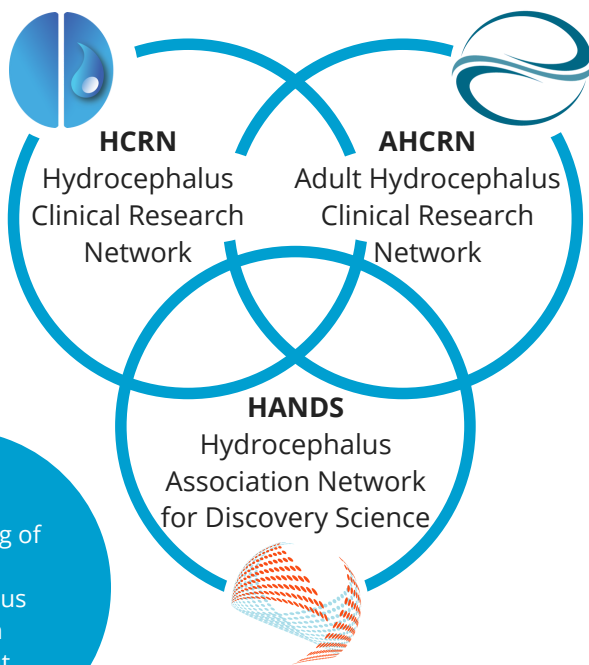


# HYDROCEPHALUS IN CONNECTICUT

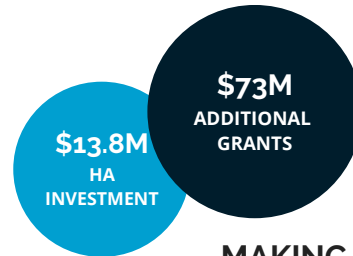
HYDROCEPHALUS IS A CHRONIC NEUROLOGICAL CONDITION THAT HAS NO CURE. ANYONE AT ANY TIME CAN DEVELOP HYDROCEPHALUS, FROM INFANTS TO SENIORS. THE ONLY TREATMENT REQUIRES BRAIN SURGERY.



## TOGETHER TOWARDS A CURE



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



## 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



## COMMUNITY SUPPORT GROUP

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



# CONTRIBUTIONS TOWARD A CURE

## YALE SCHOOL OF MEDICINE

2016 Hydrocephalus Association **\$50,000**  
Understand the role of the Choroid Plexus Epithelium (CPE) in posthemorrhagic hydrocephalus (PHH). Principal Investigator: Kahle, Kristopher

2017 Hydrocephalus Association **\$50,000**  
Understand the role of the Choroid Plexus Epithelium (CPE) in postinfectious hydrocephalus. Principal Investigator: Kahle, Kristopher

2018 Hydrocephalus Association **\$294,312.98**  
Identify and test new drug targets to prevent postinfectious hydrocephalus. Principal Investigator: Kahle, Kristopher

2018-2023 NIH NINDS **\$1,832,030**  
Modulation of choroid plexus immuno-secretory function to restore cerebrospinal fluid homeostasis in hydrocephalus. Principal Investigator: Kahle, Kristopher (follow on from HA funding)

2021 NIH NINDS **\$486,258**  
Human genetics and molecular mechanisms of congenital hydrocephalus. Principal Investigator: Kahle, Kristopher

2021 NIH NICHD **\$30,891**  
Role of TRIM71 in neural stem cell biology and congenital hydrocephalus. Principal Investigator: Phan, Duy

2021 Hydrocephalus Association **\$1,500**  
Genes involved in DNA packaging and reading implicated in congenital hydrocephalus development. Travel Award. Principal Investigator: Mekbib, Kedous

2022 NIH NINDS **\$2,794,767**  
Analysis of Congenital Hydrocephalus Genes In Xenopus. Principal Investigator: Deniz, Engin

## YALE UNIVERSITY

2019 Hydrocephalus Association **\$49,999**  
Understanding the role of cilia in post-traumatic hydrocephalus. Principal Investigator: Deniz, Engin

## YALE UNIVERSITY CON'T

2020 NIH NINDS **\$30,375**  
The Role of Pten in Congenital Hydrocephalus. Principal Investigator: Despenza, Tyrone

2020 Hydrocephalus Association **\$1,500**  
HA – A role for inflammation: TLR-4-mediated cerebrospinal fluid hypersecretion in post-hemorrhagic and post-infectious hydrocephalus. Travel Award. Principal Investigator: Karimy, Jason

2020-2022 NIH NINDS **\$432,988**  
Xenopus as a Model System for Hydrocephaly and Ependymal Ciliogenesis. Principal Investigator: Deniz, Engin (follow on from HA funding)

2021 NIH NCCIH **\$737,021**  
Lymphatics-Glymphatics in CNS Fluid Homeostasis. Principal Investigator: Benveniste, Helene

## UNIVERSITY OF CONNECTICUT SCH OF MED/DNT

2020 NIH NIGMS **\$407,224**  
Molecular Analysis of Flagellar Dynein Function. Principal Investigator: King, Stephen

## UNIVERSITY OF CONNECTICUT

2017 Hydrocephalus Association **\$75,000**  
Post-infectious hydrocephalus: Developmental sensitivities based on stem cell niche and ependymal lining status. Principal Investigator: Conover, Joanne

2020-2025 NIH NINDS **\$1,760,940**  
Disease Mechanisms of Prenatal and Pediatric Acquired Hydrocephalus. Principal Investigator: Conover, Joanne (follow on from HA funding)

2021 HA/Rudi Schulte Research Institute **\$50,000**  
Single-cell multiplex characterization of the inflammatory response in congenital post-infectious hydrocephalus. Principal Investigator: Conover, Joanne

2022 Hydrocephalus Assoc Travel Award **\$1,500**  
Effect of Post-Infectious Hydrocephalus on the Developing Ventricular-Subventricular Zone Stem Cell Niche. Principal Investigator: Herman, Juliana