Opportunity for funded PhD in Sustainability on Tribal Energy Sovereignty with Prof. Nathan Williams at the Golisano Institute for Sustainability – Rochester Institute of Technology

I am seeking a highly motivated graduate student to join my growing research group to work on issues of tribal energy sovereignty in the Sustainability PhD program at the Golisano Institute for Sustainability at the Rochester Institute of Technology (RIT). RIT is built on the traditional territory of the Onöndowa'ga:' or "the people of the Great Hill." In English, they are known as Seneca people, "the keeper of the western door." They are one of the six nations that make up the sovereign Haudenosaunee Confederacy, whose flag flies on campus at the Student Alumni Union. My team includes a diverse, international group of graduate students working on issues relating to energy and sustainable development.

The ideal student would have significant experience working with Indigenous communities and a strong understanding of and sensitivity to Indigenous cultures. Applicants should describe their experience and involvement with tribal communities in their personal statement. This project, and the Sustainability PhD program, is interdisciplinary in nature, involving both qualitative and quantitative methods. Advantageous backgrounds include work with energy systems, quantitative and computational skills, experience with qualitative research methods, and an interest in energy system modeling and policy. It is not necessary that students have experience in all of these areas but they should be interested in developing these interdisciplinary skills. A bachelor's degree is required and a master's degree would be beneficial. Financial support is available to cover full tuition and a monthly stipend. Indigenous students are encouraged to apply. RIT is committed to supporting indigenous scholars in STEM fields through the Native American Future Stewards Program.

Project Description:

Native American tribes have a special status as sovereign nations within the United States. And while this sovereign status may be well established in law, in practice it is often challenged by relationships with state and federal governments, as well as private interests seeking to exploit tribal resources. For example, there is a long and troubled history of outside exploitation of Native energy resource that has led to environmental degradation, social harm, and insufficient economic gain on the part of tribes. Furthermore, tribal partnerships with non-tribal entities are complex, and may not provide adequate energy services on which tribal economies and well-being depend. Tribal energy sovereignty, the right of tribal nations to make their own decisions about how they generate and use energy, and develop their energy resources, is increasingly understood as a critical element of the sovereignty of tribes in general, and their environmental stewardship and economic futures.

The preliminary scope of this project includes a study of how tribes view energy sovereignty, an analysis of the technical and economic implications of these visions of energy sovereignty, how these views could inform the design of tribal energy systems, and an assessment of critical gaps and challenges that must be overcome to achieve these goals. However, the student will also have the opportunity to help shape the research agenda. The project will involve both field work engaging with tribes on their views on energy sovereignty, likely in the southwestern United States, as well as quantitative energy system modeling. The work will be done in collaboration with the Energy Sovereignty Institute in Santa Fe, NM.

PhD program and application information can be found on the <u>RIT GIS website</u>. Applications should be submitted by January 15th 2021 for a Fall 2021 start. Note that GRE scores are no longer required for admission to the PhD program. Interested candidates should direct questions to Prof. Nathan Williams at njwgis@rit.edu.