Over the past three years, faculty at UCI have piloted an innovative form of Math Circle - the UCI Math CEO program, which specifically targets students from disadvantaged backgrounds. Approximately 100 middle-school students come to the UCI campus each week throughout the academic year to explore interesting and challenging mathematical investigations, puzzles and games with the help of undergraduate mentors. These meetings provide a setting in which children do not only learn math; they acquire familiarity with college and STEM careers. The program also features STEM-focused field trips for participating middle-school students, and bilingual college-orientation workshops for their parents. Almost all the kids in the program are Latinx. In this talk, we describe efforts to increase the scope and the quality of Math CEO. (Received September 26, 2017)