The recipients of the Tulane ByWater Institute Faculty Fellowships in Interdisciplinary Collaboration represent a variety of academic disciplines at Tulane University.

The fellows are Claudia Herrera, research assistant professor in the School of Public Health and Tropical Medicine; Kevin Gotham, professor of sociology in the School of Liberal Arts and associate dean of graduate programs, grants and research; and Richard Campanella, senior professor of practice in the School of Architecture.

Fellows are chosen by application and are selected based on intellectual merit, potential for funding, and interdisciplinary methodology and/or theoretical framework. The recipients will use funds for preliminary data collection and refining methodologies in order to prepare and submit proposals to grant funding.

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The first of the two fellowships went to Herrera’s team, which includes colleagues from the departments of mathematics, ecology and evolutionary biology, and tropical medicine. They are conducting a pilot study that will result in a proposal to the National Institutes of Health (NIH). Their work focuses on Chagas disease, a major public health concern in the United States and much of Central and South America that is caused by the protozoa Trypanosoma cruzi. They will collect preliminary data in Louisiana on the diversity of T. cruzi, which live in insect vectors and mammalian hosts.

This data will allow the team to model the relative risk of human infection based on transmission dynamics among animal hosts, vectors and local environmental conditions, providing key insight into Louisiana residents’ risk of contracting the disease.

The second fellowship was awarded to both Gotham and Campanella in support of a grant proposal to be submitted to the National Science Foundation. The proposed two-year project will focus on the determinants of business owner support for coastal resilience measures. The project aims to understand how local business owners perceive environmental risk and how they make decisions regarding hurricane and flooding threats.

With the help of this fellowship, Gotham and Campanella will study how these business owners engage with coastal restoration, mitigation and resiliency strategies by utilizing an interdisciplinary methodology.

“These research proposals demonstrate the broad scope of science collaborations at Tulane, and the ByWater Institute is glad to encourage and support them,” said Mark Davis, director of the ByWater Institute. “These are exactly the kinds of interdisciplinary efforts that are necessary to shape more resilient and productive communities and ecosystems in places like coastal Louisiana.”

Requests for proposals for ByWater Institute Faculty Fellowships are accepted on a rolling basis.