



# HYDROCEPHALUS IN ILLINOIS

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

### UNIVERSITY OF CHICAGO

2015 Hydrocephalus Association **\$49,785**  
A Molecular Shunt for Curing Hydrocephalus. Principal Investigator: Linninger, Andreas

2021 NIH NIBIB **\$339,292**  
Transfontanelle photoacoustic imaging to study the pathophysiology of neonatal brain injury. Principal Investigator: Avanaki, Kamran

### NORTHWESTERN UNIVERSITY

2020 NIH NINDS **\$45,520**  
A Predictive Model for Assessment of CSF Flow Through Ventricular Shunts. Principal Investigator: Arafa, Hany Mohamed

2021 NIH NINDS **\$42,104**  
A Predictive Model for Assessment of CSF Flow Through Ventricular Shunts. Principal Investigator: Arafa, Hany Mohamed

### NORTHWESTERN UNIVERSITY AT CHICAGO

2020 NIH NIGMS **\$329,248**  
Developmental Dynamics of Ciliated Epithelia. Principal Investigator: Mitchell, Brian Joseph

### UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

2019 NIH NICHD **\$182,940**  
Measuring CSF shunt flow with MRI using flow enhancement of signal intensity (Shunt-FENSI). Principal Investigator: Sutton, Bradley P.

### RHAEOS, INC.

2021 NIH NINDS **\$1,000,000**  
Noninvasive, wireless thermal sensors for the quantitative monitoring of ventricular shunt function in patients with hydrocephalus. Principal Investigator: Somera, Anna Lisa

### RUSH UNIVERSITY

2021-2026 NIH NINDS Grant **\$14,000,000**  
Placebo-Controlled Effectiveness of Idiopathic Normal Pressure Hydrocephalus Shunting, Principle Investigator: Sani Sepehir

**\$13.8M**  
HA  
INVESTMENT

**\$73M**  
ADDITIONAL  
GRANTS

## 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



## CHICAGO

### WALK TO END HYDROCEPHALUS

Forest Preserve of Cook County- Miller Meadow  
2024 Date TBD

[hydroassoc.org/chicagowalk](http://hydroassoc.org/chicagowalk)

## COMMUNITY SUPPORT GROUP

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