Penn Health-Tech Announces New Health Tech Accelerator Cohort

Philadelphia, July 23, 2021—Penn Health-Tech, the medical device and health technology center for the University of Pennsylvania, revealed its newest cohort taking part in its accelerator program.

“We are excited to support these outstanding interdisciplinary teams tackling important unmet clinical needs through novel technologies and innovative approaches,” said Dr. Katherine Reuther, Executive Director of Penn Health-Tech. “PHT and our accelerator program will provide expert commercialization guidance and funding to bring these solutions towards market, with the ultimate goal of benefiting human health and society.”

Since its inception in 2017, Penn Health-Tech has provided over $1.5 million in funding to over 45 project teams and early-stage startups. Its revamped Health Tech Accelerator program provides dedicated pilot funding and project support for early-stage technology development and commercialization to faculty and staff from the University of Pennsylvania, Penn Medicine, and the Children’s Hospital of Philadelphia (CHOP).

The program is co-sponsored by Penn Health-Tech and the Acceleration Lab at the Penn Medicine Center for Health Care Innovation. Participating teams receive:

- Funding
- Advising to support development and achieve proof of concept
- Access to industry experts and complementary programs to assist with engineering and design, manufacturing, regulatory guidance, quality systems, and marketing
“With support and mentorship from the Health Tech Accelerator, we are excited to further develop our technology and achieve business and regulatory milestones in medical device commercialization,” says Jun Beom Pyo from the project Smart Band-Aid.

The Penn Health-Tech Call for Proposals also included the option to apply for the Center for Innovation & Precision Dentistry-sponsored Innovation in Dental Medicine and Engineering to Advance Oral Health (IDEA) prize to advance oral health care innovation.

Selection for the 2021-22 cohort was highly competitive. Of the 83 submissions received, 11 projects have been selected.

**ALFA (A Lung for All) Ventilator**: Cost-efficient and compact novel mechanical ventilator  
Todd Kilbaugh, MD  
Jeremy Zuckerberg, MD  
Mohammed Shaik, MD, PhD  
Timothy Nelin, MD  
Keith Widmeier, BA, NEP, FP-C, CHSE

**Altaios**: A urine-based point-of-care testing platform  
Ankita Brahmaroutu, MD  
Efe Cudjoe, MD  
Suri Brahmaroutu  
Rebecca Anastos-Wallen, MD

**BABY SEAL**: Promoting intrinsic sucking in cleft palate infant bottle feeding  
Eugene Ko, DDS  
Shu Yang, PhD  
Mingtao Chen

**Developing CAR T cells**: A novel microfluidic device producing optimized CAR T cells within 24 hours  
Saba Ghassemi, PhD  
Roddy O’Connor, PhD

**Early Postpartum Hemorrhage Detection Software and Device**: Detecting a change in a mother’s circulating blood volume  
James Weimer, PhD  
Stefanie Modri MSN, RN, C-MNN  
Kim Trout, PhD, CNM  
Maggie Power MSN, CNM, WHNP
Eye-V Ultrasound: ultrasound images directly at the point-of-care
Shariq Raza, MD

Hemostatic chest tube: A non-invasive balloon providing hemostasis at the bedside
William J. Vernick, MD
Jacob Gutsche, MD
Jason Han, MD

Low-cost diagnostic platform: For COVID-19 and other emerging pathogens
Cesar de la Fuente, PhD

Needle-Free Injector: Precise drug delivery at variable depths
Daniel Mazzaferro, MD, MBA
Scott Bartlett, MD

Smart Band-Aid: Wound infection management hindering bacterial growth and disrupting biofilms
Mark Allen, PhD
Junn Beom Pyo
Iris Lee
Joe Kim, PhD

Smart Feeding Tube: To avoid life threatening airway complications
Barry Fuchs, MD, MS
Marek Swoboda, PhD
Michal Swoboda

Learn more about Penn Health-Tech’s Health Tech Accelerator and meet previous cohorts
https://healthtech.upenn.edu/portfolio/

About Penn Health-Tech
The Penn Center for Health, Devices and Technology (Penn Health-Tech) is an interdisciplinary, cross-campus initiative to advance world-class breakthroughs in novel devices and health technologies to solve unmet healthcare needs and improve patient care. Penn Health-Tech fosters a culture of collaboration and innovation across the University among faculty, postdoctoral fellows, and students.

About Penn Medicine Center for Health Care Innovation
The Center for Health Care Innovation (CHCI) facilitates the rapid, disciplined development, testing, and implementation of new strategies to reimagine health care delivery for dramatically better patient outcomes, value, and experience.

About the Center for Innovation and Precision Dentistry
The CiPD leverages engineering and computational approaches to discover new knowledge for disease mitigation, develop affordable diagnostics and therapies, and train future leaders to advance oral & craniofacial health care.