

## **Flinn Foundation Awards Critical Path Institute and TGen North a New Grant to Develop and Pilot a System to Respond to Antimicrobial Resistance**

**TUCSON, Ariz., January 8, 2019** — Critical Path Institute (C-Path) and Flagstaff, Arizona-based TGen North — the Pathogen and Microbiome Division of the [Translational Genomics Research Institute \(TGen\)](#) — have received a Phase 1 Concept Validation grant from the Flinn Foundation, of \$400,000 over 12 months, to develop and pilot a framework enabling the state institutions to be more responsive to antimicrobial resistance. Working as partners in this venture, C-Path and TGen, an affiliate of [City of Hope](#), will solidify requirements among multiple stakeholders and develop an integrated deployment plan for a statewide Healthcare Associated Antimicrobial Resistant Microbe genomic surveillance system, dubbed Prevent HAARM.

Antimicrobial resistant (AMR) infections caused by microbial pathogens including bacteria, viruses, fungi and parasites, can be deadly for humans and constitute a growing threat that jeopardizes modern medicine and healthcare in Arizona and across the globe.

“The increasing occurrence of dangerous — and sometimes life-threatening — infections caused by antimicrobial resistant pathogens has accelerated the need to develop and implement new tools and systems to detect outbreaks and manage an effective response,” said C-Path President and Chief Executive Officer Martha Brumfield, Ph.D. “The Prevent HAARM system will effectively monitor and track the emergence and transmission of antimicrobial resistant pathogens throughout Arizona, and provide rapid feedback to clinicians, hospitals, epidemiologists and public health professionals. This, in turn, will allow critical intervention decisions to be implemented faster to effectively limit further spread of AMR clusters in Arizona.”

Prevent HAARM will be designed to leverage existing genomic, informatic, and database technology resources previously developed by C-Path and TGen to effectively respond to AMR threats in Arizona. With support from the Flinn Foundation, C-Path and TGen plan to engage with Arizona-based stakeholders to identify the most critical public health needs related to AMR, determine integration points into the existing healthcare and public health data infrastructure, and validate the utility of the existing genomic, informatic, and database technology as a proof of concept of the Prevent HAARM solution.

This project’s goal of identifying ARM in hospital and clinical settings is in sync with TGen North’s new One Health philosophy, which puts a premium on the interrelationships among humans, plants, wildlife, farm and pet animals, and microbes. TGen North already is developing systems to look for AMR in water, soil, food and animals.

“We’ve been honored to work with great public health and clinical medicine partners across the state for over a decade. With this project, we have a chance to help make a real difference in the health of Arizonans,” said David Engelthaler, Ph.D., Director of [TGen North](#) and the [TGen One Health Collaborative](#). “TGen and C-Path have worked together on similar systems for tracking the spread of drug resistant tuberculosis in the developing world. Here is an opportunity for us to parlay that success into local benefit.”

The HAARM pathogens are not unique to Arizona, but they do cause significant burdens on the healthcare system, health finances, and the health of Arizonans in general. “Antibiotic resistance is the scourge of healthcare everywhere. Using advanced genomics and cutting edge information technology, we can collectively make a impact in this state,” Dr. Engelthaler said.

Prevent HAARM will significantly advance the state of public health surveillance and response for critical infectious diseases in Arizona’s hospitals, clinics, and communities. Although federal public health agencies such as the U.S. Food and Drug Administration and Centers for Disease Control and Prevention have been working to move genomic technologies to the states, the current state of the science and technology, much of it advanced by TGen and C-Path researchers, allows for a much greater adoption of genomic data sharing technology for nearly all infectious disease concerns in Arizona. The project also will put a spotlight on underserved and at-risk populations, including Native American populations and patients in long-term care facilities.

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### **About Critical Path Institute**

C-Path (Critical Path Institute) is an independent, nonprofit organization established in 2005 as a public and private partnership. C-Path’s mission is to catalyze the development of new approaches that advance medical innovation and regulatory science, accelerating the path to a healthier world. An international leader in forming collaborations, C-Path has established numerous global consortia that currently include over 1,500 scientists from government and regulatory agencies, academia, patient organizations, disease foundations, and dozens of pharmaceutical and biotech companies. C-Path is headquartered in Tucson, Arizona, with additional staff in multiple remote locations. For more information, visit [www.c-path.org](http://www.c-path.org).



### **About TGen, an affiliate of City of Hope**

Translational Genomics Research Institute (TGen) is a Phoenix, Arizona-based non-profit organization dedicated to conducting groundbreaking research with life changing results. TGen is affiliated with City of Hope, a world-renowned independent research and cancer and diabetes treatment center: [www.cityofhope.org](http://www.cityofhope.org). This precision medicine affiliation enables both institutes to complement each other in research and patient care, with City of Hope providing a significant clinical setting to advance scientific discoveries made by TGen. TGen is focused on helping patients with neurological disorders, cancer, diabetes, and infectious diseases, through cutting edge translational research (the process of rapidly moving research towards patient benefit). TGen physicians and scientists work to unravel the genetic components of both

common and rare complex diseases in adults and children. Working with collaborators in the scientific and medical communities literally worldwide, TGen makes a substantial contribution to help our patients through efficiency and effectiveness of the translational process. For more information, visit: [www.tgen.org](http://www.tgen.org). Follow TGen on [Facebook](#), [LinkedIn](#) and [Twitter @TGen](#).

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