EXPERIMENTAL HYDROCEPHALUS PROGRAM 2017

The 2017 SRHSB pre-meeting on Experimental Hydrocephalus will be held on Wednesday 21st June 2017 from 13.00 -17.00 h. We will be meeting at the BJC Institute of Health (interactive Google map https://www.google.com/maps/d/viewer?mid=13J74vFD0A0vl3jM5eeYzP9zLKV4&ll=38.63532346793801,-90.26281892827228&z=18), Washington University School of Medicine, 425 S Euclid Ave, St. Louis, MO 63110, USA, **8th floor conference room A/B.**

Chair: Hazel Jones

Program

1. **13.00-13.20:**

   Expression of AQP1 and Na,K-ATPase in the choroid plexuses and ciliary processes of hypertensive rats

   Agustin Castañeyra-Perdomo[1], Emilia M Carmona-Calero[1], Luis G Hernandez-Abad[2], Leandro Castañeyra-Ruiz[3], Ibrahim Gonzalez-Marrero[1].

   [1] Unidad de Anatomía, Departamento de Ciencias Médicas Básica, Facultad de Medicina, Universidad de La Laguna, La Laguna, Tenerife. Spain

   [2] Instituto de Investigación y Ciencias, Puerto del Rosario, Fuerteventura, Spain

   [3] Department of Neurosurgery, School of Medicine, Washington, University, St. Louis, MO, USA

2. **13.20-13:40:**

   Role of primary cilia in the developing chick

   Takayuki Inagaki and Gary Schoenwolf

   Neurosurgery at Ibaraki Children's Hospital, Japan and Department of Developmental biology and Anatomy at University of Utah, Utah USA.

3. **13:40-14.00:**

   Modeling Pressure-Induced Neuronal Injury *ex vivo*.

   Michael E. Smith[1] Ramin Eskandari[1,2]

   Departments of Neurosurgery[1] and Pediatrics[2] Medical University of South Carolina, Charleston, South Carolina, USA.

4. **14.00-14:20 Role of Ventricular Zone Junctional Biology in Posthemorrhagic Hydrocephalus**

   Leandro Castaneyra-Ruiz [1] ,* Diego M. Morales [1], Jian Xu [2], Steven L. Brody [2], James P. (Pat) McAllister[1], David D. Limbrick, Jr.[1]

   1 Washington University School of Medicine Pediatric Neurosurgery 425 Euclid, Campus Box 8057 St. Louis, MO, USA

   2 Washington University Division of Biology and Biomedical Sciences Campus Box 822 660 S. Euclid Ave. St. Louis, MO, USA

5. **14:20-14:40 Developing the basis for new brain ventricular repair**

   Luis Manuel Rodriguez-Perez, *Patricia Paez-Gonzalez*,

   Department of Cell Biology, University of Malaga, Spain

   14:40 -15.20: Coffee /Tea break

6. **15.20-15.40**

Blood-derived lysophosphatidic acid signaling alters mitotic spindle orientation and subsequent cell fates of neuroprogenitor cells in post-hemorrhagic hydrocephalus.

Yun C. Yung, Kyoko Noguchi,

Whitney McDonald, and Jerold Chun. Sanford Burnham Prebys Medical Discovery Institute in La Jolla, Ca, USA

7. **15:40 -16.00**

   Evaluation of the effects of bone marrow-derived mesenchymal stem cells transplantation in congenital hydrocephalus

   Maria Garcia-Bonilla, Patricia Paez-Gonzalez, Antonio J Jimenez,

   University of Malaga, Spain.

8. **16.00- 16:15**

   The Beginnings of Experimental Hydrocephalus

   Shawn M. Vuong and Francesco T. Mangano

   Division of Pediatric Neurosurgery, Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio, USA

9. **16:15- 16:30**

   Applications and Considerations of CRISPR/Cas9 Genome-Editing in Hydrocephalus Research

   A. Scott Emmert, June Goto, and Francesco T. Mangano

   Division of Pediatric Neurosurgery, Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio, USA

10. **16:30- 16:45**

    The Power of Mouse Genetics in Neonatal Hydrocephalus Research

    June Goto and Francesco T. Mangano

    Division of Pediatric Neurosurgery, Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio, USA

11. **16:45- 17:00**

    Addressing Clinical Implications of Ependymal Cilia in Hydrocephalus Condition

    Zakia Abdelhamed and Francesco T. Mangano

    Division of Pediatric Neurosurgery, Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio, USA

17.00 end