



# Building Communities of Scholars in the STEM Disciplines

Peter K. Dorhout  
Kansas State University

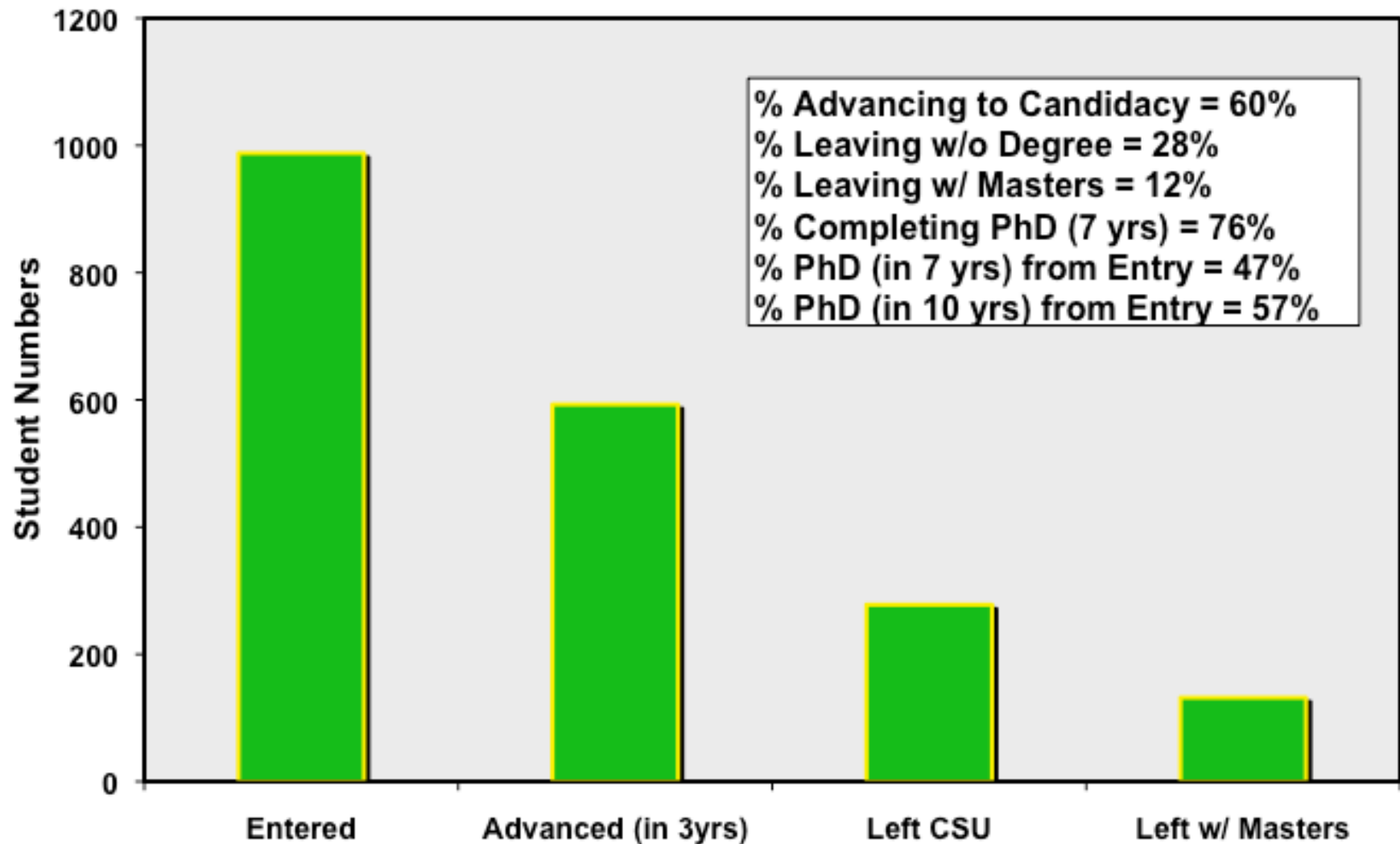
## Framing the Challenges

- NRC Study on PhD showed CSU student completion was at/below average
- Underrepresented Minority Students (URM) were struggling in grad school at CSU
- CSU leadership was committed to growing graduate programs, PhDs

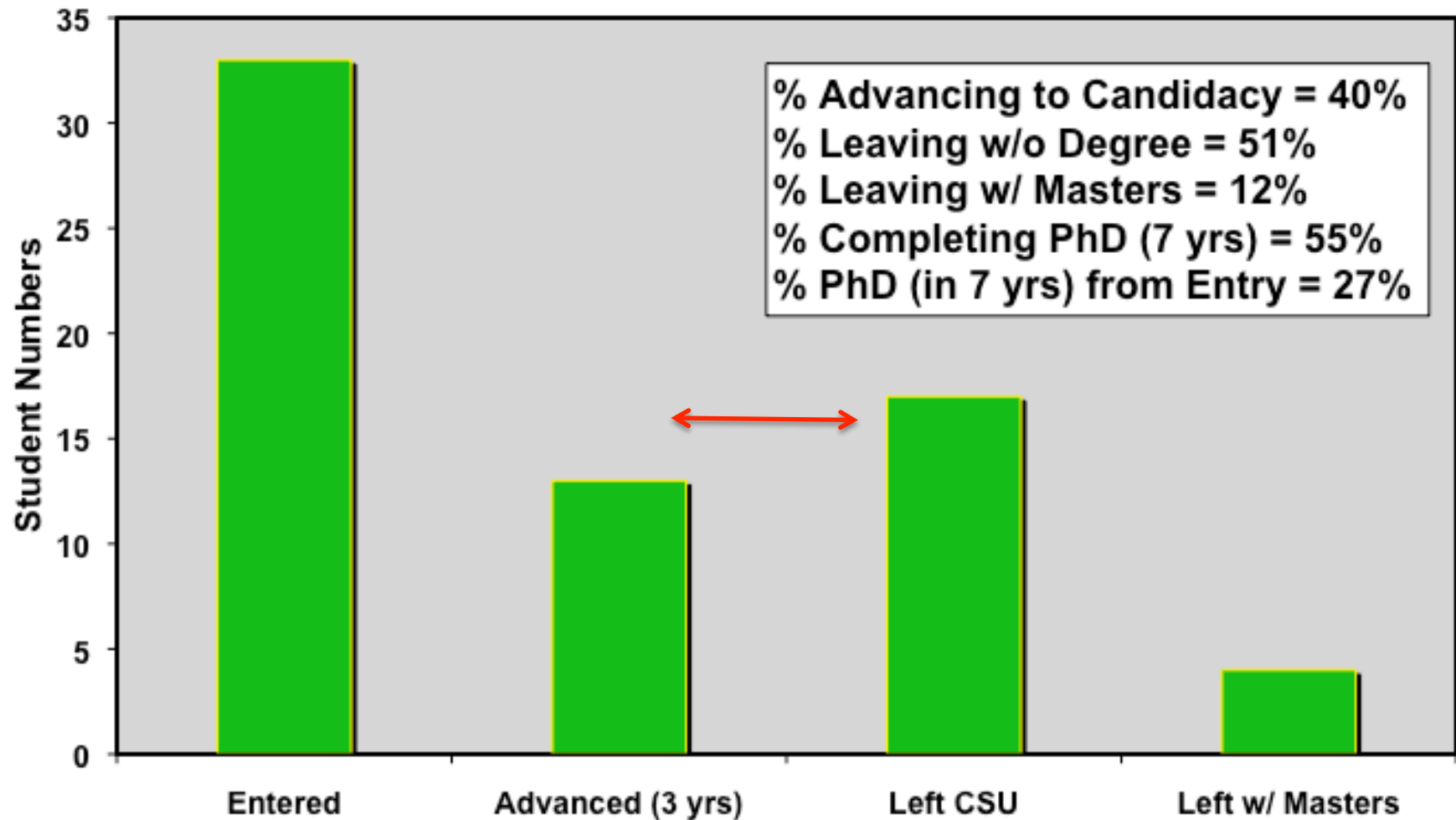
## Understanding where we are...

- What is our baseline of activity?
- What is/are the biggest challenge(s)?
- Where is/are the problem(s)?
- Is the challenge recruiting or retention?

### PhD Student Trends 1996-2003



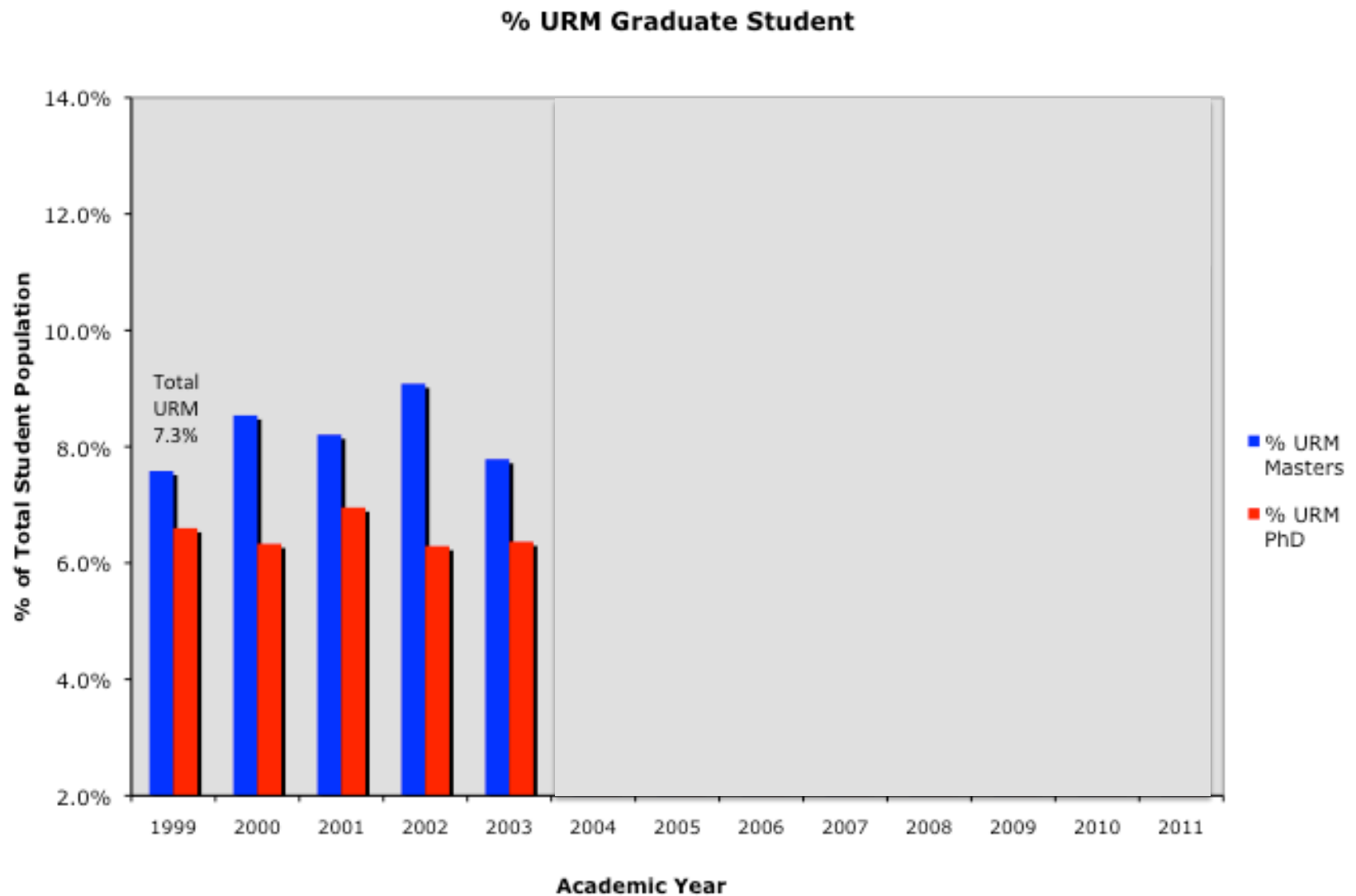
## PhD Trends 1996-2003 - URM Students



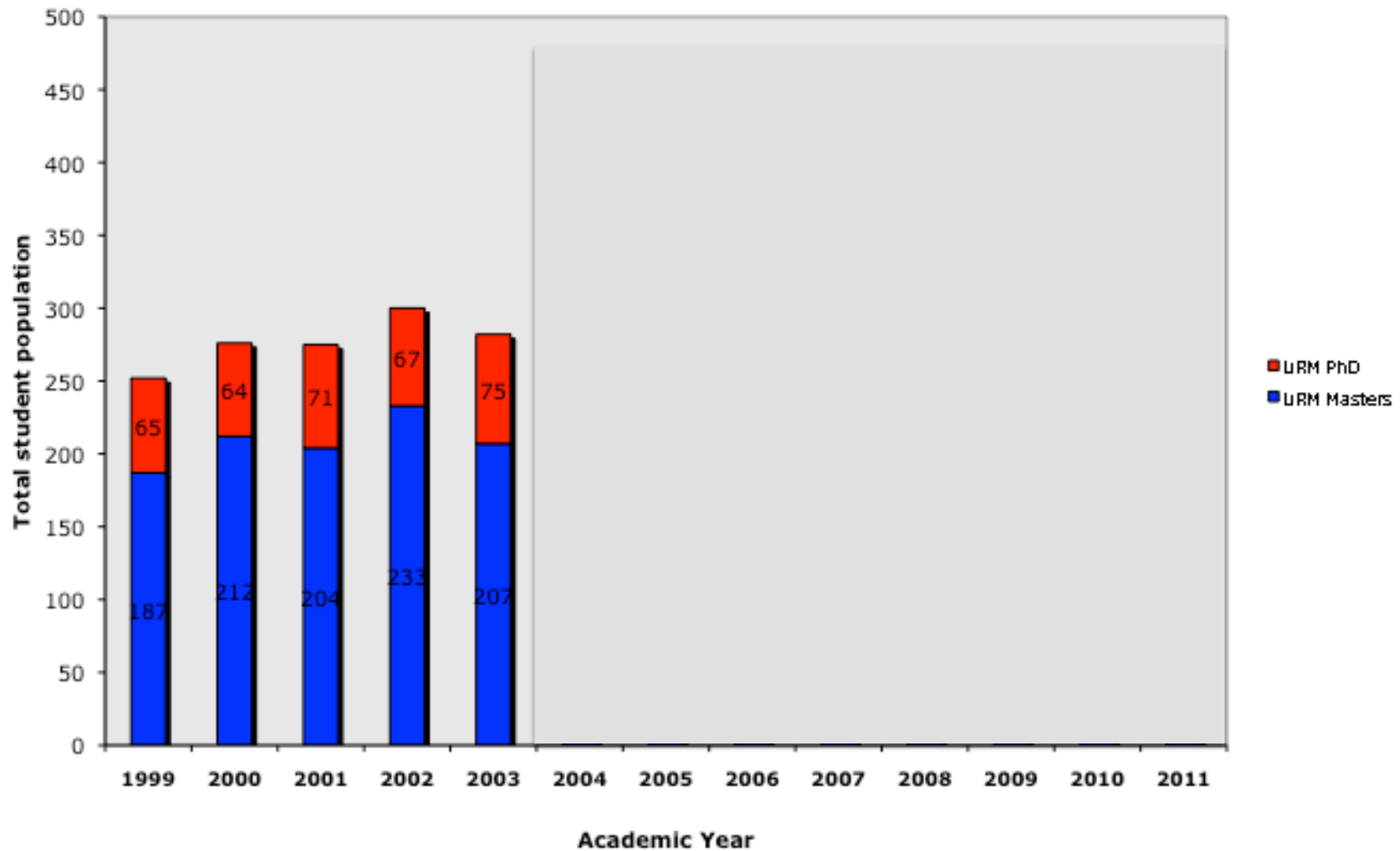
## Our starting point...

- Small numbers of incoming PhD students.
  - Getting the word out about CSU
- Leaky pipeline prior to candidacy.
  - Are these advising or student life issues?
- Students who stay still finish more slowly.
  - Professional development opportunity
- CSU wants to grow its graduate students...  
but how, if there's a leak?

# Student Enrollment at CSU

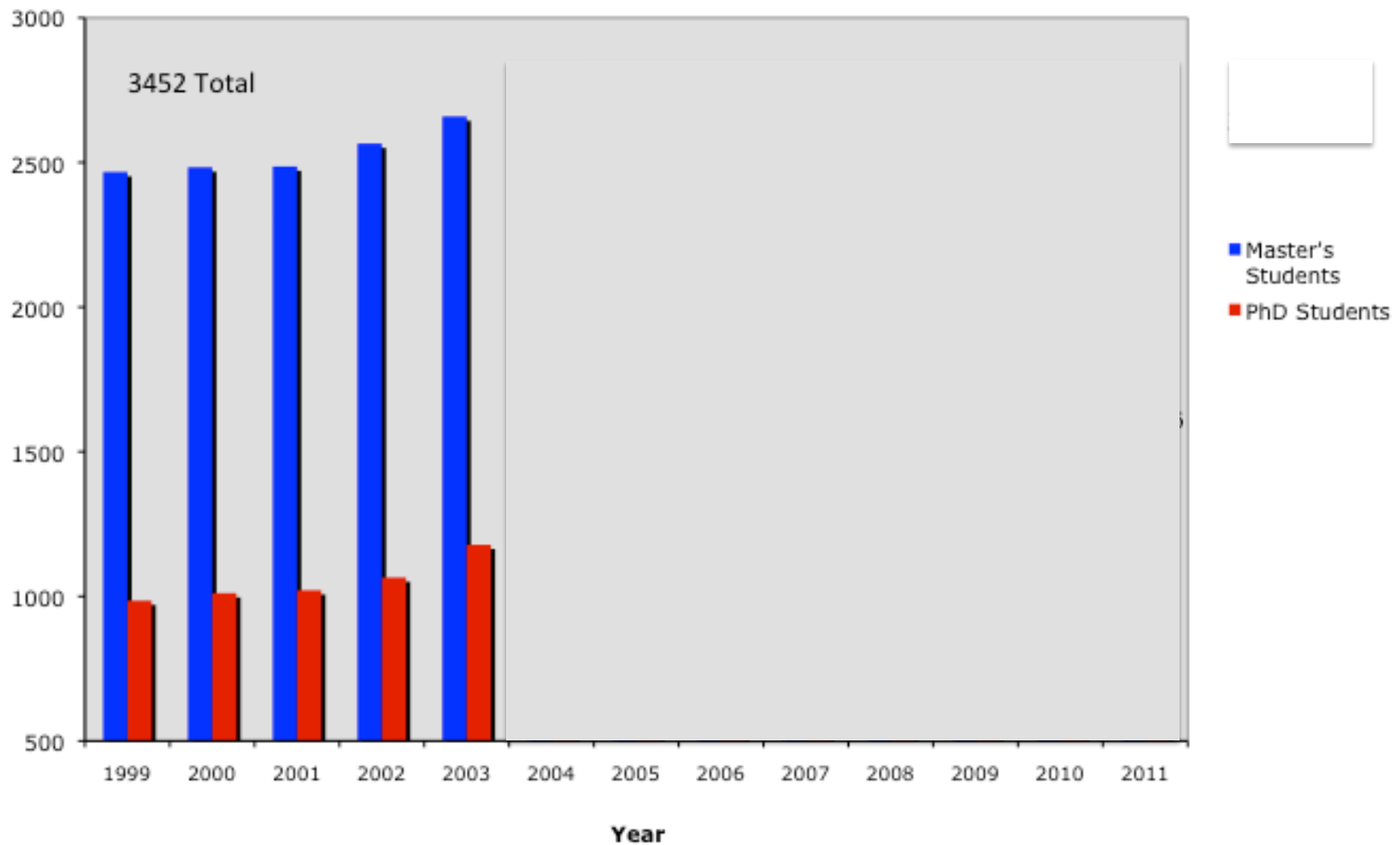


### Underrepresented Minority Graduate Students





### Graduate Student Population by Degree



# Stagnation in Students

- Our baselines showed that we needed to change how we recruited and retained students of color
- Connecting students and creating communities was our goal
- Coordinate our student diversity programs – these were unfocused, silo-ed projects

THE  
**Graduate School**  
at Colorado State University

Send Me Program Information

SEARCH

For Prospective Students

For Current Students

For Faculty & Staff

Diversity & Access

Financial Resources

AGEP

Campus Diversity Resources

GCDA Staff Directory

McNair Scholars



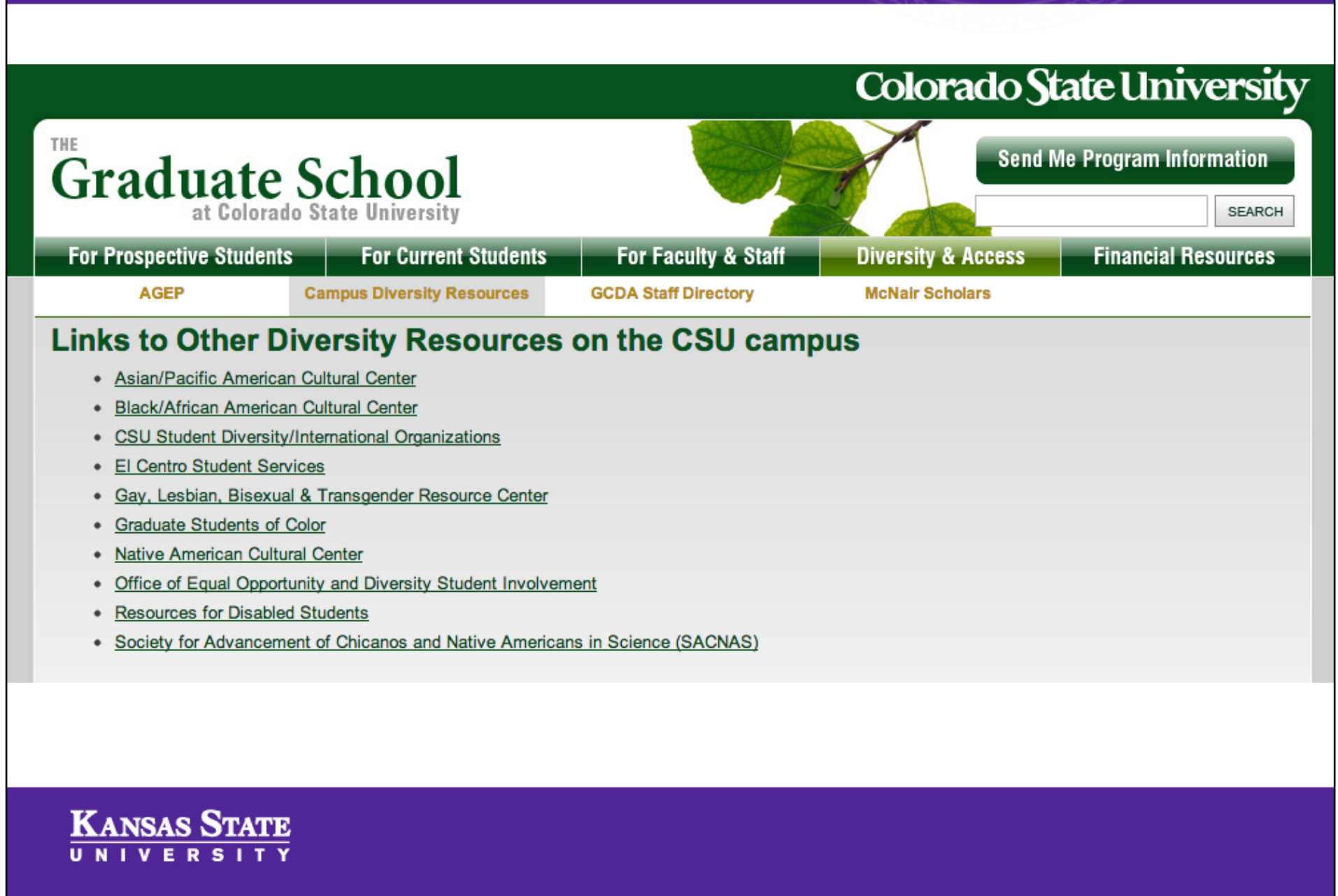
## Welcome to the Graduate Center for Diversity & Access!

The Graduate Center for Diversity and Access is committed to providing an environment that supports all forms of diversity. We invite you to explore our website and to contact us with your questions ([Debbie Sheaffer/970-491-6818](#)).

We are pleased to provide:

- recruitment and retention activities and programs with an emphasis on graduate students from diverse populations.
- activities and programs that prepare diverse students as strong candidates for graduate school.
- consultative services to departments and colleges regarding graduate recruitment and retention activities, diversity data and graduate school diversity initiatives.

# Connecting Students Across Campus



The screenshot displays the Colorado State University Graduate School website. At the top, the university's name is in a green banner. Below it, the Graduate School logo is on the left, and a 'Send Me Program Information' button with a search field is on the right. A navigation bar contains links for prospective students, current students, faculty & staff, diversity & access (highlighted), and financial resources. Under 'Diversity & Access', there are links to AGEP, Campus Diversity Resources, GCDA Staff Directory, and McNair Scholars. The main content area is titled 'Links to Other Diversity Resources on the CSU campus' and lists ten organizations, including cultural centers, student services, and resource centers for various groups.

**Colorado State University**

**THE Graduate School**  
at Colorado State University

Send Me Program Information

SEARCH

For Prospective Students | For Current Students | For Faculty & Staff | **Diversity & Access** | Financial Resources

AGEP | Campus Diversity Resources | GCDA Staff Directory | McNair Scholars

### Links to Other Diversity Resources on the CSU campus

- [Asian/Pacific American Cultural Center](#)
- [Black/African American Cultural Center](#)
- [CSU Student Diversity/International Organizations](#)
- [El Centro Student Services](#)
- [Gay, Lesbian, Bisexual & Transgender Resource Center](#)
- [Graduate Students of Color](#)
- [Native American Cultural Center](#)
- [Office of Equal Opportunity and Diversity Student Involvement](#)
- [Resources for Disabled Students](#)
- [Society for Advancement of Chicanos and Native Americans in Science \(SACNAS\)](#)

**KANSAS STATE**  
UNIVERSITY



## CSU Student Programs - STEM

- McNair
  - Focused on STEM students in Colorado, pipelines to UG students
  - Large first-generation student population at CSU
- LS-AMP
  - 15 years in Colorado, 15 partner institutions, 4 Tribal partners
  - 35 Bridges PhD students
- AGEP
  - 10+ years of programs at CSU, CU-Boulder, CU-Denver
  - 61 faculty mentors, 20% underrepresented
- Needed to build a community of scholars
  - Focus on student life and professional development
  - Engage graduate students, undergraduates in mentoring - SACNAS



# SACNAS

## **“Advancing Hispanics/Chicanos & Native Americans in Science”**

- Founded in 1973 by a group of minority scientists
  - 501(c)3 nonprofit corporation under the name Society for Advancement of Chicanos and Native Americans in Science
- SACNAS Mission
  - Fosters the success of Hispanic/Chicano and Native American scientists—from college students to professionals—to attain advanced degrees, careers, and positions of leadership in science.



# SACNAS CSU Chapter

- **Founded in the College of Natural Sciences**
  - Applied for Chapter status, Fall, 2005
  - Advisor, Arlene Nededog, Director of Undergraduate Retention Programs
- **Faculty and Graduate Student Mentors**
  - 12 Faculty & Advisory Board Members
    - Colleges of Agriculture, Engineering, Natural Sciences, Veterinary Medicine and Biomedical Sciences, Graduate School
    - Mentoring the mentors program
  - 6 graduate student SACNAS Mentors
- **Chapter Programs**



**Networking  
Workshops**



**Volunteering  
Fundraising**



**Professional Development  
Workshops**



**KANSAS STATE**  
UNIVERSITY



# Chapter Outreach



**Colorado Science & Engineering Fair**



**CSU Student Involvement Fair**



**Little Shop of Physics**



**Triunfo/Triumph Tutoring Program**



**CSU-Connect**



**Stemapolooza**

# SACNAS National Chapter Recognition

- **2006-2007**
  - Outstanding Leadership as a First Year Chapter
- **2007-2008**
  - Outstanding Faculty & University Support of a SACNAS Chapter
- **2008-2009**
  - Outstanding Leadership & Governance
- **2009-2010**
  - National Chapter of the Year (Medium)
- **2010-2011**
  - Role Model of the Year – Regional leadership
- **2011-2012**
  - Role Model of the Year – Native American Outreach





**TILT** | THE INSTITUTE FOR LEARNING AND TEACHING[Home](#) > [Teaching](#) > [Orientation for New Graduate Teaching Assistants](#)

## Orientation for New Graduate Teaching Assistants

In recognition of the important contributions our Graduate Teaching Assistants make to instructional excellence at Colorado State University, the Provost Office, the Graduate School, and the Institute for Learning and Teaching are pleased to sponsor and host an annual Orientation for incoming GTAs.

### The Goal

In the ongoing effort to enhance the effectiveness of undergraduate teaching and learning at Colorado State University, the goal of the annual GTA Orientation is to equip every incoming GTA with basic institutional knowledge about CSU, review current learning and teaching *Best Practices*, and introduce a wide variety of resources that will help further their career as a CSU graduate teaching assistant.

### On the Agenda

Experienced teaching assistants, faculty, and staff will address key issues related to



#### 2013 GTA Orientation Info

##### To Register

Please complete the registration form

##### Date

Thursday, August 15, 2013

##### Location

Andrew G. Clark Building – A101

##### Sign-In and Continental Breakfast

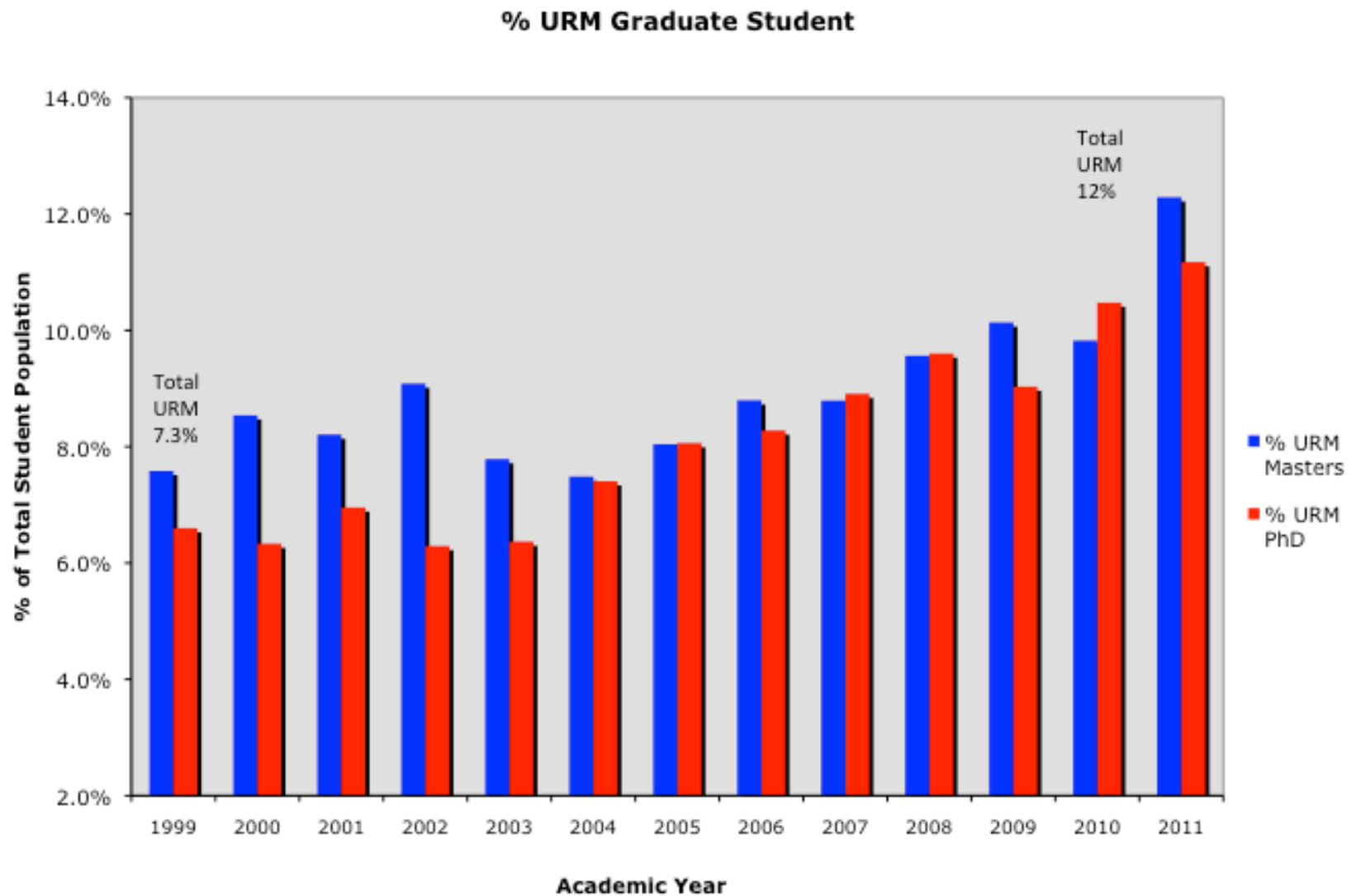
7:15 – 8:00 AM

##### Program Time

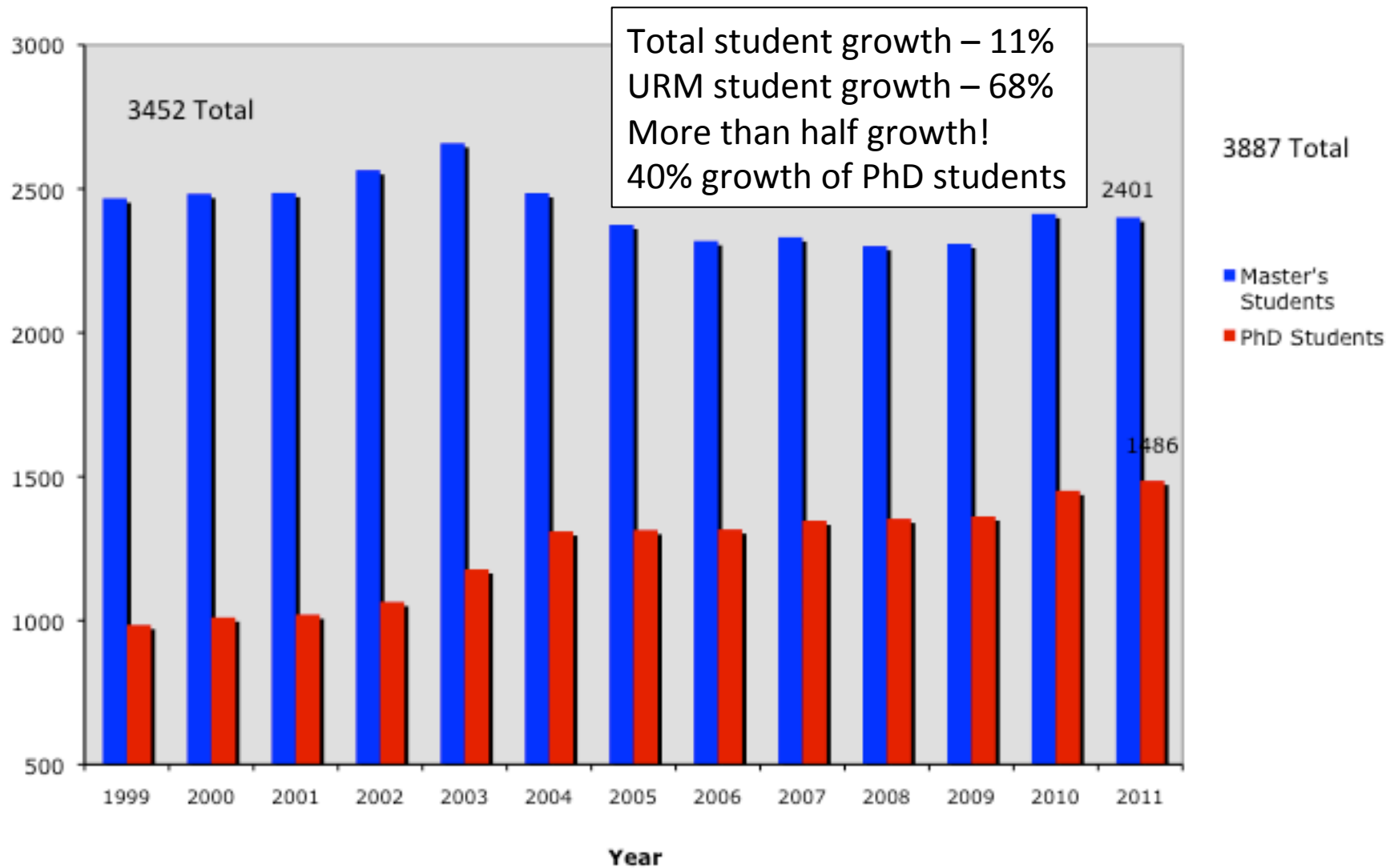
8:00 AM – 5:00 PM

##### Related Links

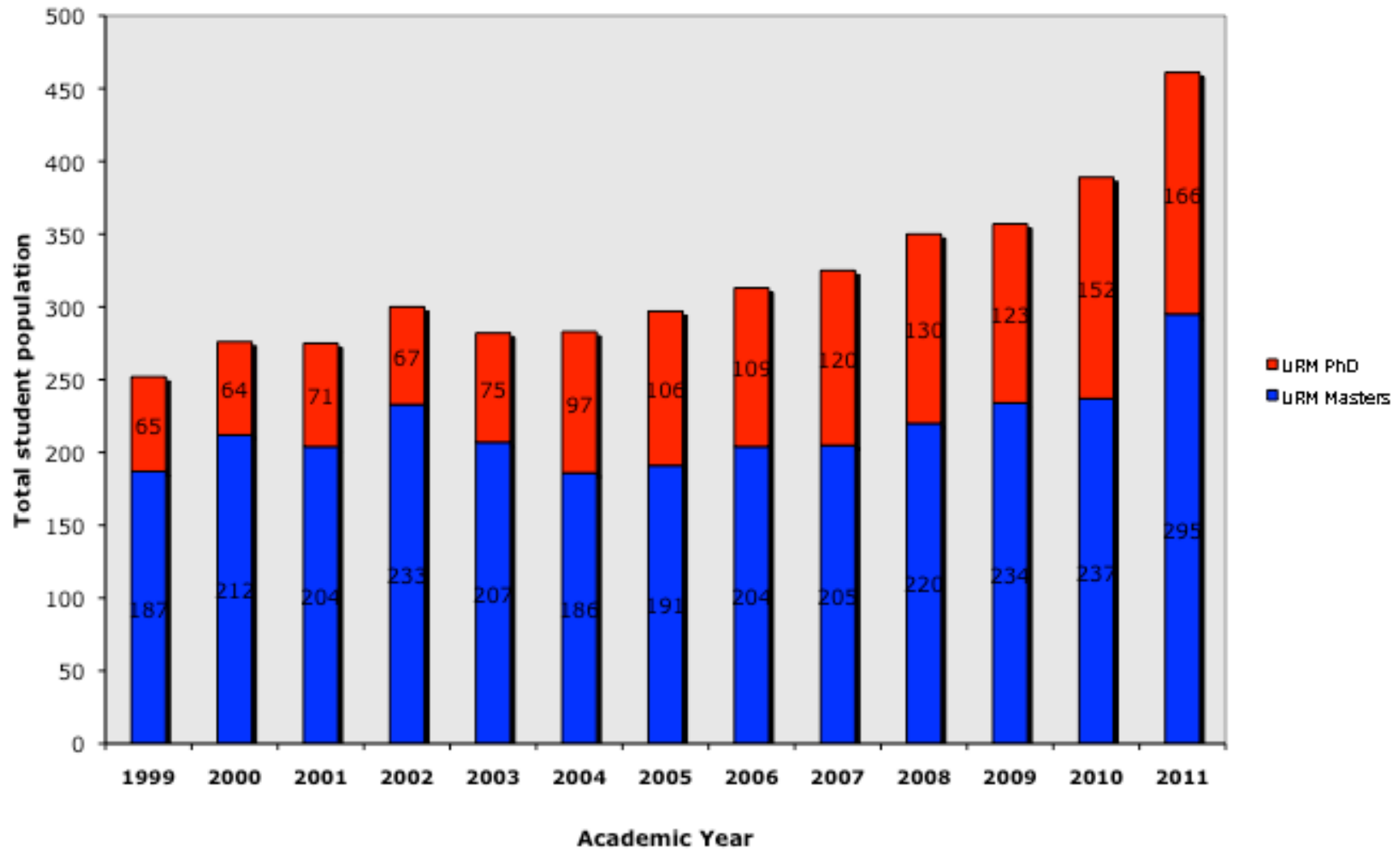
# Student Enrollment at CSU



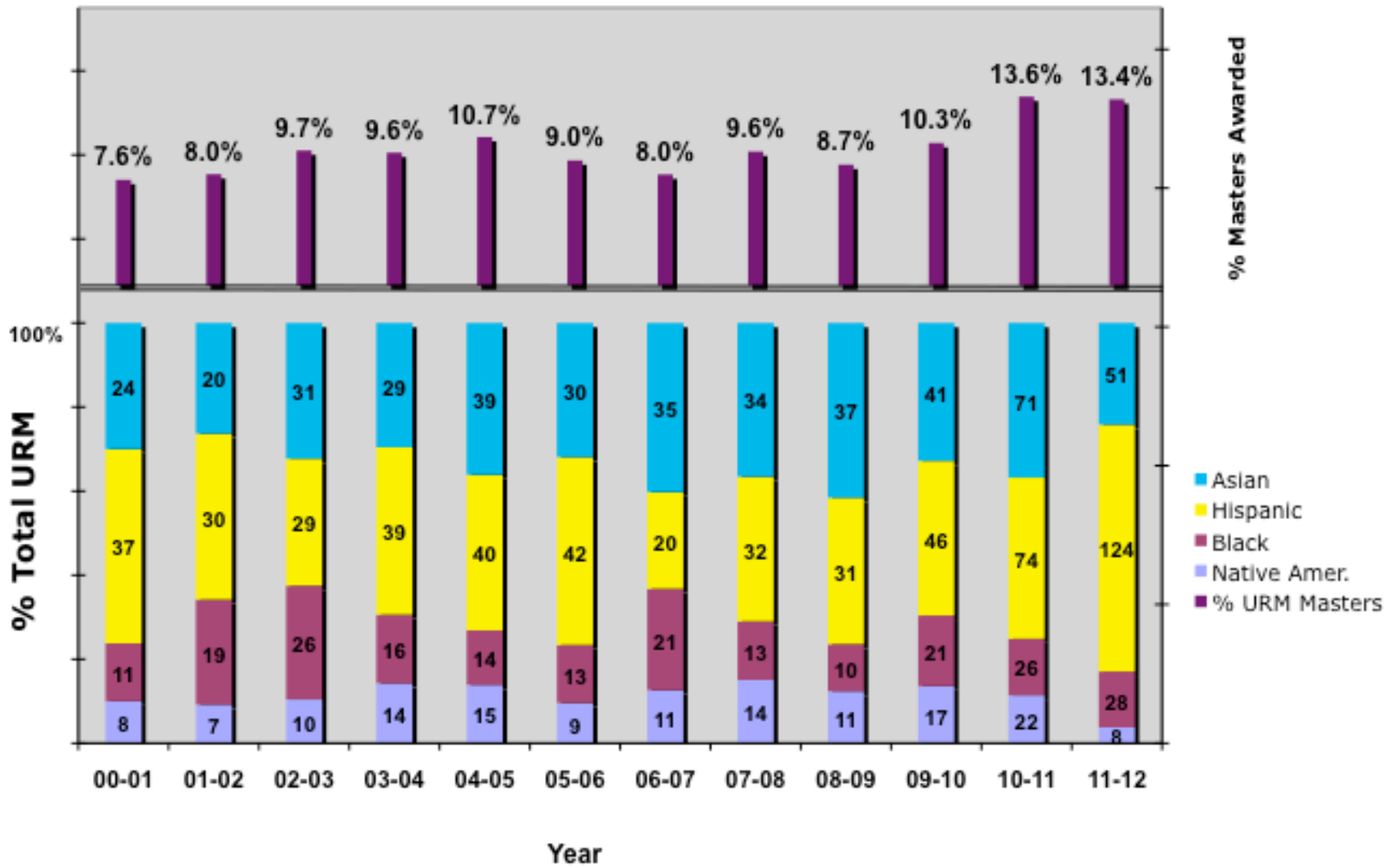
### Graduate Student Population by Degree



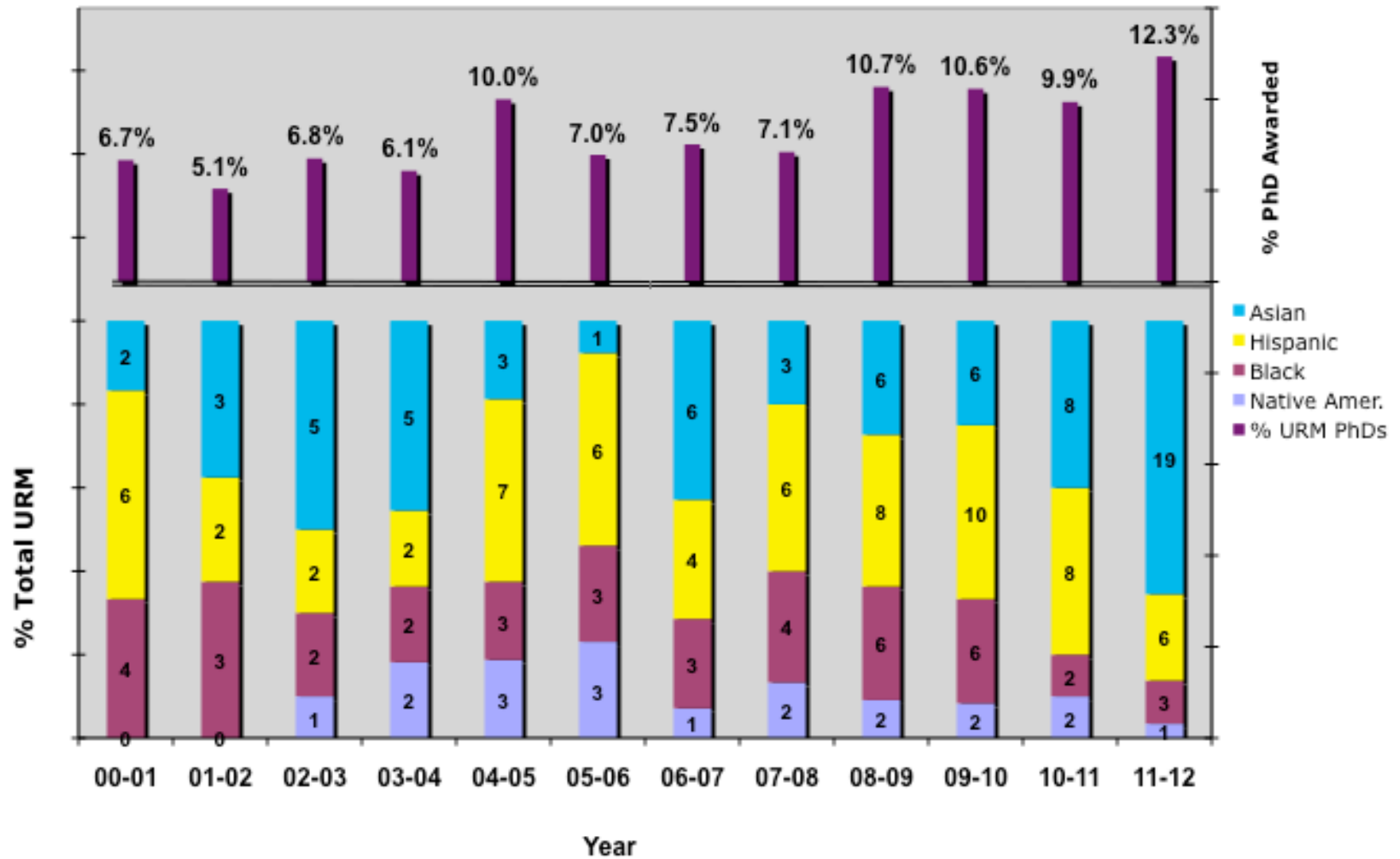
### Underrepresented Minority Graduate Students



### URM Masters by Year



URM PhDs by Year



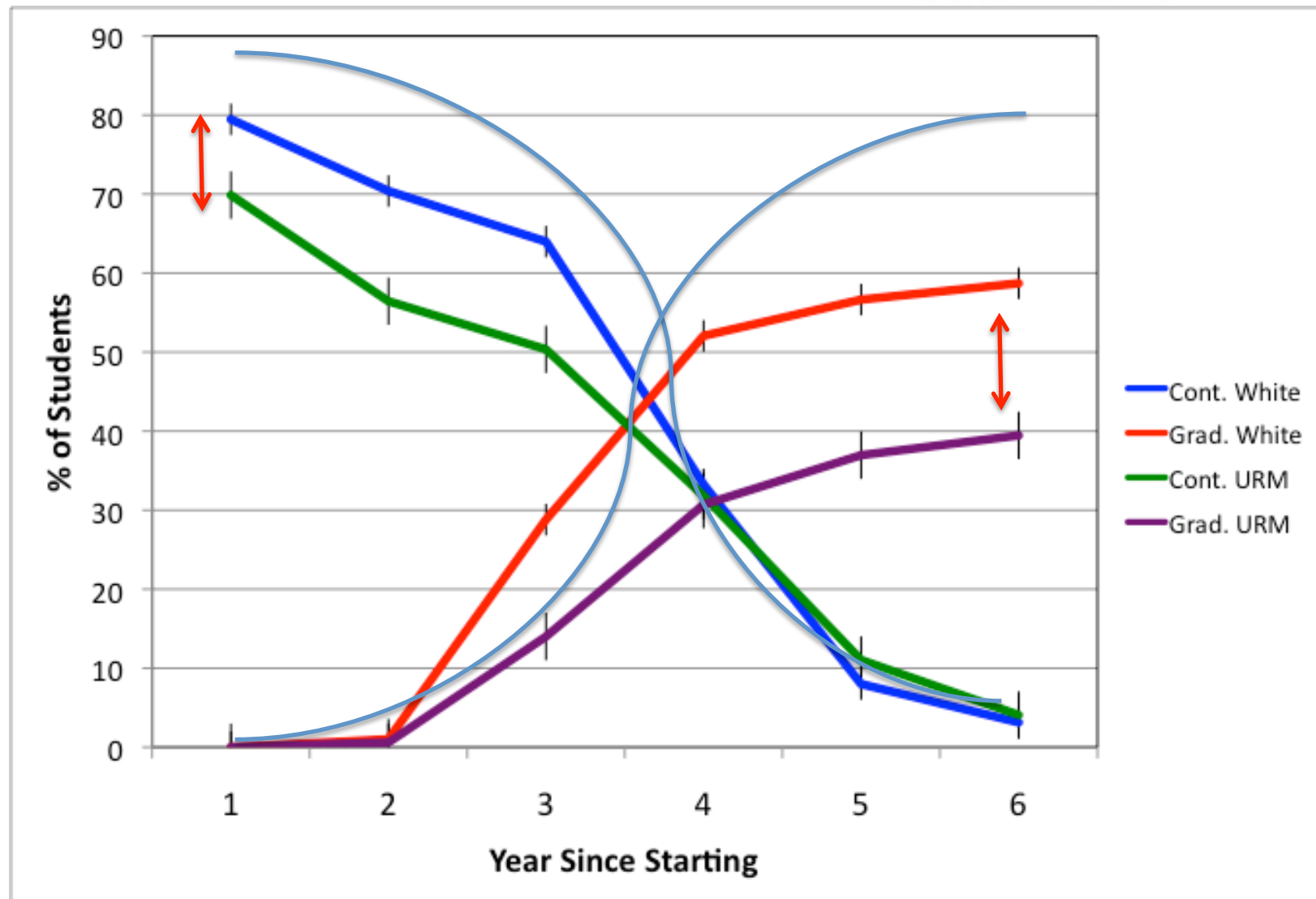


# What about Kansas State – what's next?

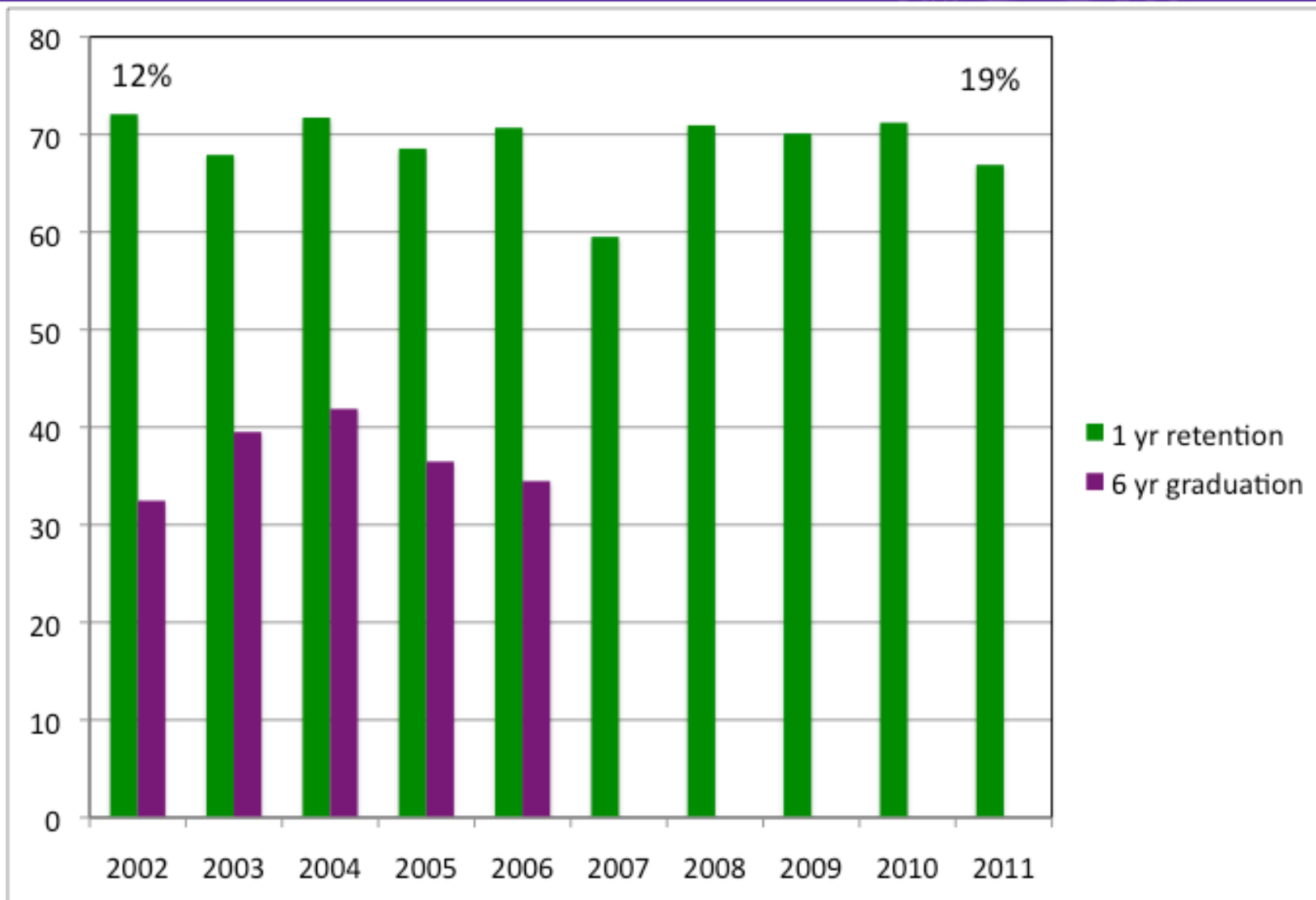
- Understand the baseline for undergraduates
- Kansas State has a recognized completion gap
- Change the undergraduate experience
- Collaborate across campus – build a SACNAS chapter
- Promote UG research
  - Initiated a student fee to support UG research and study abroad
  - Developing Scholars Program

# KSU Undergraduate Retention Challenges

## 2002-2012 Cohorts for Arts & Sciences



## KSU URM Undergraduate Retention – A&S Cohorts



# What about Kansas State – what's next?

- Understand the baseline for undergraduates
- Kansas State has a recognized completion gap
- Change the undergraduate experience
- Collaborate across campus – build a SACNAS chapter
- Promote UG research
  - Initiated a student fee to support UG research and study abroad
  - Developing Scholars Program

## Center for the Advancement of Teaching and Learning



Home

Course Ratings:  
TEVAL & IDEA

EDCI 943

Events

Graduate Teaching  
Assistants

Faculty Exchange for  
Teaching Excellence

New Faculty Institute

### Resources for Graduate Teaching Assistants

#### Welcome, GTAs!

On the CATL site you will find helpful and valuable resources for your career. These resources are available to you in a variety of ways. Check out our new Teaching and Learning Center at <http://catl.ind.opalsinfo.net>

Visit the links to your left to find out more about the Advancement of Teaching and Learning. If you ever have any questions or comments, please contact [catl.ind.opalsinfo.net](http://catl.ind.opalsinfo.net) or 755-532-7828 to

### GTA Recognition of Achievement in Professional Development

All events take place from 3:30–4:30pm in the Hale Library Hemisphere Room (5th floor). We'd like to extend a big THANK YOU to Hale Library for hosting these events!

#### January 24, 2013

*"Avoiding Powerpointlessness in your Lectures and Other Tips on Teaching Styles"*  
David Fallin, Instructor of Marketing, will share some ideas on the use of PowerPoint, discussion, and demonstrations in large vs. small classroom settings.

#### February 6, 2013

*"OMG! My prof just tweeted me!" Using Technology in the Classroom*  
Dr. Rebecca Gould, Director of the Information Technology Assistance Center, will talk about technology use in the classroom, including K-State Online. This session will be a lively, interaction discussion about the use of technology in the classroom with instructional designers, technology trainers and faculty.

#### March 5, 2013

*"Diversity in Your Teaching: Today's Global World and Multicultural Competencies in Teaching"*  
Gabriela Diaz de Sabates, Instructor of Women's Studies, will discuss diversity, international GTAs, and international students in the classroom.



## Developing Scholars



Developing Scholars Home

Application Information

About the Program

Mission

Frequently Asked Questions

For Faculty

Calendar of Events

Scholars' Scope

Helpful Links

Edgerley-Franklin Urban Leadership

Contact Us

### Developing Scholars Program (DSP)

The Developing Scholars Program is an Excelencia In Education Honorable Mention

#### What is DSP?

DSP offers underrepresented students research projects with faculty mentors. Students will receive academic, social, and financial support while participating in the discovery and creation of new knowledge at Kansas State University.

The program provides structured, faculty-supported opportunities for selected students who typically have not been well-represented in higher education in Kansas. If you are a student who has been historically underrepresented and are interested in doing research with faculty, you are strongly encouraged to apply.

Students will be involved in a seminar course for each semester of their first year. During subsequent semesters, students will be required to attend lectures and follow-up discussions at monthly meetings.

Developing  
Scholars  
Program



## Activities at K-State

- Developing Scholars Program
- K-State Advancement of Women in Science and Engineering (KAWSE)
- McNair Scholars
- NIH Bridges
- LS-AMP (new)
- MANNRS (Agricultural Sciences)
- SUROP, REU programs
- Kaufman Scholars/IMPACT

# Resources for Recruiting Faculty

<b>Indian Country Today</b>	579 Main Street Oneida, NY 13421 888.550.1311	<a href="http://indiancountrytodaymedianetwork.com">http://indiancountrytodaymedianetwork.com</a>
<b>Minority Health Professions Foundation</b>	3 Executive Park Drive N.E. Suite 100 Atlanta, GA 30329 404.634.1193	<a href="http://www.minorityhealth.org">www.minorityhealth.org</a>
<b>Minority &amp; Women Doctoral Directory</b> A registry which maintains up-to-date information on employment candidates who have recently received, or are soon to receive, a Doctoral or Master's degree in their respective field from one of approximately two hundred major research universities in the United States	5908 Featherlight Place Santa Rosa, CA 95409 707.539.7944 707.539.7916	<a href="http://www.mwdd.com">www.mwdd.com</a>
<b>National Association of African American Studies &amp; Affiliates (NAAAS)</b>	NAAAS P.O. Box 325 Biddenford, ME 04005 207.839.8004 207.839.3776 (Fax) <a href="mailto:naaasgrp@webcom.com">naaasgrp@webcom.com</a>	<a href="http://www.naaas.org">www.naaas.org</a>



## People made this possible...

- Chardie Baird
- Bonnie Beer
- Margi Cech
- Anita Cortez
- Omnia El Hakim
- Val Gallegos
- Larry Goodrich
- Jodie Hanzlik
- Beth Montelone
- Arlene Nededog
- Mark Rodriguez
- Farrell Webb

## Resources made this possible:

- DoEd
  - McNair Scholars programs – KSU, CSU
  - TRIO – KSU, CSU
- NSF
  - ADVANCE, KAWSE - KSU
  - AGEP – CSU
  - Louis Stokes AMP – KSU, CSU
- NIH
  - Bridges to the Doctorate, Bridges to Bachelors
- CSU and KSU for base support for personnel