

Soaking up the rays

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Matthew Escarra, an assistant professor of engineering physics, says Louisiana is poised to contribute to solar energy research and development. (Photo by Ryan Rivet)

Away from home, engineer [Matthew Escarra](#) knew what it means to miss New Orleans.

Escarra, a New Orleans native, is an assistant professor in the Tulane University Department of [Physics and Engineering Physics](#). A graduate of Rice University in Houston, Escarra left the South for colder, grayer climates up north, landing at Princeton for his doctoral work in electrical engineering.

It was in New Jersey, Escarra says, that he felt the pull of home, namely, the Louisiana sunshine.

“I knew I wanted to come back,” he says. “It was clear almost from the moment I arrived. But I had this incredible opportunity, and wanted to make the most of it.”

As he did ? after graduating, Escarra focused his research on renewable energy while working at the California Institute of Technology and built partnerships with the private sector, before coming to Tulane last August.

Escarra's research aims to make photovoltaic (PV) panels better at harvesting solar energy, by increasing their efficiency and developing new ways of using them. While PV industry leaders typically concentrate in places like Silicon Valley or Europe, Escarra says Louisiana is poised to contribute to solar energy research and development.

“There's some personal irony here,” he says with a laugh. “I have family in oil and gas, so I grew up with a healthy respect for that industry. But with a strong existing energy industry, a positive business climate for solar energy use and manufacturing, and our homegrown instinct for innovation, Louisiana could also become a national leader in solar technology.”

Currently, when not advising his students in engineering and physics, Escarra is building out laboratory space for his developing research program.

Now that he's home, is he getting enough Louisiana sunshine? Again, Escarra laughs. “Absolutely. It feels great. Now let's put it to good use.”

Benjamin Morris is a freelance writer for the Department of Development Communications at Tulane.