Monday, 3 August 2026

GRAND BALLROOM I - II

08:00-09:30 SESSION 21: ADULT HYDROCEPHALUS

Chairs: **Marianne Schmid Daners & Fernando Hakim**

08:00-08:10 The importance of organizing the geriatric neurosurgery subspecialty in Brazil and Latin America
Fernando Gomes Pinto

08:10-08:20 Experimental hypertension in animal models submitted to cerebral volume infusion: How is intracranial compliance?
Eduardo Colombari

08:20-08:30 iNPH as mechanistic probe for clearance research in neurodegenerative diseases
Eric Schmidt

08:30-08:40 Potential for dementia prevention in Latin America: A public health policy perspective
Regina Paradela

08:40-08:50 Long journey in diagnosis and decision making for treatment of Hakim disease (idiopathic Normal Pressure Hydrocephalus) in an urban area, Sendai, Japan
Chifumi Iseki

08:50-09:00 The presence of potential patients with idiopathic Normal Pressure Hydrocephalus in the Okhotsk region of Hokkaido and associated clinical challenges: Toward future awareness strategies
Teruo Kimura

09:00-09:10 Hormonal and endocrine disturbances in spontaneous intracranial hypotension: A comparative cohort study
Amir El Rahal

09:10-09:20 Could gait analysis in the home environment support the assessment of shunt responsiveness to ventriculoperitoneal shunt treatment?
Sandra Fernandes Dias & Marianne Schmid Daners

09:20-09:30 Outcomes after single-incision, laparoscopic placement of a fully subcutaneous short peritoneal catheter (SLAPS) for ventriculoperitoneal shunt: A single-center experience
Raphael Bertani

GRAND BALLROOM III

08:00-09:20 SESSION 22: EXPERIMENTAL HYDROCEPHALUS

Chairs: **Juan Daniel Ramirez Muñoz & Giorgio Palandri**

08:00-08:10 Functional interaction between ependymal ciliary movement and glymphatic pathway in chronic hydrocephalus model mice complicated with Alzheimer's pathology
Kaito Kawamura

08:10-08:20 Inflammatory protease-mediated barrier failure as a mechanistic framework for the origin of intraventricular hemorrhage
Leandro Castaneyra Ruiz

08:20-08:30 Impaired choroid plexus function promotes age-related neurodegeneration
Madoka Nakajima

08:30-08:40 Toward a controllable ovine Normal Pressure Hydrocephalus model
Karl Werner

08:40-08:50 Evaluation of the administration of coenzyme Q10 and curcumin on brain lesions resulting from experimental hydrocephalus: a dose-response study
Tiago Neri Di Lorenzo

08:50-09:00 Role of continuous ICP monitoring in the diagnosis and treatment of post-traumatic hydrocephalus (PTH): prospective study and pressure curves analysis in a series of 10 patients
Luigi De Gennaro

09:00-09:10 Hydrostatic forces from distal catheter length can induce drainage despite virtual off setting
Michael Le

09:10-09:20 Diffusion tensor imaging metrics differentiate idiopathic Normal Pressure Hydrocephalus from Alzheimer's disease and healthy aging
Diego Quintero

JARDIM

08:00-09:20 **SESSION 23: TECHNICAL ADVANCES IN TREATMENT AND DIAGNOSIS**
Chairs: **Ahmed Toma & Kaito Kawamura**

08:00-08:10 A posterior craniometric landmark with a standardized 90° trajectory for reproducible freehand ventriculostomy: A CT-based study
Kaio Barros

08:10-08:20 Assisted versus freehand ventricular catheter placement in pediatric hydrocephalus: A systematic review and meta-analysis of randomized controlled trials
Renato Pereira

08:20-08:30 Case studies of an investigational wireless, wearable, noninvasive hydrocephalus shunt flow monitor across outpatient, emergency, and perioperative clinical settings
Chad Webb

08:30-08:40 Estimation of human brain fluid clearance using intrathecal imaging contrast agents
Aslan Lashkarivand

08:40-08:50 Random forest pixel classification for automated cerebral ventricle identification on intraoperative and transcranioplasty ultrasound: A proof-of-concept study
Raphael Bertani

08:50-09:00 An open-source AI-driven pipeline for automated ventricular segmentation and morphometric analysis in Normal Pressure Hydrocephalus and the first open benchmark in the field
Matheus Rech

09:00-09:10 Our experience in management of Chiari I malformation with syrinx based on intracranial pressure monitoring
Charlie Richardson

09:10-09:20 Cranial suture displacement as a mechanism of intracranial volume expansion in idiopathic Normal Pressure Hydrocephalus: A volumetric and geometric modeling study
Leonardo Brenner

	GRAND BALLROOM I - II
09:30-10:20	**SESSION 24: INPH GUIDELINES UPDATE** Chair: **Mark Hamilton**
09:30-09:50	International iNPH guidelines update part 1: Methods and results **Mark Hamilton**
09:50-10:20	International iNPH guidelines update part 2: Implications for today and the future **Michael Williams**

	GRAND BALLROOM III
09:20-10:20	**SESSION 25: NEUROIMAGING** Chairs: **Alexandra Ramos Márquez & Shigeki Yamada**
09:20-09:30	Neuroimaging in Normal Pressure Hydrocephalus: What every physician should know **Paula Ricci Arantes**
09:30-09:40	White matter changes in Normal Pressure Hydrocephalus and Alzheimer's disease: A comparative study **Hongliang Li**
09:40-09:50	Metabolic difference of the default mode network between Normal Pressure Hydrocephalus and elderly control: A multi-regional ^{1}H-MRS study **Ki-Su Park**
09:50-10:00	Anterior eye displacement in spaceflight: A previously unrecognized structural change in astronauts **Bryn Martin**
10:00-10:10	Radiological predictors of initial and sustained response to shunt insertion in Normal Pressure Hydrocephalus **George Tsermoulas**
10:10-10:20	Neurofluids contributions to ICP excitation and relaxation during the cardiac cycle in chronic hydrocephalus **Kimi Owashi**

	JARDIM
09:20-10:20	**SESSION 26: PEDIATRIC HYDROCEPHALUS** Chairs: **Richard Edwards & Mark Luciano**
09:20-09:30	Spina bifida and congenital hydrocephalus in newborns: Prevalence analysis in Brazilian states from 2010 to 2024 **Giovana Lira Duarte**
09:30-09:40	Endoscopic third ventriculostomy versus ventriculoperitoneal shunting for pediatric hydrocephalus: a 10-year tertiary center experience **Tarsis Pissolato**
09:40-09:50	Ventricular collapse and proximal catheter revision in young children with shunted non-tumoural hydrocephalus: a retrospective cohort study **Lisa Hagens**

09:50-10:00 Ventriculo-gallbladder shunt: case series and literature review
Leandro Amaral

10:00-10:10 Performance of adjustable pressure valves compared to fixed pressure valves in the management of pediatric congenital hydrocephalus
Gabriel Antunes Feijo

10:10-10:20 Hydranencephaly plus mimicking severe congenital hydrocephalus: A case report
Giovanna Trevisan

10:20-11:00 ***Coffee Break & Exhibition***

GRAND BALLROOM I - II

11:00-12:30 **SESSION 27: INTRACRANIAL PRESSURE**
Chairs: **Sara Qvarlander & Katharina Wolf**

11:00-11:10 Brain neuromodulation in patients with NPH through the implantation of an internal cerebrospinal fluid shunt: the rationale
Manoel Jacobsen Teixeira

11:10-11:20 Optic nerve sheath diameter ultrasonography and invasive cisternal pressure monitoring for risk stratification and surgical selection in idiopathic intracranial hypertension
Luigi De Gennaro

11:20-11:30 Reoperation rates and hospital stay in venous sinus stenting versus shunting for idiopathic intracranial hypertension: A meta-analysis
Danielly De Souza

11:30-11:40 Lumbar infusion test in pediatric cerebrospinal fluid disorders: A combined review and institutional experience
Petr Skalicky

11:40-11:50 Surgical versus endovascular treatment for idiopathic intracranial hypertension
Samiya Abi Jaoude

11:50-12:00 Estimation of a disability weight for spontaneous intracranial hypotension with a patient-derived utility-based approach
Florian Volz

12:00-12:10 Cognitive function and spontaneous intracranial hypotension (SIH): A curable spinal dementia
Katharina Wolf

12:10-12:20 Noninvasive intracranial dynamics monitoring in complex hydrocephalus: A case report
Gustavo Frigieri

12:20-12:30 A reversed CSF–venous pressure gradient as a hemodynamic signature of cerebrospinal fluid–venous fistulas
Federico Cagnazzo

	GRAND BALLROOM III
11:00-12:30	**SESSION 28: ORAL PRESENTATIONS - VARIOUS TOPICS** Chairs: **Rodolfo Casimiro Reis & Chifumi Iseki**
11:00-11:10	Leveraging markerless video-based gait analysis to diagnose iNPH **James Liao**
11:10-11:20	Temporal changes in finger tapping response to the tap test in idiopathic Normal Pressure Hydrocephalus (iNPH) **Yoko Shimizu**
11:20-11:30	Wireless, passive flow patency sensor for early detection of shunt malfunction in hydrocephalus **Seunghyun Lee**
11:30-11:40	Temporary CSF diversion methods: Analysis of hospital stay and treatment costs in Brazil **Pedro Henrique Cieslak**
11:40-11:50	Long-term stability of at-home measurements of ICP **Simon Malpas**
11:50-12:00	Cost-effectiveness analysis of programmable versus fixed-pressure valves for Normal Pressure Hydrocephalus under the SUS perspective **Aretha Luz**
12:00-12:10	Expert consensus on the diagnosis and treatment of low-pressure hydrocephalus in China **Xuehai Wu**
12:10-12:20	Diagnostic accuracy of cerebrospinal fluid drainage tests in predicting shunt response in idiopathic Normal Pressure Hydrocephalus: a meta-analysis **Luca Andrews**
12:20-12:30	Armoring the shunt: Antibiotic-impregnated catheters and infection risk in hydrocephalus – A meta-analysis **Marcela Pereira**

	JARDIM
11:00-12:30	**SESSION 29: ORAL PRESENTATIONS - VARIOUS TOPICS** Chairs: **Eric Schmidt & Ignacio Jusue-Torres**
11:00-11:10	Identification of cerebrospinal fluid biomarkers for the differential diagnosis of idiopathic Normal Pressure Hydrocephalus: a systematic review and meta-analysis **Ki-Su Park**
11:10-11:20	Proportional mortality and stratification by maternal education in congenital hydrocephalus in Brazil **Barbara Bonatti**
11:20-11:30	A systematic review of symptomatic choroid plexus cysts in children: A rarity or a nomenclature misdiagnosis? **Fernando Cotrim Gomes**
11:30-11:40	Can biomarkers in cerebrospinal fluid predict outcomes in pediatric hydrocephalus? **Giovanna Trevisan**

11:40-11:50	Rigid versus flexible neuroendoscopy in pediatric hydrocephalus: What does the evidence show? A systematic review **Giovanna Trevisan**
11:50-12:00	Artificial intelligence in hydrocephalus related research: A brief bibliometric analysis **Pedro Henrique Cieslak**
12:00-12:10	Lumbar cistern peritoneal shunt under epidural anesthesia —Operational points and clinical observation **Hao Xu**
12:10-12:20	Complication rates of programmable vs non-programmable shunts in hydrocephalus: A bayesian pairwise meta-analysis of randomized controlled trials **Renato Pereira**
12:20-12:30	Objective gait biomarkers define a distinct motor signature in idiopathic Normal Pressure Hydrocephalus, a potentially reversible gait disorder: A systematic review and meta-analysis **Diego Quintero**
12:35-13:40	**Industry Sponsored Lunch Seminar**

GRAND BALLROOM I - II

13:40-15:30 SESSION 30: ADULT HYDROCEPHALUS
Chairs: **Ahmed Toma & Chris Carswell**

13:40-13:50	Idiopathic Normal Pressure Hydrocephalus: When does an ageing population make a rare disease clinically recognisable? **Ahmed Toma**
13:50-14:00	Early postoperative outcomes after ventriculoperitoneal shunting for idiopathic Normal Pressure Hydrocephalus **Felipe Bassetto Capell**
14:00-14:10	Impact of cervical stenosis, myelopathy and decompression on gait outcomes following ventriculoperitoneal shunting in idiopathic Normal Pressure Hydrocephalus **Derrick Obiri-Yeboah**
14:10-14:20	Risk of intracranial hemorrhage after cortical brain biopsy during shunt surgery for idiopathic Normal Pressure Hydrocephalus: A prospective comparative study **Aslan Lashkarivand**
14:20-14:30	Reversible parkinsonism in Normal Pressure Hydrocephalus (Hakim syndrome): Evidence from lumbar tap test **Fernando Hakim**
14:30-14:40	Durability of gait improvement after shunting in idiopathic Normal Pressure Hydrocephalus: Evidence of decline beyond three years **Derrick Obiri-Yeboahr**
14:40-14:50	Cochlear symptoms in patients shunted for Normal Pressure Hydrocephalus: A 12-year single-center retrospective study **Stephane Goutagny**

14:50-15:00 Is there a volumetric therapeutic window in idiopathic Normal Pressure Hydrocephalus?
Rafael Holmgren

15:00-15:10 Cortical volume loss in skull base-adjacent and cistern-adjacent regions in iNPH: Testing the pia-arachnoid dehiscence hypothesis
Gabriel Semione

15:10-15:20 Callosal angle improvement following endovascular shunting for Normal Pressure Hydrocephalus
Pedro Lylyk

15:20-15:30 U-CARE iNPH Score as a proxy indicator: Associations between caregiver evaluation and objective clinical outcomes in idiopathic Normal Pressure Hydrocephalus
Francesco Tuniz

GRAND BALLROOM III

13:40-15:30 **SESSION 31: ORAL FLASH PRESENTATIONS OF E-POSTERS**
Chairs: **Carolyn Harris & Sara Qvarlander**

13:40-13:45 Anti-siphon devices for overdrainage prevention in Normal Pressure Hydrocephalus: a meta-analysis
Leticia Gusso Scremin

13:45-13:50 Cranio spinal complianceS during the cardiac cycle in chronic hydrocephalus
Kimi Owashi

13:50-13:55 The development of a predictive framework for shunt optimisation in IIH using real-time ICP mapping and waveform analysis (P2/P1 Ratio)
Hannah Eskender

13:55-14:00 Dynamic modulation of non-invasive ICP waveform morphology suggests extracranial sensitivity to CSF drainage and postural change
Mark Luciano

14:00-14:05 Venous sinus stenting as primary intervention therapy in long-standing idiopathic intracranial hypertension: A case report and systematic review.
Kim Wouters

14:05-14:10 Association between ventricular size and outcomes after ventricular shunting in Idiopathic Intracranial Hypertension
Sana Murtaza

14:10-14:15 Ventriculobiliary shunt as an alternative in complex hydrocephalus: A case report
Nicolle da Silva Dantas

14:15-14:20 Peritonitis caused by ventriculoperitoneal shunt infection: A diagnostic challenge in the emergency department
Stefanie Kaestner

14:20-14:25 Are we intervening too late? Timing of surgical treatment in pediatric hydrocephalus
Giovanna Trevisan

14:25-14:30 Challenges in the differential diagnosis of idiopathic Normal Pressure Hydrocephalus against parkinson's and alzheimer's diseases: A systematic review
Raquel Menegatt

14:30-14:35 Reconsidering the timing of venous sinus stenting in refractory idiopathic intracranial hypertension: A case report and systematic review
Kim Wouters

14:35-14:40 Neuroendoscopic infection control strategy for ventriculitis in hydrocephalus after posterior fossa surgery: Aerial lavage and combined endoscopic ansd shunt CSF diversion
Ricardo Maldonado Padilla

14:40-14:45 Where are the patients lost? A meta-analysis of the inph diagnostic cascade
Kaua Gabriel Oliveira da Silva

14:45-14:50 The wandering cyst: Pan-ventricular migration of racemose neurocysticercosis and pooled analysis of 28 cases
Kaua Gabriel Oliveira da Silva

14:50-14:55 Automated brain segmentation in a real-world Normal Pressure Hydrocephalus cohort
Clara Belessiotis

14:55-15:00 Cognitive changes after the tap test in Normal Pressure Hydrocephalus: A systematic review
Vitoria Pinheiro

15:00-15:05 Hakim syndrome or Hakim disease? A scoping review of the nosological framework of Normal Pressure Hydrocephalus
Juan Daniel Ramirez Munoz

15:05-15:10 Impact of Alzheimer's disease co-pathology on shunt outcomes in idiopathic Normal Pressure Hydrocephalus: A systematic review and meta-analysis
Ameya Patwardhan

15:10-15:15 What radiological markers can tell us about iNPH severity? A prospective study
Francesco Tuniz

15:15-15:20 Optic Nerve Sheath Ultrasound in suspected spontaneous intracranial hypotension: Guiding therapeutic decisions and monitoring after epidural blood patch, a three-case series
Francesco Russo

15:20-15:25 Interim results of a comparative study of brain temperature changes across clinical environments in shunted patients
Hannah Eskender

15:25-15:30 Early experience with a flushing-enabled ventricular shunt for pediatric hydrocephalus in Zambia: A pilot case series
Bryn Martin

	JARDIM
13:40-15:30	**SESSION 32: ORAL PRESENTATIONS - VARIOUS TOPIC** Chairs: **Gianpaolo Petrella & Uwe Kehler**
13:40-13:50	Automated extraction of clinical concepts into shunt registries using content mapping and natural language processing **Emalee Burrows**
13:50-14:00	Multidimensional connectomic characterization of shunt-responsive Normal Pressure Hydrocephalus (NPH): A feasibility study **Alexandra Ramos**
14:00-14:10	Cerebrospinal fluid Aβ42, tau protein levels and related ratios in patients with hydrocephalus: A clinical observational study **Chunyan Liu**
14:10-14:20	Establishing the first geriatric neurosurgery academic league in Brazil: The University of São Paulo Medical School experience **Vinicius Galbim De Paula**
14:20-14:30	Improved strategies of one-stage cranioplasty and ventriculoperitoneal shunt for post-traumatic hydrocephalus **Kun Wang**
14:30-14:40	Water influx into CSF spaces evaluated by H215O dynamic PET **Mitsuhito Mase**
14:40-14:50	Correlation between BOON and MoCA scores in idiopathic Normal Pressure Hydrocephalus (iNPH) **Chunyan Liu**
14:50-15:00	Changes of TUG and MoCA in patients with iNPH before and after cerebrospinal fluid tap test **Yan Xing**
15:00-15:10	Clinical course and predictors of resolution in subdural hematomas/hygromas following shunting for Normal Pressure Hydrocephalus **Mark Luciano**
15:10-15:20	Non-invasive manometry and DTI tractography in the surgical management of arachnoid cysts: A case-based update **Rodolfo Reis**
15:20-15:30	Understanding the natural history of idiopathic Normal Pressure Hydrocephalus through long-term comprehensive outcomes **Giovanni Grasso**

	GRAND BALLROOM I - II
15:30-16:30	**CLOSING OF THE CONGRESS** Chairs: **Giorgio Palandri & Fernando Gomes Pinto**
15:30-15:40	Young investigators awards results **Carolyn Harris**
15:40-15:55	Highlights of the Hydrocephalus 2026 World Congress **Laurence Watkins**
15:55-16:05	Closing address by the Hydrocephalus 2026 World Congress President **Fernando Gomes Pinto**
16:05-16:15	Welcome address by the Hydrocephalus 2027 World Congress Organizing Team **Mark Luciano & Sevil Yasar**
16:15-16:25	Closing Address by the Hydrocephalus Society President **Giorgio Palandri**
16:25-16:30	Closing Photo

E-POSTERS - ALL DAYS

Available through the Mobile App & Screens

P.01	Auditory electrophysiological evaluation of patients with suspected idiopathic Normal Pressure Hydrocephalus who underwent the tap test **Sandro Matas Liliane Aparecida Fagundes Silva**
P.02	Bobble-head doll syndrome after a vp shunt in a dandy walker syndrome **Eduardo Samir Cipriano Hanna**
P.03	Cerebral edema secondary to pediatric hydrocephalus in Uganda - Provenance, diagnosis and prognosis **Yasmin Sa Cerqueira**
P.04	Changes in CSF dynamics and regional brain activation following CSF drainage in NPH **Eungseok Oh**
P.05	Characterization of intracranial compliance dynamics in older adults using a non-invasive monitoring method – Study protocol **Gustavo Frigieri**
P.06	Choroid plexus remodeling associated with inflammatory CSF exposure in preterm acquired hydrocephalus **Noah Ramos**
P.07	Chronic post-traumatic hydrocephalus: Pathophysiological mechanisms involving inflammation, cerebrospinal fluid dynamics, and glymphatic dysfunction **Maria Alice Simões Silva**
P.08	Clinical profile, frailty, and comorbidity burden in shunted idiopathic Normal Pressure Hydrocephalus: A real-world cohort **Maria Clara Junqueira Teles De Menezes, Caio Arruda Maciel**
P.09	Cognitive changes after the tap test in Normal Pressure Hydrocephalus: Comparison between ACE and MMSE **Rodolfo Casimiro Reis**
P.10	Comparative outcomes of classical ventricular access trajectories for ventricular catheterization in adults: A systematic review and meta-analysis **Maurício Mathews Faria Monti Lopes Oliveira**
P.11	Defining shunt overdrainage by ICP measurements and waveform morphology: A systematic review **Jassim Araim**
P.12	Delayed ventriculoperitoneal shunt migration presenting as pericardial effusion: A case report **Fernando Cotrim Gomes**
P.13	Endoscopic fenestration of a temporal arachnoid cyst causing hydrocephalus in an adult: A case report and literature review **João Pedro Techelsk Fasanaro**
P.14	Epidemiological trends, hospital mortality, and economic burden of hydrocephalus complications: An 11-year ecological study **Maria Alice Simões Silva**

P.15 Expanded MMSE-2 may enhance detection of cognitive changes after the tap test in Normal Pressure Hydrocephalus: A pilot study
Kim Wouters

P.16 Family and caregiver guidance in the manegement of idiopathic Normal Pressure Hydrocephalus: A systematic review
Paula Cristina Gomes, Kim Wouters

P.17 Feasibility of an ai-assisted symptom tracking tool for adults with hydrocephalus: A pilot patient-led initiative
Kevin Flynn

P.18 Is ptosis an immediate post - endoscopic third ventriculostomy complication?
Athanasia Athanasaki

P.19 Long-term technical reliability and survival of telemetric ICP sensors: A 2-year experience from a tertiary uk center
Hannah Eskender

P.20 Magnetic resonance imaging characterization in an experimental rat model of neurocysticercosis-induced hydrocephalus
João Pedro Craco Lorentz

P.21 Management strategies and neurodevelopmental outcomes in infantile occlusive hydrocephalus: A single-center cohort study
Vasilii E. Danilin

P.22 Memory impairment in idiopathic Normal Pressure Hydrocephalus: Primary deficit or secondary to attentional dysfunction? A systematic review
Kim Wouters

P.23 Morphological and behavioral analysis with 3D brain reconstruction in an experimental model of chronic hydrocephalus
Jose de Anchieta

P.24 Morphological and radiological analysis of sexual dimorphism in extraparenchymal neurocysticercosis-induced hydrocephalus in rats
João Pedro Craco Lorentz

P.25 Neuropsychological instruments used before and after the tap test in patients with idiopathic Normal Pressure Hydrocephalus: A systematic review
Daniela Gama, Kim Wouters

P.26 Normal Pressure Hydrocephalus within national dementia policies in aging societies: A comparative systematic review
Laura Miranda

P.27 Post-traumatic external hydrocephalus in severe traumatic brain injury after decompressive craniectomy: Case report
Alexis Condolo Lara

P.28 Predictive value of preoperative gait tests for postoperative improvement in idiopathic Normal Pressure Hydrocephalus
Emilia Fromm

P.29 Progress in biomarkers for early diagnosis of hydrocephalus: Challenges and future perspectives
Laura Miranda

P.30 Relationship between neurofeedback electrophysiological patterns and neuropsychological assessment in Normal Pressure Hydrocephalus
Kim Wouters

P.31 Sphera pro/sphera grav programmable shunt system for hydrocephalus: Safety, efficacy and clinical performance in a singlecenter study
Michelle Rüedi De Paiva

P.32 Subdural fluid collection in adults: Differential diagnosis and management - A case report
Stephannie Mônaco

P.33 Surgical management of tumor-related pediatric hydrocephalus: A systematic review and meta-analysis of reoperation and revision after VPS versus ETV
Letícia Saraiva

P.34 The benefits of intrauterine myelomeningocele closure (IUMC) in the treatment of hydrocephalus
Igor Vasconcelos Costa De Sousa

P.35 Three-dimensional reconstruction and behavioral analysis of the ventricular system and hypothalamus in a rat model of acute hydrocephalus
Higor H. Dias, Pedro T. Hamamoto-Filho

P.36 Time-stamp MRI for rapid, contrast-free evaluation of CSF flow in ventriculoperitoneal shunts
Clio Gonzalez-Zacarias

P.37 Valve technology and risk of subdural hematoma in adult hydrocephalus: A systematic review with narrative synthesis
Rafael Zorzo

P.38 Wearable-derived heart rate as an indicator of post-operative delirium in idiopathic Normal Pressure Hydrocephalus patients undergoing VP shunt surgery
Katria Edwards

P.39 Economic Burden of Hydrocephalus Hospitalizations in the Brazilian Public Health System: A retrospective Cross Sectional Study
Pedro H.P.S. Godoi

P.40 P.40 Epidemiology and in-hospital survival of Atresia of Magendie and Luschka Formaina in Brazil: 2008 - 2024
Pedro H.P.S. Godoi

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