



SRHSB

**Society for Research into
Hydrocephalus and Spina Bifida**

**63rd Annual Meeting
La Laguna,
Canarias, Spain
June 26th-29th 2019**

Officers and Executive Committee members

President

Prof. John Pickard, UK jdp1000@cam.ac.uk

Hon Secretary

Andy Wynd, MBE, UK andy.wynd@sbhscotland.org.uk

Membership Secretary

Dr David Nash, USA nash.david@mayo.edu

Hon Treasurer Mr. Ian Pople, UK ikpople@hotmail.com

Publication Secretary

Prof. Antonio J Jiménez, Spain ajjimenez@uma.es

Panamerican Corresponding Member

Prof. Pat Mc Allister, USA mcallisterjp@wustl.edu

Co-opted Member

Jo Glazier, PhD, UK j.glazier@manchester.ac.uk

Ordinary Members

Leandro Castañeyra-Ruiz, PhD, USA, lcastan@wustl.edu

Bioengineering Liaison

Dr. Carolyn Harris, USA caharris@wayne.edu

Folic Acid Spokesperson

Prof. Jaleel Miyan, UK j.miyman@manchester.ac.uk

Local organizing committee

Heads of the Local Organizing Committee

-Agustín Castañeyra-Perdomo, MD, PhD - Dean of the Faculty of Health Sciences, University of La Laguna

-Leandro Castañeyra-Ruiz, PhD - Postdoctoral Research Associate at Washington University in St. Louis, USA, and member of the board of the SRSHB

Members of the Local Organizing Committee

-Emilia M. Carmona-Calero, MD, PhD – Neuroanatomist, full professor in Anatomy and embryology at La Laguna University

-Ibrahim González-Marrero, PhD – Neuroanatomist, assistant professor in Anatomy and embryology at La Laguna University.

-Lius G. Hernández-Abad, MS – PhD student at La Laguna University.

-Victor García-Marín MD, PhD –Professor of Neurosurgery and Chief of the surgery department at Canary University Hospital

-Liberto Brage-Martín, MD – Neurosurgeon at Canary University Hospital

-María Dolores Mejías - Secretary of the Alumni Foundation of ULL

On behalf of the Society for Research into Hydrocephalus and Spina Bifida, the local organizers would like to thank our sponsors for the meeting



Acción Exterior



Welcome to Tenerife

The 63rd Annual Meeting of the Society for Research into Hydrocephalus and Spina Bifida will be held in La Laguna, Spain at the kind invitation of University of La Laguna.

In the name of the local organizing committee I wish you a warm welcome to La Laguna, for the 63rd SRHSB Annual Meeting. La Laguna is a touristic and cultural city located in Tenerife Island. We hope you enjoy it!

To mark the start of the meeting, you are invited to the Welcome Reception for delegates on Wednesday evening, which takes place in the Aula 1 and Aula 2 of the Faculty of Medicine in La Laguna University. The social program includes a guided tour to the city centre and Visit to the Vulcano “Teide”. In addition, we will have a welcome reception at Nibaria’s Hotel and the traditional gala dinner that will take place at Mencey’s Hotel.

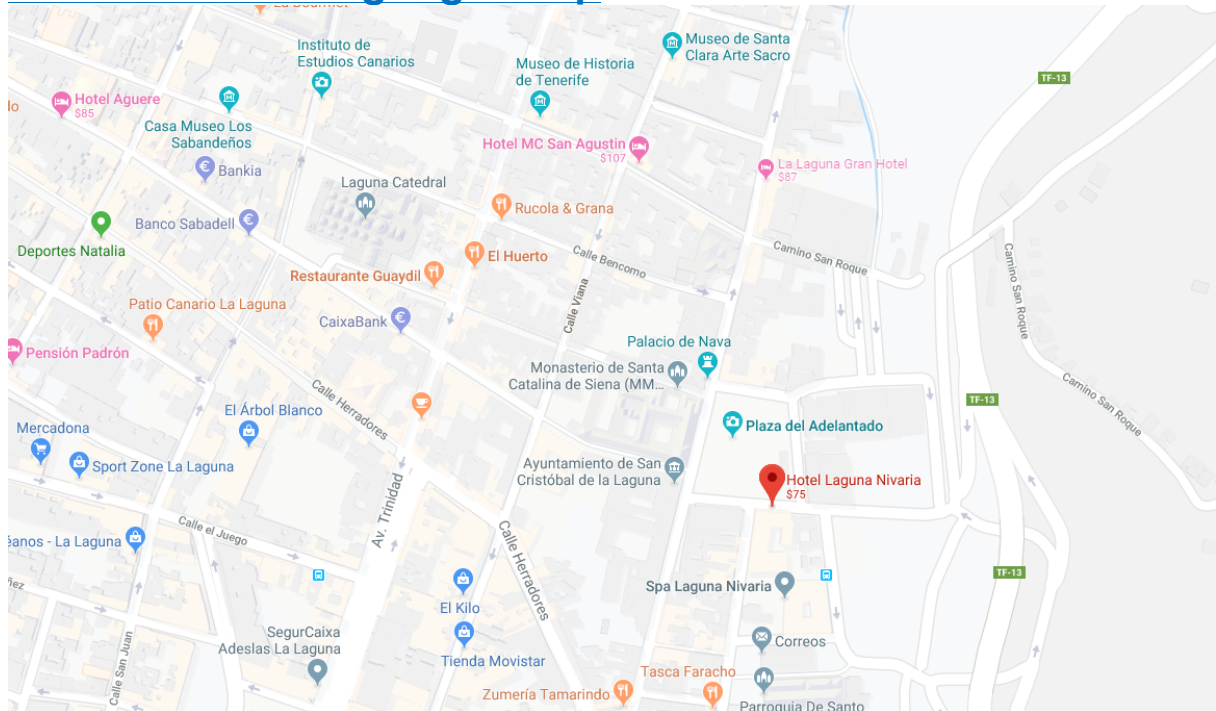
The lecture venue is located in the Faculty of Medicine of the University of La Laguna. It is located at approximately 2 km from the Nibaria hotel. The organization provides bus transfers from “Plaza del Adelantado” (in front of the hotel Nibaria) to the venue.

The main scientific program will provide four special sessions on; 1st *Origins of Hydrocephalus and Its Outcomes in the Present*, with Prof. Victor Garcia, PhD, MD, and Prof David D. Limbrick, Jr., PhD, MD as invited speakers. 2nd *Transitional Care and Social Integration* with Ampar Cuxart Fina, PhD, MD “Spina bifida beyond childhood”. 3rd *Physiopathology in Hydrocephalus and Brain Development*, with Prof. Esteban Rodriguez, PhD, MD and Prof. Gundela Meyer PhD, MD. 4th *Innovative Device Technology, Investigative Platforms and the Evolving Regulatory Landscape*.

Details and start times of the pre-meetings and the scientific sessions are in the program.

Nivaria Hotel and “Plaza del Adelantado”

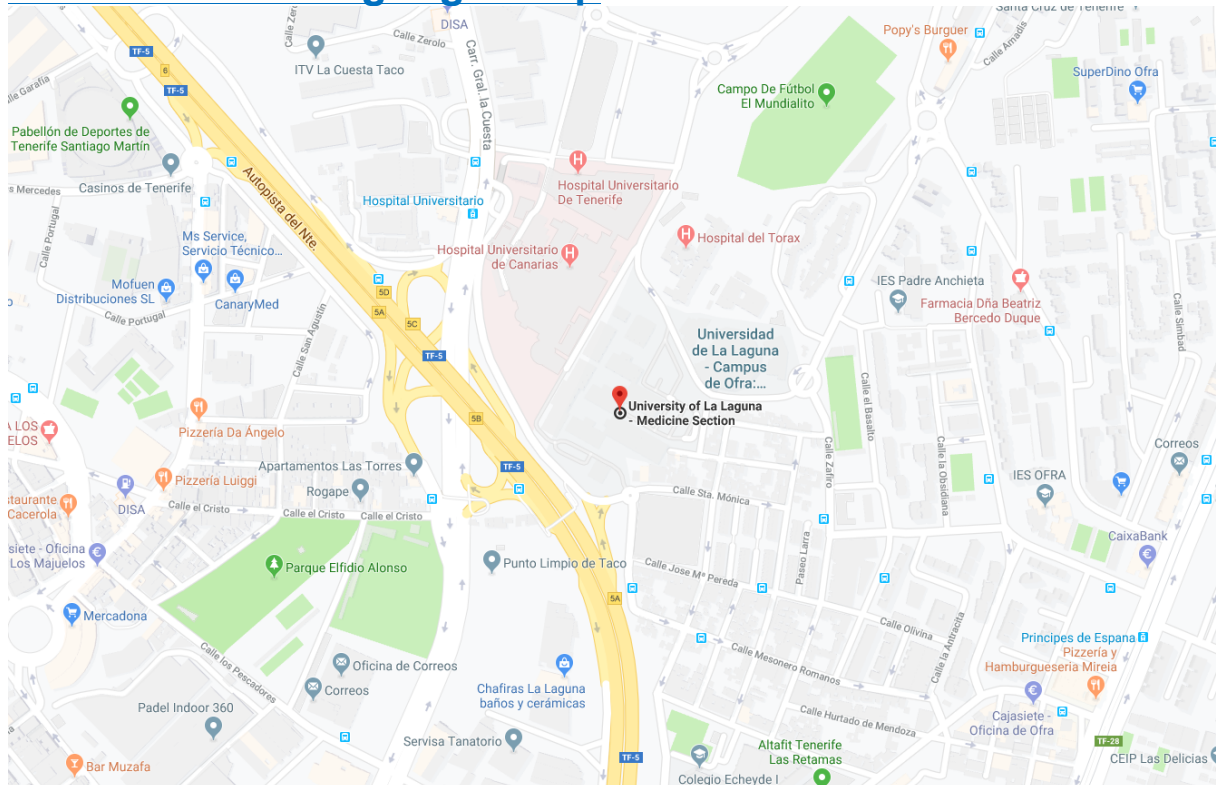
[Click here to use google map](#)



The bus transfers will pick up attendees in Plaza del Adelantado

Venue: University of La Laguna -Medicine Section-

[Click here to use google map](#)



La Laguna Map with location of the venue

Schedule of Events /Outings during the SRHSB Meeting in La Laguna

Wednesday June 26th 2019

- 12:00-17:00 **Registration at University of La Laguna -Medicine Section-**
- 13:00-17:00 **Premeetings:** Scientific Experimental Hydrocephalus and Clinical Cases at **University of La Laguna -Medicine Section- Lecture Rooms 1 and 2**
- 18:00-19:00 **La Laguna Guided Tour**
- 19:00-21:00 **Welcome Reception**

Thursday June 27th 2019

- 08:00-13:00 **Registration at University of La Laguna -Medicine Section-**
- 08:45-09:00 **Opening Remarks:** Agustin Castaneyra-Perdomo and Leandro Castaneyra-Ruiz
- 09:00-10:20 **Symposium: Origins of Hydrocephalus and Its Outcomes in the Present.** Introduced by John Pickard.
- 9:00-9:40 **Victor Garcia, MD, PhD** “Hydrocephalus; From Hippocrates to Dandy and to present. Is the future clear?”
- 9:40-10:20 **David D. Limbrick, MD, PhD** “Current Treatments for Hydrocephalus”
- 10:20-10:35 Break
- 10:35-12:05 **Session 1: Clinical Aspects of Hydrocephalus**

Moderators: **David D. Limbrick, MD, PhD & Victor Garcia, MD, PhD**

- 10:35-10:50 **Liberto Brage-Martin** “Current state of neuroendoscopy for the treatment of hydrocephalus”
- 10:50-11:05 **Pat McAllister** “Correlations between brain stiffness, headaches and ventricular size using magnetic resonance elastography in children with hydrocephalus”
- 11:05-11:20 **Afroditi Lalou** “Global cerebral autoregulation, resistance to CSF outflow and cerebrovascular burden in Normal Pressure Hydrocephalus”
- 11:20-11:35 **Afroditi Lalou** “Principles of testing hydrocephalus shunts *in vivo* using infusion test” Ok
- 11:35-11:50 **Alexis Joannides** “Epidemiology of cerebrospinal fluid shunt surgery in the UK and Ireland”
- 12:05-12:35 **Society Photograph**
- 12:35-14:00 **Lunch and SRHSB Annual General Meeting**

- 15:00-21:00 SRHSB **Retreat with Dinner** (Trip to volcano Teide)

Friday, June 28, 2019

- 08:00-18:00 **Registration at University of La Laguna -Medicine Section-**
- 08:00-08:45 **Special Lecture: Transitional Care and Social Integration**
Ampar Cuxart MD, PhD “Spina bifida beyond childhood” introduced by Antonio J Jimenez.

- 08:45-10:15 **Session 2: Spina Bifida a Life Style**

Moderators: **Ampar Cuxart MD, PhD** and **Andy Wynd MBE, MlOD**

- 08:45-09:00 **Kirstein Verity** “Psychology Adding Value Through Partnership (PAVTP): Hydrocephalus screening - a mental health screening and intervention pathway for children and young people with hydrocephalus (CYPwH)”
- 09:00-09:15 **Trudi Edginton** “The impact of ageing on neurocognitive and emotional processing in hydrocephalus”
- 09:15-09:30 **Indre Bakaniene** “Functional aspects of spina bifida in childhood: a cross-sectional analysis of a nationally represented sample”
- 09:30-09:45 **Rahul Deo Sharma** “Quality of life (QOL) in children with spina bifida (SB) in South East Asia need not to be gloomy as generally believed: a short report”
- 10:15-10:30 **Break**
- 10:30-11:30 **Session 3: Basic Aspects of Hydrocephalus and Spina Bifida**

Moderators: **Hazel Jones MD, PhD** and **Ian Pople MD, PhD**

- 10:30-10:45 **Pat McAllister** “Ventriculoperitoneal shunting and endoscopic third ventriculostomy with choroid plexus cauterization in a piglet model of infantile communicating hydrocephalus”
- 10:45-11:00 **Jaleel Miyan** “The H-Tx rat has heritable methylation error affecting all tissues including the germline which underlies the congenital hydrocephalus of its offspring and is corrected by folate supplementation”
- 11:00-11:15 **Emilia M. Carmona-Calero** “IV ventricle choroid plexus study in several cases of hydrocephalus human fetuses”
- 11:15-11:30 **Agustín Castañeyra-Perdomo** “Role of AQP4 in brain barriers and functional interfaces during systemic hypertension and ventriculomegaly”
- 11:30-11:45 **August A Allocco** “Exome sequencing establishes dysregulation of neural progenitor cell fate as a critical mechanism in human congenital hydrocephalus”
- 11:45-13:00 **Lunch**

- 13:00-14:30 **Special Symposium: Physiopathology in Hydrocephalus and Brain Development** introduced by Pat McAllister.
- 13:00-13:45 **Esteban Rodríguez MD, PhD.** “Physiopathology of foetal onset hydrocephalus”
- 13:45-14:30 **Gundela Meyer MD, PhD.** “How does the choroid plexus influence the development of the human cerebral cortex”

- 14:30-15:45 **Session 4: Hydrocephalus; a cytological disease**

Moderators: **Esteban Rodríguez MD, PhD** and **Gundela Meyer MD, PhD**

- 14:30-14:45 **Funmilayo Olopade** “The progression of kaolin-induced hydrocephalus light and electron microscopic features in rats”
- 14:45-15:00 **María García-Bonilla** “Long-time effects of an experimental therapy with mesenchymal stem cells in congenital hydrocephalus”
- 15:00-15:15 **Esteban Rodríguez** “Grafting of subcommissural organ cells improves neurological deficits in the hydrocephalic brain”
- 15:15-15:30 **Patricia Páez-González** “iPSC differentiation into ependymal progenitors to treat ventricular damage during hydrocephalus”
- 15:30-15:45 **Omowumi Femi-Akinlosotu** “Temporal changes in the brain in neonatal hydrocephalic mice: structural and neurobehavioral findings”

- 15:30-16:00 **Break**

- 16:00-17:15 **Session 5: Hydrocephalus as an Inflammatory Disease**

Moderators: **Jaleel Miyan PhD** and **Antonio J Jiménez PhD**

- 16:00-16:15 **Betsaida Ojeda-Pérez** “Neuropathological events in an animal model resembling human fetal post-hemorrhagic hydrocephalus”
- 16:15-16:30 **Leandro Castaneyra-Ruiz** “Post-infectious and post-hemorrhagic hydrocephalus may have a common pathway that triggers ventricular zone disruption”
- 16:30-16:45 **Funmilayo Olopade** “Persistent ventriculomegaly in hydrocephalic rat brains: neuroinflammatory response”
- 16:45 -17:00 **Albert Isaacs** “Quantification and differentiation of periventricular white matter injury in post-hemorrhagic hydrocephalus using diffusion basis spectrum imaging”
- 17:00 -17:15 **Jason K. Karimy** “A role for inflammation: TLR-4-mediated cerebrospinal fluid hypersecretion in post- hemorrhagic and post-infectious hydrocephalus”

- 17:15-18:15 **Session 6: Spina Bifida: Clinical Aspects**

- Moderators: **Reinhold Cremer MD, PhD** and **Marcus Pauly MD, PhD**

- 17:15-17: 30 **Rahul Deo Sharma** “Urinary incontinence is a major factor in determining the quality of life in spina bifida patients”
- 17: 30-17:45 **Rahul Deo Sharma** “Factors affecting outcomes of bladder augmentation surgery in spina bifida patients”

SRHSB 63rd Annual Meeting. Program and Abstracts

- 17:45-18:00 **Takayuki Inagaki** “Management of feet skin breakdown in spinal lipoma patient”
- 18:00-18:15 **Shazia Yasmin** “A sociological study of mothers’ knowledge towards hydrocephalus and spina bifida in The Children Hospital, Lahore, Pakistan”
- 19:30-11:30 **Conference Banquet**

Saturday, June 29, 2019

- 09:00-10:00 **Session 7: Innovative Device Technology, Investigative Platforms and the Evolving Regulatory Landscape**

Moderators: **John Pickard MD, PhD** and **Roger Byston MD, PhD**

- 09:00-09:20 **John Pickard MD, PhD** “Barriers to innovation in the care of patients with CSF disorders”
- 09:20-09:40 **Marcelo Galarza MD, PhD** “Bench testing: mathematical modeling of shunt designs; clinical results of the parametric catheters”
- 09:40-10:00 **Pat McAllister PhD** “In vivo testing of surgical and diagnostic devices for hydrocephalus”
- 10:00-10:20 **Roger Bayston MD, PhD** “Regulatory issues for approval of combination devices for shunts and EVD”
- 10:20-10:40 **Michael G. Muhonen, MD** “Have we created a smart shunt? Early clinical experience with the ReFlow shunt disoccluding device (Anuncia, Inc.) and the Aura (Branchpoint, Inc.) wireless intracranial pressure monitor”.
- 10:40-10:50 **Open Discussion**
- 10:50-11:00 **Break**
- 11:00-12:00 **SRHSB award presentations and closing remarks**