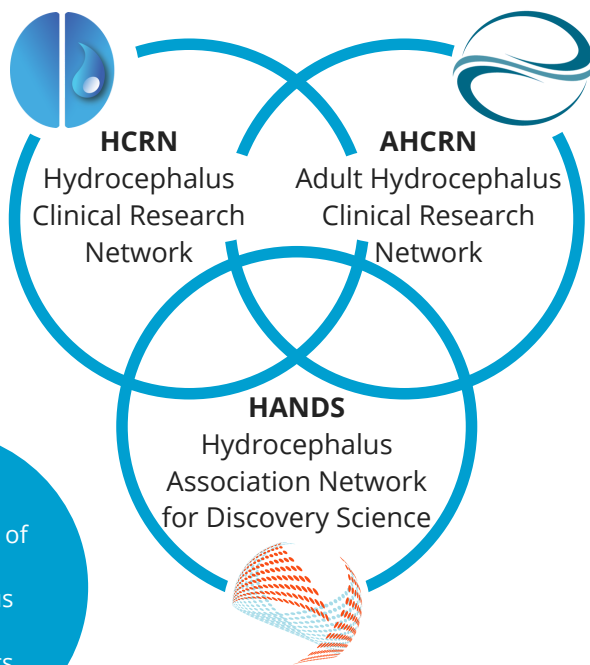


# HYDROCEPHALUS IN MASSACHUSETTS

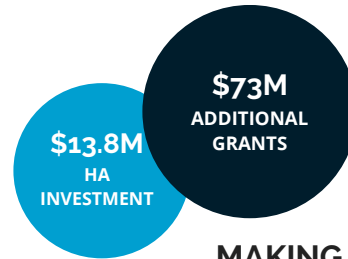
HYDROCEPHALUS IS A CHRONIC NEUROLOGICAL CONDITION THAT HAS NO CURE. ANYONE AT ANY TIME CAN DEVELOP HYDROCEPHALUS, FROM INFANTS TO SENIORS. THE ONLY TREATMENT REQUIRES BRAIN SURGERY.



## TOGETHER TOWARDS A CURE



**PAGE 2**  
for a full listing of  
funded  
hydrocephalus  
research in  
Massachusetts



## 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

## WALK TO END HYDROCEPHALUS

Medford, DCR Torbert MacDonald Park  
2024 Date TBD  
[hydroassoc.org/gnewalk](http://hydroassoc.org/gnewalk)



## COMMUNITY SUPPORT GROUPS

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



# CONTRIBUTIONS TOWARD A CURE

## **BOSTON CHILDREN'S HOSPITAL**

2010 Hydrocephalus Association **\$110,000**  
Determine the role of pro-angiogenic factor VEGF in hydrocephalus. Principal Investigator: Shim, Joon

2018 Hydrocephalus Association **\$297,000**  
Determine how a brain bleed changes choroid plexus function and brain development. Lehtinen, Maria

2020 NIH NINDS **\$472,004**  
Improving the Safety and Efficacy of Intraventricular Neurosurgery via Robotics. Principal Investigator: Dupont, Pierre E

2021 NIH NICHD **\$536,941**  
Improving infant hydrocephalus outcomes in Uganda: Predicting developmental outcomes and identifying patients at risk for early treatment failure after ETV/CPC. Principal Investigator: Lin, Pei-Yi and Warf, Benjamin

2022 Hydrocephalus Association **\$1,500**  
Brain monitoring to predict surgical treatment outcome for neonatal hydrocephalus. Travel Award. Principal Investigator: Rajaram, Ajay

2022 Hydrocephalus Association Innovator Award  
Principal Investigator: Lehtinen, Maria

## **BETH ISRAEL DEACONESS MEDICAL CENTER / HARVARD MEDICAL SCHOOL**

2017 Hydrocephalus Association **\$50,000**  
Identify markers of delayed hydrocephalus following subarachnoid hemorrhage (SAH). Principal Investigator: Fillippidis, Aristotelis

## **MASSACHUSETTS GENERAL HOSPITAL**

2021 NIH NINDS **\$200,880**  
Apathy and Depression following Intracerebral Hemorrhage. Principal Investigator: Biffi, Alessandro

## **MASSACHUSETTS GENERAL HOSPITAL CON'T**

2021 NIH NICHD **\$510,303**  
Portable MRI Technology for Neonatal Care. Principal Investigator: Cooley, Clarissa Zimmerman

2021 NIH NINDS **\$462,000**  
Development of a multi-modal MRI methodology to map paravascular clearance linked to astrocyte dysfunction in fetal-onset hydrocephalus. Principal Investigator: Yu, Xin

## **UNIV OF MASSACHUSETTS MED SCH WORCESTER**

2020 NIH NINDS **\$561,865**  
Genetics of Adult Idiopathic Hydrocephalus. Principal Investigator: Johnson, Mark D.

2021 NIH NINDS **\$31,969**  
Genetics of Adult Idiopathic Hydrocephalus. Principal Investigator: Johnson, Mark D.

2021 NIH NINDS **\$638,592**  
Genetics of Adult Idiopathic Hydrocephalus. Principal Investigator: Johnson, Mark D.

2021 NIH NIGMS **\$636,066**  
Flagellar Motility and Assembly. Principal Investigator: Witman, George B.