Math CEO outreach program wins $1.5 million NSF grant

The grant will help the program better understand how to help the students it mentors.

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Professor Alessandra Pantano of the UCI Department of Mathematics helps lead a Math CEO event with Villa Intermediate sixth-graders from Santa Ana.

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Steve Zylius / UCI

Professor Alessandra Pantano of the UCI Department of Mathematics, alongside Professor Sandra Simpkins of the UCI School of Education, recently received a $1.5 million grant from the National Science Foundation to support an outreach program run by the UCI Department of Mathematics called Math CEO (Community Educational Outreach). Pantano created Math CEO alongside UCI Mathematics Professor Li-Sheng Tseng in 2014, and the program aims to provide after-school mentoring at UCI to middle and high school students from regional schools that predominantly serve underrepresented groups. Based on surveys conducted by Simpkins' group, one of the keys to Math CEO's success are the relationships that form between UCI undergraduate mentors and mentees. "You really have to pay attention to the training of the mentors," said Pantano. "How do you show the middle school students you care about them? How do you develop a pedagogy that seizes the strengths of the students and leverages it?" To that end, the NSF grant will help Pantano and Simpkins zero in on what exactly makes for an effective mentor given the social and cultural backgrounds of the students it serves. They'll do the work alongside UCI Mathematics alumna Cynthia Sanchez who, now an assistant professor at California State University, Dominguez Hills, will create a new Math CEO branch at CSUDH. Pantano explained how the effects of a positive mentoring experience can be far-reaching; one middle school student named Fatima Robles participated in Math CEO back in 2014, and, many years later, as an undergraduate at UCI, Robles came full circle and is now a Math CEO mentor herself. "A lot of our students get passionate and want to become teachers," said Pantano. "It's very purposeful. We have very ambitious goals." Math CEO begins its on-campus mentoring on October 5 and will continue running throughout the academic year.

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