



University of Pittsburgh

THE PITTSBURGH REVOLUTION FUND FOR PATIENT-DRIVEN THERAPIES

- \$13 billion integrated healthcare system with 3 million patients
- Integrated electronic health record system
- \$150 million investment in data analytics

UPMC

- Ranked 5th in NIH funding
- Leader in Quantitative Systems Pharmacology (QSP)
- Personalized Medicine, Drug Discovery, Cancer, and Brain institutes
- Chancellor champions public-private partnerships

University of Pittsburgh



Pitt + CMU

- NIH Big Data Center for Causal Discovery
- Pittsburgh Supercomputing Center
- Joint PhD programs in Neuroscience and Computational Biology
- Extensive collaborative research

Carnegie Mellon University

- Top-ranking schools of Engineering and Computer Science
- Leadership in Robotics and Software
- Tech-art ecosystem fosters innovative design

Pittsburgh is leading the revolution in patient-driven therapies with integrated computational and experimental technologies.

The University of Pittsburgh, in partnership with Carnegie Mellon University, is leading a multi-institutional integration of biomedical, data, and clinical research and development, for which UPMC clinics both inspire and serve as test beds for innovation.

This close and collegial relationship between Pitt, CMU, and UPMC supports faster, more efficient development and cross-fertilization of new ideas.

To support these collaborative efforts, we have created The Pittsburgh Revolution Fund for Patient-Driven Therapies to support therapeutic development in all fields. Programs supported by the fund will all operate with the same three goals:

- To integrate patient-centered computational and experimental methods to more efficiently develop diagnostic, prognostic, and therapeutic innovations based on QSP
- To use living models of disease, derived from the patient's own cells, to test the safety and efficacy of selected therapeutic drugs
- To pioneer translational technologies and therapeutics to deliver practical outcomes and create a sustainable regional biotechnology industry

“No other closely-coupled, but wide-ranging multidisciplinary structure exists anywhere else in the U.S. at this point, reflecting, in part, the unusual situation and nature of the institutions in Pittsburgh and the close collaboration and direct support of UPMC.”

- 2015 External Advisory Board of the University of Pittsburgh Drug Discovery Institute, addressing the potential of Pittsburgh to lead the nation in the development of personalized therapeutics using Quantitative Systems Pharmacology (QSP)