

## 2020 University of Rochester UL1 Strategic Goals (addressing each Aim):

- 1. Expand our culture of translational *Research Without Walls*, both within the University of Rochester and across the CTSA:** We will develop and disseminate research tools and innovative workforce educational programs, and expand our extensive stakeholder engagement. Specific innovations and goals will include seamless data integration across the translational spectrum, expanded teleresearch capacity,<sup>96,141-143</sup> a new undergraduate major in Clinical and Translational Sciences, new remote research methods, novel regulatory science frameworks for AI and precision Omics, and multi-modal recruitment, consent and engagement. We will expand our multi-site clinical trials and cohort studies with engaged stakeholders (CTSA Trial Innovation Network, industry, CTSA Hubs) through a deep commitment to quality improvement and metrics to address translational barriers and improve efficiency.
- 2. Accelerate integration of translational research with the Learning Health System.** We will expand our innovative approaches to dissemination and implementation (D&I) research through: the proposed Optional Function in EQ-DI; a new and dedicated D&I KL2 Scholar position; ensuring that translational barriers to applicability of research in diverse populations and domains are addressed; and a new collaborative, highly integrated pilot program focused specifically on D&I projects within the Learning Health System. We will develop, demonstrate and disseminate novel educational materials and methods via the CTSA Coordinating Center (CLIC) and the Trial Innovation Network (TIN). **(Aim 1)**
- 3. Create a translational research data ecosystem that seamlessly integrates data across the translational spectrum.** Building on our extensive expertise, we will continue integration of basic, clinical, and population health data by linking our research and clinical data warehouses, including GIS (geographic information systems) and clinical trials data, providing researchers with secure sandboxes and extensive analytic tools, and developing new analytic genotype-phenotype analysis pipelines. We will implement the ACT/SHRINE cohort discovery software and make extensive use of the National Center for Data to Health (CD2H) tools, ontologies and working groups. We will expand current education efforts across our pilot programs to achieve translational research data and analytic excellence. **(Aim 2)**
- 4. Enhance translational research collaborations at the local and national levels across the spectrum of stakeholders.** We are deeply committed to team science, exemplified by our MPI structure. We support T1-T4 research teams, help them bring innovations to FDA IND/IDE applications, and find business partners to translate discoveries into impactful clinical devices and therapies. During this next period, we will continue our extensive participation with the CTSA Coordinating Centers (TIN, CD2H, Center for Leading Innovation and Collaboration (CLIC)). We will extend our innovative and highly successful program in community-based participatory research (CBPR), facilitating multidisciplinary team formation with community team members. We will expand our extensive local and national collaborations. **(Aim 3)**
- 5. Educate the next generation of translational science workforce leaders.** We will expand our innovative approaches to ensure competence in the collaborative, technical, and regulatory skills necessary to accelerate the translation of high impact research to clinical applications that improve population health. We will develop, demonstrate and disseminate novel educational materials (e.g., Massive Online Open Courses), investigator support (e.g., Research Methods Forum), and methods (e.g., Un-Meetings). Our priority areas for the next five years will be: dissemination and implementation science, bioinformatics, community engagement, team science, remote research enabling technologies, and regulatory science. **(Aim 4)**
- 6. Catalyze the development, implementation and dissemination of methods and processes that advance translational research locally and nationally across the CTSA Consortium.** Specific activities will focus on: speeding basic and early stage research to pre-clinical and clinical studies and trials with regulatory support and industry sponsorship; and implementing new programs in the Office of Clinical Research for rapid trial evaluation, negotiation, and approval. We will enhance our Participant and Clinical Interactions (PCI) Function to accommodate teleresearch visits and extensive remote data and sample capture methods. We will employ our existing strengths (e.g., multi-site study management, novel research enabling technologies, standardized contracting arrangements), to implement and manage multi-site research studies. **(Aim 5).**