COMMUNITY ENGAGEMENT SCHOLARSHIP AWARD

This award is given in recognition of mutually beneficial and sustained campus-community research partnerships.

Irene Xagoraraki
College of Engineering

Community Partners in Detroit Tri-County

**Community Partners in Detroit Tri-County
and College of Engineering**

IRENE XAGORARAKI

Dr. Irene Xagoraraki has led an innovative academia-industry-government collaboration that monitored and predicted communicable disease outbreaks in the Detroit tri-county area since 2017. This wastewater surveillance collaboration between the Great Lakes Water Authority (GLWA), COM Smith, several local health departments, and the Michigan State University College of Engineering, led to significant advances in early disease detection, helping local health departments respond rapidly to public health threats.

The partnership is funded by the Michigan Department of Health and Human Services; Michigan Department of Environment, Great Lakes, and Energy; GLWA, and other agencies. The partnership has collected and analyzed wastewater samples from the Detroit tri-county area, home to more than three million people. It has resulted in the collection of data that has been critical in providing early warnings for disease outbreaks, such as COVID-19, hepatitis A and sexually transmitted infections. This work has enabled targeted clinical testing, vaccination campaigns and public health messaging.

Key to the success of this effort has been the frequent communication and collaboration among academic, governmental and industry partners. Weekly meetings and continuous knowledge-sharing have ensured that the wastewater surveillance data is actionable, supporting real-world public health responses in the Detroit area. The methodologies developed through this partnership have also been published, shared with the public, and utilized by other communities nationwide, expanding the impact of the work beyond Michigan.

This wastewater surveillance project demonstrates the power of cross-sector partnerships to address public health challenges.

For her leadership in not only advancing the field of wastewater-based epidemiology but also providing valuable training for MSU students and postdoctoral researchers and preparing the next generation of public health experts, Dr. Xagorarak is richly deserving of the Community Engagement Scholarship Award.