

Promoting success of underrepresented minority students in STEM Ph.D. programs at UC San Diego

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Institutional context

- * UC San Diego is a young campus (52 years since founding) with a substantial emphasis on education and research in STEM fields
- * STEM Ph.D. programs were highly ranked in the most recent NRC study
- * Despite being located in a “majority minority state”, we face both internal and external barriers to recruitment of a diverse graduate student body
 - * STEM emphasis
 - * Demographics of local community
 - * Proposition 209
- * URM applicants are, in general, admitted at a rate that at least equals that of majority students, and accept our offers comparably
 - * Our issues are developing a robust applicant pool and ensuring retention

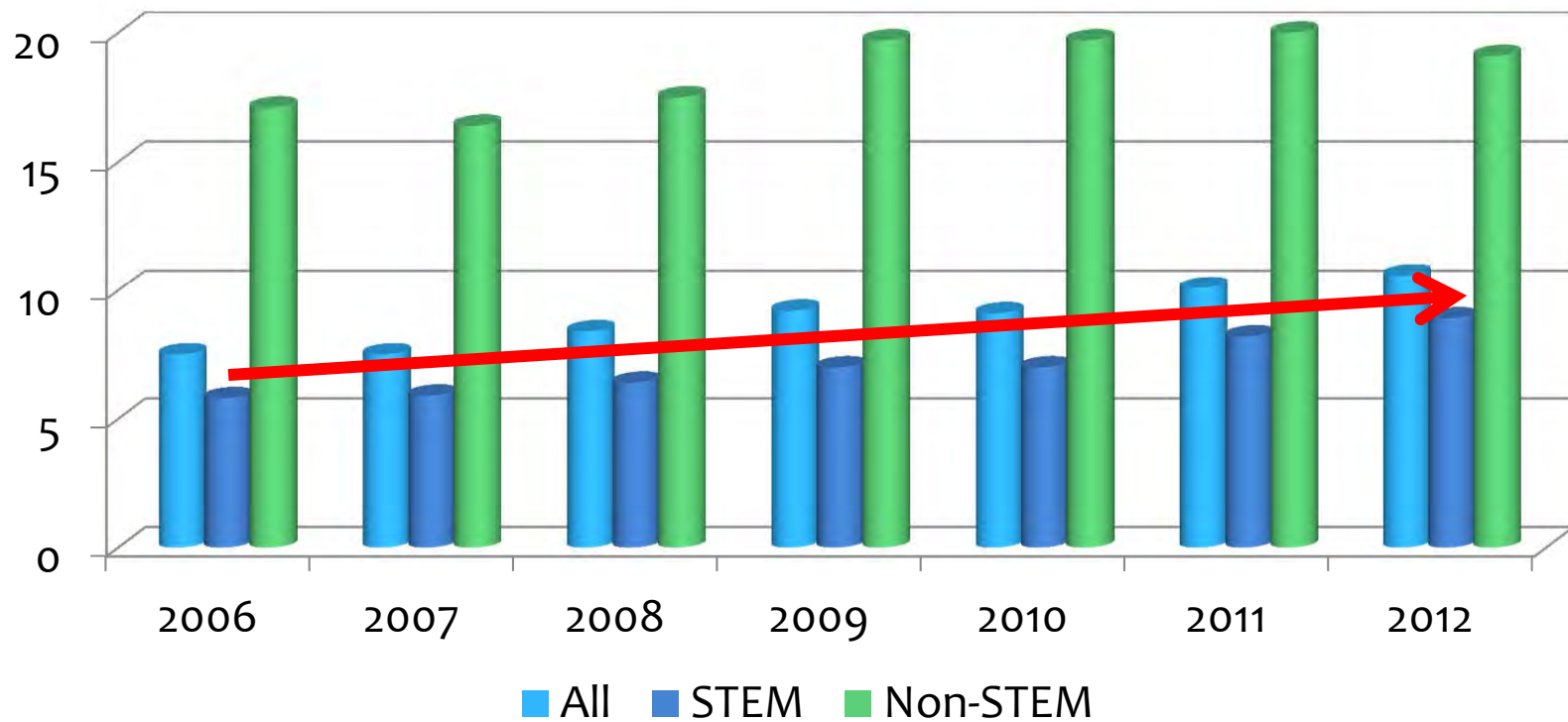
Institutional efforts focused on equity and inclusion

- * A series of distressing on-campus incidents triggered a more intense dialog around issues of diversity in the academy
- * Faculty review process now includes consideration of contributions to diversity
- * Numerous FTE's designated for hiring of faculty whose scholarship and/or personal experiences can enhance our ability to build an inclusive community
- * New VC for Equity, Diversity and Inclusion will arrive on campus next month
 - * We anticipate a more holistic response to diversity issues
- * Increased funding levels for fellowships directed to students who will add diversity or who have overcome barriers to graduate study
 - * Promotion of matching fellowships for large faculty-initiated proposals

Office of Graduate Studies efforts

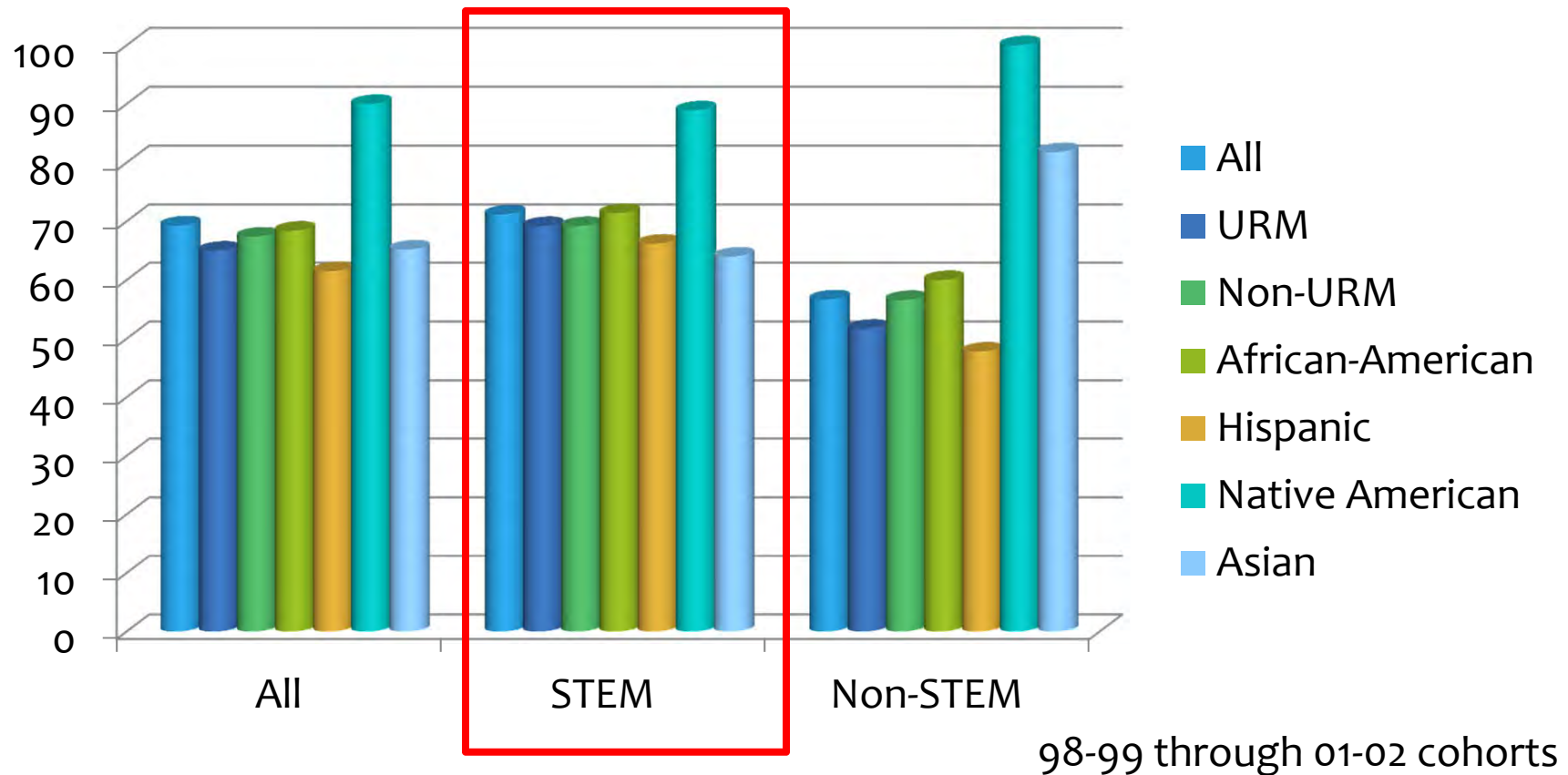
- * UC San Diego participated two key initiatives focused (in part) on the recruitment, retention and completion of URM students
 - * NSF AGEP, as part of a UC systemwide alliance, from 2004-2011
 - * The CGS Ph.D. Completion Project Phase II, from 2007-2010
- * The programs above, as well as plans to grow our graduate student population substantially and growth in URM enrollments, provided an impetus for DIMAC participation
 - * Our goal is to analyze the effectiveness of measures implemented under the above projects to ensure solid doctoral completion rates for URM students moving forward

Percent URM* enrollments by year



*Federal definition

UCSD 10-year completion rates



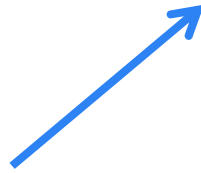
UC-AGEP at UC San Diego

- * Several initiatives begun under the auspices of this systemwide grant have been institutionalized
 - * Diversity Coordinators/Diversity Outreach Collaboration
 - * Develop best practices for URM recruitment and a coordinated outreach effort
 - * Summer Training Academy for Research in the Sciences
 - * STARS has built a critical mass of summer student experiences on campus, while building relationships with MSIs
 - * Competitive Edge
 - * Preparatory program for entering students that seeks to enhance their transition to graduate study

AGEDP



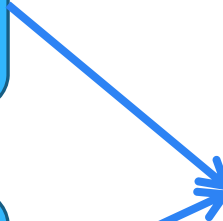
Diversity
Outreach
Collaboration



Enhanced
relationships with
Howard University



Bouchet Honor
Society Chapter



UC funding for
summer research
experiences for
Howard
undergraduates



HOWARD
UNIVERSITY

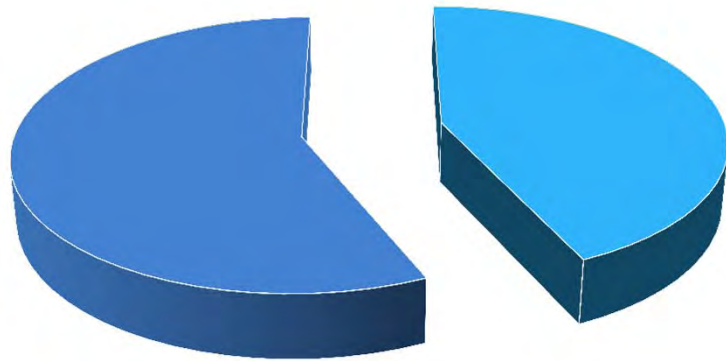


STARS

- * Eight week mentored research experience
- * Leverages a variety of undergraduate preparation programs on campus and beyond
- * Provides a critical mass of participating students
 - * Benefits of a cohort experience and inter-institutional networking
 - * Simplifies logistics
- * Lab activities supplemented by weekly workshops
- * Culminating research conference builds skills, community

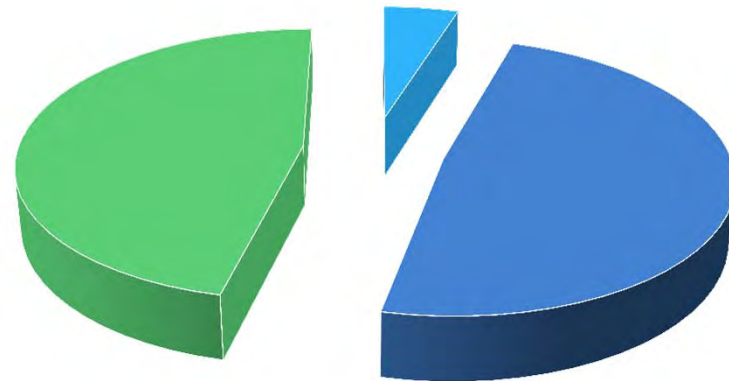
STARS outcomes 1999-2011*

Graduate study



■ Yes ■ No

Program type



■ Professional ■ Masters ■ Ph.D.

*Information on 423 participants as of 11/14/12

Competitive Edge

- * Eight-week summer pre-entry program designed to provide an early introduction to campus life and research
 - * Also guarantees access to campus graduate housing
- * Initially focused on URM students and STEM via AGEP
 - * Now broadened to all departments and inclusive of students of all ethnicities who have overcome hurdles
- * Builds professional networks and interdisciplinary thinking
- * Joint funding model – costs shared with departments

Competitive Edge outcomes 2006-2012

- * 48 students have taken part in the program since its inception. Of these:
 - * Two have received their Ph.D.'s (in 5.25 and 6 yrs)
 - * 41 are continuing or are on approved LOA's
 - * Two have left with masters degrees
 - * Three have withdrawn/did not return from a leave

90% of participating students are on track to complete their original degree aim

CGS Ph.D. Completion Project

- * Implemented strategies focused on completion – four have been institutionalized centrally
 - * Revamped campuswide Graduate Orientation
 - * Focused on delivering an upbeat message about graduate study along with practical information
 - * Wednesday Wellness Workshops
 - * Ongoing dissemination of helpful tips and stress-avoidance strategies
 - * Ph.D. Career Conference
 - * Introduces the full range of career opportunities
 - * Online exit survey

Project has also enhanced productive collaborations with other campus units

Conclusions

- * Despite barriers, we are making slow but steady gains in both the recruitment and persistence of URM students in all of our graduate programs, but especially in STEM areas
- * Participation in national efforts has resulted in new initiatives that should further improve our ability to improve equity and inclusion
- * Building a campus community of collaborators dedicated to these efforts may have unanticipated payoffs
 - * Bouchet Honor Society, Howard Partnership, systemwide funding
- * There is still work to be done!

UC San Diego

THANK YOU!

