Transforming the clinical trial experience for researchers and participants

The Industry
Clinical trials are crucial to modern medicine as they are the only way to validate new and better treatments. However, they are complex, expensive, and require significant time and administrative resources to conduct. $54 billion is spent on clinical research annually in the U.S. Despite this, only 3% of physicians offer clinical trials as a care option, and only 35% of patients say they would be willing to participate. Given the growing rate of diseases such as cancer, cardiovascular disease, dementia and stroke, there is an increasing need globally for clinical trials research and participation in it.

The Challenge
Physicians are a key resource for clinical trials, but are often in short supply. Most practices are incredibly busy, with little time to perform research. A supportive administrative and financial clinical trials infrastructure would help many medical practices participate, but such infrastructure is rarely available outside of large metro centers.

Patients face other hurdles to participating in clinical research. Many are unaware of trials as a treatment option, or of how to find them. When they do find suitable trials, they may still be dissuaded by worries about travel distance, costs and insurance, or side effects. There is a lack of clear, accessible information about trials, which can leave those who do participate feeling like “guinea pigs.”

The Project
Circuit Clinical connects people with clinical trials through in-person outreach and education for patients and physicians, and by simplifying enrollment. In collaboration with UB students and faculty, Circuit Clinical is developing a patient web community that provides information and reviews in plain language, helps identify the best clinical trials, and allows patients to sign up right in the office of their own primary care physician. In collaboration with the UB Biorepository and Genomics Core they are also helping interested patients share their samples and data for medical research into their condition. It is hoped the large network they are building of informed and engaged physicians and patients will meet a considerable unmet need in the healthcare field.
The Technology/Innovation

Circuit Clinical’s participant platform, TrialScout™, is designed to empower patients to confidently select a clinical trial research center that is trusted by their peers. Research sites, sponsors and CROs can use TrialScout™ to share their stories and communicate with patients considering taking part in a clinical trial. Circuit Clinical’s BioLibrary™ provides potential participants the chance to drive the discovery of new medicines for their condition by providing their samples and genomic data to a premier academic biorepository.

UB Resources

The Buffalo Institute for Genomics and Data Analytics (BIG) at UB is investing $1.1 million over five years to support Circuit Clinical’s growth in Buffalo. BIG provides the biorepository services, genomics, and bioinformatics infrastructure that will enable their BioLibrary™ product. UB CAT funding and academic expertise has supported the back-end development of TrialScout™, and Circuit Clinical is also tapping into what they refer to as “the best and brightest in the region” by recruiting interns and recent graduates from UB to help them build a proficient development team.

Outcome/Benefits

Dr. Irfan Khan, Circuit Clinical’s Founder and CEO, was planning to move the company to Colorado to take advantage of Denver’s mature life-sciences sector when he learned of START-UP NY’s tax-free program and Circuit Clinical made it to the finals of the 43North business plan competition. When he was connected with the Buffalo Institute for Genomics and Data Analytics (BIG), UB’s Center for Computational Research and a pool of talented UB interns and graduate students, his mindset changed and he decided to expand the company in Buffalo instead.

Circuit Clinical is already building patient networks and winning contracts on the clinical trial recruitment side of their business. Their TrialScout™ and BioLibrary™ products are still in development, but their partnerships with UB and local start-up support organizations is expected to enable the creation of over 100 jobs in the next five years. Company leadership believes that given the substantial market need for its services, it will grow rapidly—building a network across New York State and then nationally. The company’s end-goal is to help bring new medicines to market faster and lower the costs of drug and medical device development overall.

“Circuit Clinical would not exist without UB. Their partnership has helped us develop our idea and build it to scale. We could not have asked for a better business partner.”

Dr. Irfan Khan, Circuit Clinical Founder and CEO