Advancing Educational Equity at a Hispanic Serving University

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Goals

1. Understand the academic trajectory of UCSC STEM intended students

2. Identify barriers that impede the success of Latino and low-income students

3. Eliminate achievement gaps between traditionally marginalized students and their privileged peers
Approach

- Identified potential STEM majors who entered in Fall 2012 based on course enrollment patterns

- Analyzed courses attempted, grades earned, majors declared, and retention and graduation rates over next four years

- Disaggregated data by gender, ethnicity, first generation, and EOP (low-income proxy)
Profile of 1438 potential life sciences majors who entered as freshmen in the fall of 2012

- 60% women
- 1.7% African-American, 29.6% Asian, 31.6% Hispanic or Latino, 29.6% white.
- 46.5% first generation
- 46.3% EOP
4 year course history: Fall 12 life sciences cohort

GPA

Stats

Chemistry

Biology

Math

Physics

Writ 2

course

20A

1A (1536)

1B

1C

108A

108B (788)
Course history disaggregated by ethnicity

- **White**
- **Hispanic/Latino**

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<th>GPA</th>
<th>Course</th>
<th>Area (Proportional to Enrollment)</th>
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**Courses**
- Biology
- Stats
- Math
- Chemistry
- Physics
- Writ 2

(course area proportional to enrollment)
Poor performance in a small number of courses reduces the diversity of STEM majors

Chem 1A: General Chemistry
Biol 20A: Cell & Molecular Biology
Math 3: Pre-calculus
Strategies and Intervention

Continue to raise awareness and build solutions for educationally effective and equitable outcomes through:

- Curricular improvements
- Support Services: Advising, Tutoring, Problem Solving Sessions
- Addressing sense of belonging
- Frequent data analysis