

Seed: Synthetic soft matter created and inspired by communal behaviors of bacteria

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This Seed project engaged underrepresented minority students in STEM through the MRSEC-sponsored summer REU program at UW-Madison. Doris A. Vargas Valentin, an undergraduate student from the University of Puerto Rico—Mayaguez, learned how to use dynamic light scattering and surface and surface tensiometry to characterize the self-assembly of small-molecule amphiphiles in solution, analyze her experimental results, and present the results of her work in a formal setting during an eight-week stay in Madison. This experience also provided opportunities for Benjamin J. Ortiz, a senior graduate student who is also an underrepresented minority student in the Wisconsin MRSEC, to develop and hone his mentoring skills.



Doris A. Vargas Valentin (left), a participant in the MRSEC-sponsored summer REU program at UW-Madison, and an undergraduate student at the University of Puerto Rico—Mayaguez, presented the results of her research on the characterization of small-molecule amphiphiles at the 2017 MRSEC-REU summer poster session. Also pictured at right is her graduate student mentor, Benjamin J. Ortiz, a member of the UW MRSEC. Mr. Ortiz is a former undergraduate student at the University of Puerto Rico—Mayaguez and also a former participant in the UW-Madison NSF REU program.