



HYDROCEPHALUS IN MICHIGAN

HYDROCEPHALUS IS A CHRONIC NEUROLOGICAL CONDITION THAT HAS NO CURE. ANYONE AT ANY TIME CAN DEVELOP HYDROCEPHALUS, FROM INFANTS TO SENIORS. THE ONLY TREATMENT REQUIRES BRAIN SURGERY.



CONTRIBUTIONS TOWARD A BETTER TOMORROW

WAYNE STATE UNIVERSITY

2018 Hydrocephalus Association **\$50,000**
Development of shunt catheters that resist occlusion. Principal Investigator: Harris, Carolyn

2018 Hydrocephalus Association **\$1,500**
Using Super Glue to Strengthen Current Shunt. Travel Award. Principal Investigator: Horbatiuk, Jeff

2019 NIH NIBIB \$317,314 and NINDS **\$408,000**
3D neonatal Photoacoustic Tomography (3D-nPAT) to detect Hypoxic-Ischemic brain injury in preterm neonates.

2020 Hydrocephalus Association **\$24,877**
Understanding the differences in how immune cells in the brain react after a shunt is placed. Principal Investigator: Harris, Carolyn

2020 Hydrocephalus Association **\$1,500**
The Flow Limiting Operator: FLO. Travel Award. Principal Investigator: Horbatiuk, Jeff

2020 NIH NINDS **\$474,352**
Investigating the cellular mechanisms leading to repetitive shunt failure in pediatric hydrocephalus. Principal Investigator: Harris, Carolyn

2022 Hydrocephalus Association **\$1,500**
Squire: A Multi-Dye In Vivo Model for Real-Time Neuroinflammation in Hydrocephalus. Travel Award. Principal Investigator: Horbatiuk, Jeff

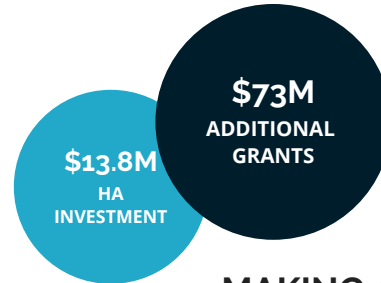
2022 HA/Rudi Schulte Research Institute **\$100,000**
Principal Investigator: Harris, Carolyn

2022 Hydrocephalus Association Innovator Award
Principal Investigator: Harris, Carolyn

2023 DOD CDMRP **\$307,000**
Study shunt design to lower obstruction rates. Principal Investigator: Harris, Carolyn

UNIVERSITY OF MICHIGAN

2020 Hydrocephalus Association **\$49,890**
The Role of Carbonic Anhydrase to Prevent the Development of Hydrocephalus after a Stroke. Principal Investigator: Pandey, Aditya



MAKING AN IMPACT

The Big Picture

- 2 Clinical Research Networks
- 1 Basic & Translational Research Network
- 2 Biobanks
- 1 Hydrocephalus Patient-Powered Registry
- 36% Decrease in Shunt Infection Rates
- 11 Preclinical Drug Therapies in testing
- 1 New Patent for a Drug Target
- 1 FDA Investigational New Drug Application



DETROIT

WALK TO END HYDROCEPHALUS

Veterans Memorial Park, St. Clair Shores,
Aug 24, 2024

hydroassoc.org/detroitwalk

COMMUNITY SUPPORT GROUPS

- Detroit Community Network
- State-wide Online Facebook Group
- One-on-one Peer Support Volunteers



CONTRIBUTIONS TOWARD A CURE

UNIVERSITY OF MICHIGAN AT ANN ARBOR

2021 NIH NINDS **\$1,070,438**
EXPERIMENTAL CEREBRAL HEMORRHAGE:
MECHANISMS AND THERAPIES. PRINCIPAL
INVESTIGATOR: XI, GUOHUA

HENRY FORD HEALTH NEURODEGENERATIVE & NEUROINFLAMMATORY DISORDERS CENTER

2021-2026 NIH NINDS GRANT **\$14,000,000**
PLACEBO-CONTROLLED EFFECTIVENESS OF
IDIOPATHIC NORMAL PRESSURE HYDROCEPHALUS
SHUNTING