

Reflections on SRHSB Columbus 2025 Conference

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Over three days, surgeons, scientists, engineers, and families came together with one shared purpose: to advance care for hydrocephalus and spina bifida. As a doctoral student working in pediatric hydrocephalus, this conference was a meaningful opportunity to learn from leaders in neurosurgery, biomedical engineering, basic science, and patient advocacy. The meeting's theme, "Bridging Innovation and Collaboration: Advancing Care in Hydrocephalus and Spina Bifida," set the tone for a multidisciplinary event focused on improving patient outcomes through scientific discovery, clinical innovation, and community partnership. One of the most memorable moments was the opening keynote by Dr. Ian Pople, who shared clinical experiences from his work in Doha. His talk blended medicine with culture, describing how clinical care, community connection, and respect for local customs shaped his practice. It was a unique reminder that hydrocephalus care is not only technical but also personal and deeply influenced by the people and communities we serve.

A highlight for me was the engineering-focused sessions, particularly the presentations by Dr. Peter Chiarelli, who showed how modern engineering tools are being applied to better understand hydrocephalus and guide patient care. His talk reinforced the value of benchtop modeling, experimental design, and translational engineering in solving clinical challenges. The conference also featured insightful presentations from researchers such as Dr. June Goto and Dr. Bonnie Blazer-Yost. Their work in choroid plexus physiology and therapeutic development highlighted an important point: the future of hydrocephalus treatment may not come solely from surgery or device design, but also from deeper biological understanding and new therapeutic pathways.

A particularly powerful talk came from patient advocate Dianne Kean, a parent advocate. Her talk was a powerful reminder that behind every dataset, catheter, or MRI scan is a person and a family who are living this journey every day. It was an emotional reminder for me as a researcher that behind every experimental model is a family looking for hope and education that we, as scientists, clinicians, and engineers, can provide through our work. Her words made the purpose behind the research unmistakably clear. As the meeting concluded, Dr. Chau shared research priorities developed in collaboration with the Hydrocephalus Association, emphasizing the need for clinicians, scientists, and engineers to work together toward shared goals. One final joyful moment came when the Welburn lecturer Mr. Joe Blundo helped settle a long-standing debate in the field: is it "hydrocephalus" or "hydro-kephalus?". After decades of discussion, he confirmed definitively that it is hydrocephalus, and the room erupted in laughter.

During the closing notes to the conference, I found myself thinking about the words Dr. Marion "Jack" Walker once told me: "It's all just vocabulary." When I first heard it, I did not realize how much weight those words carried. Now I do. He meant that the letters after our names, the scientific tools we use, and the paths we take might all look different, but the purpose is the same. We are all trying to give children and families a better future. In that room, surrounded by surgeons, scientists, engineers, parents, and advocates, his words finally made sense in a way they never had before. From its earliest days, SRHSB has united people who approach hydrocephalus and spina bifida from different perspectives, such as surgery, biology, engineering, and advocacy, all toward the same mission. That collaboration is what continues to push research and care forward.