

## Joint Call for Proposals Awards 12 Development Projects for Medical Device and Health Technology

Philadelphia, PA – December 6, 2019 – Penn Health-Tech has selected the awardees for its annual Pilot Award Program for the 2020 funding year. Those receiving the Pilot Award, their proposal title, and the institutions with which they are affiliated are listed at the end of this announcement. Additionally, we are pleased to spotlight the Medical Device Accelerator Program Awardees, which were also selected by the Joint Call for Proposals Project Selection Committee.

“2019 has been a tremendous year for the Penn Health-Tech,” said Executive Director, Victoria Berenholz. “We received 84 applications, our highest number to date, and our interdisciplinary applicants represent Penn Engineering, Penn Medicine, Penn Nursing, Penn Veterinary Medicine and the Children’s Hospital of Philadelphia (CHOP). We are very excited about funding and supporting these technologies. We see our Pilot Awardees as a reflection of the excellent early stage innovation in medical technology across the Penn ecosystem.”

The Pilot Award Program is made possible by support from Penn Health-Tech leadership from Penn Medicine, Penn Engineering, and the Vice Provost for Research, along with our collaborations with the Penn Center for Musculoskeletal Disorders, Penn Center for Precision Medicine, and CHOP.

### **ABOUT PENN HEALTH-TECH: CENTER FOR HEALTH, DEVICES AND TECHNOLOGY**

Launched in May 2017, Penn Health-Tech was established by the [Perelman School of Medicine](#), the [School of Engineering and Applied Science](#) and the [Office of the Vice Provost of Research](#). It is also sponsored in part by a generous gift from Penn alum Jonathan Brassington, whose passion to encourage interdisciplinary investigative projects sparked the center’s creation. Serving the local rich ecosystem of institutes and

centers, Penn Health-Tech expands Penn's biomedical technology pipeline by uniting Penn Medicine, Penn Engineering, and beyond to create transformative technologies that address pressing healthcare needs. Penn Health-Tech also serves as an important link to regional partners such as the University of Pennsylvania Health System and [The Children's Hospital of Philadelphia](#).

#### **ABOUT THE MEDICAL DEVICE ACCELERATOR OF THE PENN MEDICINE CENTER FOR HEALTH CARE INNOVATION**

The Medical Device Accelerator, sponsored by the [Perelman School of Medicine](#) and [Penn Medicine Center for Health Care Innovation](#), in partnership with the [Penn Center for Innovation](#) and [Penn Health-Tech](#), empowers entrepreneurs, clinicians, and researchers at Penn Medicine to create and commercialize innovative medical devices to address unmet clinical needs, improve patient outcomes and reduce the cost of care. The program supports faculty and staff in transforming their "paper napkin drawing" to a final product ready for clinical use. We also partner with [PCI Ventures](#) to help participants make the transition from device to company after the program concludes.

#### **APPLICATIONS FOR THE 2019-2020 AWARDS**

Penn Health-Tech and the Penn Medicine [Center for Health Care Innovation](#) released its annual joint call for proposals targeting faculty from the University of Pennsylvania, Penn Medicine, and CHOP working on the development of medical device and health technology projects that address unmet clinical needs. Applications opened on Friday, July 12<sup>th</sup> and closed on Monday, September 23<sup>rd</sup>.

A list of previous recipients is available on the Penn Health-Tech website: <https://healthtech.upenn.edu/work-with-us/our-portfolio/>. For more information, contact Glory Durham, Associate Director, at [htec@pennmedicine.upenn.edu](mailto:htec@pennmedicine.upenn.edu)

#### ***2020 Penn Health-Tech Pilot Awardees***

An Augmented Reality Surgical Navigation System

Thomas Schaer, VMD. School of Veterinary Medicine

Stephen H. Lane, PhD. School of Engineering and Applied Science

Samir Mehta, MD. University of Pennsylvania Health System

Kathryn Wulster, VMD. School of Veterinary Medicine

#### Developing a Novel Surgical Platform for Predictive Analytics and Intelligent Guidance

Vivek Buch, MD. University of Pennsylvania Health System

Peter Madsen, MD, MBE. University of Pennsylvania Health System

Jianbo Shi, PhD. School of Engineering and Applied Science

James Gee, PhD. Perelman School of Medicine

#### Development of a Biomaterial Delivery System to Localize and Direct Stem Cells for Enhanced Cartilage Repair

Jay Patel, PhD. Perelman School of Medicine

Claudia Loebel, MD, PhD. School of Engineering and Applied Science

Robert Mauck, PhD. Perelman School of Medicine

Jason Burdick, PhD. School of Engineering and Applied Science

James Carey, MD, MPH. University of Pennsylvania Health System

#### Human Blinking Eye-On-A-Chip for In Vitro Testing of Contact Lenses

Dan Huh, PhD. School of Engineering and Applied Science

Vatinee Bunya, MD, MSCE. Perelman School of Medicine

#### Hypknowledge

Michael Perlis, PhD. Perelman School of Medicine

#### Improving Sensitivity of Liquid Biopsy

Haim Bau, PhD. School of Engineering and Applied Science

Erica Carpenter, PhD. School of Engineering and Applied Science

Charu Aggarwal, MD, MPH. Perelman School of Medicine

Jinzhao Song, PhD. School of Engineering and Applied Science

#### Microscopic Robot-Assisted Axon Regrowth for Rapid Repair of Peripheral Nerve Injuries

D. Kacy Cullen, PhD. Perelman School of Medicine

Marc Miskin, PhD. School of Engineering and Applied Science

Non-Invasive Detection of Elevated Intracranial Pressure with Near-Infrared Light

Wesley Baker, PhD. Children's Hospital of Philadelphia

Daniel Licht, MD. Children's Hospital of Philadelphia

Arjun Yodh, PhD. College of Arts and Science

Todd Kilbaugh, MD. Children's Hospital of Philadelphia

Tiffany Ko, PhD. Children's Hospital of Philadelphia

Remotely Adjustable Pulmonary Artery Band

Cynthia Sung, PhD. School of Engineering and Applied Science

Mark Fogel, MD, Perelman School of Medicine

Jonathan Chen, MD. Children's Hospital of Philadelphia

***2020 Medical Device Accelerator Program Awardees***

High-resolution, low cost, dry EEG sensors

Flavia Vitale, PhD, Perelman School of Medicine

Kathryn Davis, MD, MSTR Perelman School of Medicine

Nicolette Driscoll, PhD Candidate, School of Engineering and Applied Science

Minimally Invasive Stabilization of Fractured Ribs

Adam Shiroff, MD, Perelman School of Medicine

Stellate Ganglion Magnetic Stimulator

Timothy Markman, MD, University of Pennsylvania Health System