

Wednesday, September 4th, 2024 (Day 1)

12:30-13:00 **Arrival coffee/tea**

13:00-13:10 Welcome and announcements

Perspectives on CSF dynamics

(Chair: Jaleel Miyan & Hannah Botfield)

13:10-13:50 *Keynote Speaker 1: **Kristopher Kahle** (Harvard Medical School, USA). Translational genomics of human congenital CSF disorders.*

13:50-14:30 *Keynote Speaker 2: **Satish Krishnamurthy** (Upstate Medical University, USA). Blood-brain barrier and choroid plexus interactions.*

14:30-14:50 **Coffee/Tea**

Therapeutic approaches to NTDs and hydrocephalus – session 1

(Chair: Pat McAllister & Andy Wynd)

14:50-15:30 *Keynote Speaker 3: **Patricia Paez-Gonzalez** (University of Málaga, Spain). Sequential stem cell therapy for hydrocephalus.*

15:30-16:10 *Keynote Speaker 4: **Benedetta Pettorini** (Alder Hey Children's Hospital, Liverpool, UK). Hydrocephalus in myelomeningocele: treatment options and controversies.*

16:10-16:25 *Abstract #1: **Dhruti Doddaballapur** (University of Manchester, UK). Cerebrospinal fluid is the metabolic powerhouse for the brain: a comparison of normal and Parkinson's brain tissues.*

16:25-16:40 *Abstract #2: **Fatima Baqir** (National University of Sciences and Technology (NUST), Pakistan). Deciphering the potential fault in hepatic folate metabolism in a rat model of spina bifida with hydrocephalus comorbidity.*

16:40-16:55 *Abstract #3: **Shereen Nizari** (University College London, UK). Non-invasive MRI of blood-CSF-barrier function: A novel tool for assessment of pharmacological management of intracranial pressure and in an experimental model of hydrocephalus.*

16:55-17:10 *Abstract #4: **Lauren Roberts** (Aston University, UK). Distribution and localisation of the water channel, AQP4, in organotypic brain slice cultures.*

17:10-17:25 *Abstract #5: **Ben Hewitt** (University of Birmingham, UK). An in vitro model of post-haemorrhagic hydrocephalus.*

17:25-17:40 *Abstract #6: **Luis Manuel Rodriguez** (University of Malaga, Spain). Evolution of the inflammatory and edematous processes in the periventricular area during the onset of experimental posthemorrhagic hydrocephalus. Effect of a stem cell-based therapy.*

- 17:40-17:55 Abstract #7: **Javier Lopez-de-San-Sebastian** (University of Malaga, Spain). *Human mesenchymal stem cells and its exosomes in posthemorrhagic hydrocephalus: A focus on edema and ependymal repair.*
- 17:55-18:10 Abstract #8: **Lucia Darie** (University College London, UK). *Transition of hydrocephalus patients from paediatric to adult neurosurgery: long term outcomes and single institution experience.*
- 18:10-18:30 **SRHSB AGM**
- 18:30 Dinner at Manchester Restaurant (pay individually)**

Thursday, September 5th, 2024 (Day 2)

08.30-9.00 Arrival coffee/tea

09:00-09:10 Welcome and announcements

Therapeutic approaches to NTDs and hydrocephalus – session 2 (Chair: Ian Pople & John Pickard)

- 09:10-09:50 *Keynote Speaker 5: **Sofia Mastrodima-Polychroniou** (University College London, UK). *In utero repair of neural tube defects – open vs endoscopic approaches.**
- 09:50-10:30 *Keynote Speaker 6: **Conor Mallucci** (Alder Hey Children’s Hospital, Liverpool, UK). *Shunts vs ETVs for hydrocephalus.**
- 10:30-10:45 **Waite Hydrocephalus Student Bursary Award 2023: Tooba Asif** (National University of Science and Technology, Pakistan). *Investigating the therapeutic potential of bioactive folates in spina bifida with hydrocephalus comorbidity.*
- 10:45-11:00 **Waite Hydrocephalus Student Bursary Award 2023: Adithi Randeni** (University of Leeds, UK). *Composition of CSF in hydrocephalus.*
- 11:00-11:15 **Waite Hydrocephalus Student Bursary Award 2023: Joya Sims** (University of Manchester, UK). *Effects of hypoxia on AQP expression, CSF drainage and cerebral folate metabolism.*
- 11:15-11:45 Coffee/Tea**
- 11:45-12:00 Abstract #9: **Kim Wouters** (Open Universiteit, Belgium). *Non-invasive techniques versus invasive techniques for diagnosing shunt-responsive patients with normal pressure hydrocephalus: A systematic review.*
- 12:00-12:15 Abstract #10: **Siobhan Brennan** (University of Manchester, UK). *What are the current risks from audiological transducer on programmable ventriculoperitoneal shunts?*
- 12:15-12:30 **Albert Issacs** (Ohio State University, USA): *Announcement of SRHSB 2025 Conference Plans.*
- 12:30-13:40 Lunch**

Models of hydrocephalus and spina bifida

(Chair: Will Singleton & Jo Glazier)

- 13:40-14:20 *Keynote Speaker 7: **Pat McAllister** (Washington & Virginia Commonwealth Universities, USA). Large animal models for hydrocephalus research.*
- 14:20-14:55 **Norman Guthkelch Award 2024 Plenary Presentation: Christopher Roberts** (Wayne State University, USA). *Analyzing cerebrospinal fluid dynamics in ventricular catheters for pediatric hydrocephalus.*
- 14:55-15:10 Abstract #11: **Will Dawes** (Institute of Child Health, University College London, UK). *Preclinical models of hydrocephalus.*
- 15:10-15:30 Coffee/Tea**
- 15:30-15:45 Abstract #12: **Lucia Darie** (University College London Hospitals, UK). *Sleep stages variation in intracranial pressure and pulse amplitude.*
- 15:45-16:00 Abstract #13: **Jacob Schick** (John Hopkins Hospital, USA). *Performance of the Segment Anything Model for ventricular segmentation in normal pressure hydrocephalus.*
- 16:00-16:15 Abstract #14: **Ahmed Salih** (Imperial College, London). *A comparison of efficacy and safety of CSF shunting and diversion procedures in idiopathic normal pressure hydrocephalus: A meta-analysis.*
- 16:15-16:30 Abstract #15: **Mestet Yibeltal Shiferaw** (Addis Ababa University, Ethiopia). *Multiple-site neural tube defects complicated by multiple-site split cord malformations and thickened filum terminale: an illustrative case and experience at a pediatric neurosurgical teaching hospital in Ethiopia.*
- 16:30- 16:45 **SRHSB/Integra Travelling Fellowship Award 2023: Mr Ashwin Kumaria** (Queen's Medical Centre, Nottingham, UK). *Observership in paediatric neurosurgery: A comparison of the management of hydrocephalus associated with paediatric brain tumours.*
- 16:45-17:00 **Harry's Hat Student Bursary Award 2023: Prisha Sharma** (University of Manchester, UK) *Comparison of the awareness of hydrocephalus and spina bifida in south Asians living in the UK compared to those in south Asia and the determination of best methods to raise awareness and empower women with the knowledge to prevent and/or detect hydrocephalus and spina bifida early through the get ahead initiative.*

19:00-22:00 Society Dinner – Safire Restaurant – short walk from conference venue

Friday, September 6th, 2024 (Day 3)

08.30-09.00 Arrival coffee/tea

09:00-09:10 Welcome and announcements

Glymphatics and CSF pathways

(Chair: Albert Issacs & Pat McAllister)

09:10-09:50 *Keynote Speaker 8: **Roxana Carare** (University of Southampton, UK). Pathways of movement for cerebral fluids.*

09:50-10:30 *Keynote Speaker 9: **Hannah Botfield** (University of Birmingham, UK). Targeting CSF dynamics to treat hydrocephalus.*

10:30-11:10 *Keynote Speaker 10: **Jaleel Miyan** (University of Manchester, UK). CSF content and flow pathways are vital to cerebral cortex development and function.*

11:10-11:40 **Coffee/Tea**

Patient therapies and perspectives – session 1 (Chair: Kate Steele & Gill Yaz)

11:40-12:20 *Keynote Speaker 11: **Dominic Thompson** (GOSH, London, UK). Title: Fetal surgery for Spina bifida – A tale of translation, innovation and caution.*

12:20-12:35 *Abstract #16: **Dr Richard Morgan Prize, awarded by SHINE*. Carola McDonald** (Amsterdam UMC, Netherlands). Implementation of the Ready Steady Go transition program for youth with spina bifida: user-friendliness and role in transition from a patient perspective.*

**Awarded by SHINE in memory and honour of Dr. Richard Morgan, a dedicated and highly respected doctor who worked tirelessly to improve the health and lives of adults living with spina bifida. This prize is awarded for work that advances insight and research into spina bifida.*

12:35-12:50 *Abstract #17: **Aitana Ruiz de Lazcano** (University of Deusto, Spain). Coping with spina bifida: self-reported health-related quality of life and psychosocial needs among adult patients.*

12:50-13:05 *Abstract #18: **D Byambatsend** (Shastin Third Hospital, Mongolia). Result of surgical treatment on infant's birth defect- spina bifida.*

13:05-14:00 **Lunch**

Patient therapies and perspectives – session 2 (Chair: Kate Steele & Ian Pople)

14:00-14:30 *Keynote Speaker 12: **Andy Wynd** (formerly CEO of SBH Scotland, UK). Reflections on Innovative Practice to support those with spina bifida and hydrocephalus in Scotland.*

14:30-15:30 **SHINE Charity presentations:**

14:30-14:45 **Gill Yaz:** *1000 Voices -the experiences of adults with spina bifida.*

14:45-15:00 **Bronwen Warner:** *Transcutaneous spinal stimulation - a service review.*

15:00-15:15 **Lindsey Reid:** *Shall Wee Talk - working towards independence in CIC and transanal irrigation.*

15:15-15:30 **Gill Yaz:** *Shine's work with professionals.*

15:30-16:00 **Coffee/Tea**

Poster presentations and discussion

(Chair: Jaleel Miyan & Jo Glazier)

- 16:00-16:15 Poster #1: **D Byambatsend** (Pediatric Hospital NCMCH, Mongolia). Actual situation and development of Mongolian pediatric neurosurgery field.
- 16:15-16:30 Poster #2: **D Byambatsend** (Pediatric Hospital NCMCH, Mongolia). Pediatric neurosurgery results conducted at the National Center for Maternal and Child Health, Mongolia.
- 16:30-16:45 Poster #3: **Mestet Yibeltal Shiferaw** (Addis Ababa University, Ethiopia). Diffuse subarachnoid hemorrhage following ventriculoperitoneal shunt insertion for acute obstructive hydrocephalus from large glomus jugulare tumor: case report.
- 16:45-17:45 Meeting close - farewell drink/nibbles**

CONFERENCE SPONSORS

We are most grateful to SRHSB Manchester 2024 Annual Conference Sponsors.



CONFERENCE SUPPORT

We are also grateful to the Geoffrey Jefferson Brain Research Centre, University of Manchester for their support in sponsoring the conference presentation prizes at SRHSB Manchester 2024; Best Clinical Talk, Best Scientific Talk, Best Conference Talk.

