

Tulane University's Middle American Research Institute receives grant for mapping of Maya civilization

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A 3D overview of the Classic Maya site of La Corona. The \$1.5 million grant from the Hitz Foundation increases the ability of the Middle American Research Institute's Geographic Information Systems Lab to use lidar technology to conduct archaeological research. (Photo credit: M. Canuto and Luke-Auld Thomas)

The [Middle American Research Institute](#) (MARI) in Tulane University's [School of Liberal Arts](#) has received a \$1.5 million grant from the Hitz Foundation to conduct

innovative archaeological research on the Maya civilization of Mexico and Central America.

The grant, which builds on a nearly \$1 million 2019 gift from the Hitz Foundation, increases the ability of MARI's Geographic Information Systems (GIS) Lab to use lidar technology that can bypass thick forest canopy and map features on the earth's surface. Lidar technology reveals changes in topography, enabling archaeologists to identify human-made features on the ground such as walls, roads and buildings.

Over the next five years, the grant will enhance MARI's computing capabilities and spur the acquisition of new remote sensing data. In the past, the institute had to obtain lidar data from a network of external researchers working independently from one another. Now its GIS Lab will be able to conduct this work in-house.

"This generous grant from the Hitz Foundation empowers Tulane to further its mission as a world leading research university that seeks to understand, in the greatest depth and complexity possible, both the present and the past and to collaborate with international partners on future discoveries, " Tulane President Michael A. Fitts said.

The grant is a boon to MARI, which promotes greater understanding of Middle America through anthropological, archaeological, ethnohistorical, linguistic and ethnographic research projects.

"MARI represents Tulane's long-standing commitment to and emphasis on the indigenous cultures and societies of the Americas," said MARI Director and Professor of Anthropology Marcello Canuto, who submitted the grant application along with Tulane Research Professor Francisco Estrada-Belli. "For nearly a century, the institute has conducted innovative research throughout Mexico and Central America; our latest contributions using lidar technology allow us to add to this legacy."

In 2018, Canuto and Estrada-Belli were part of a team that discovered dozens of ancient cities in Guatemala, including more than 60,000 structures, such as houses, large palaces, ceremonial centers and pyramids.

"I am very grateful to the Hitz Foundation for this renewal of their support of our research," Estrada-Belli said. "These resources place us at the forefront of the implementation of game-changing technology in our field."

Collaborating with other researchers and institutions, MARI plans to produce up to 15,000 square kilometers of lidar surveys over the next five years.

“With MARI celebrating its centennial this year, this transformative gift from the Hitz Foundation ensures that the important work being done by our researchers will remain at the leading edge of archeological inquiry,” said Tulane School of Liberal Arts Dean Brian T. Edwards.

“We are very excited to continue our support of MARI,” Hitz Foundation President Ken Hitz said. “By giving researchers access to state-of-the-art tools and datasets, the GIS Lab enables both exciting new discoveries and deepening of knowledge about existing sites. We’re also especially proud to play a part in helping future scholars learn the latest GIS tools and techniques.”