

# Enhancing Graduate Student Success

## URMs in STEM Fields

### NSF/CGS DIMAC at the University of Iowa

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# Diversity at Iowa

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## Selected Milestones:

- 1<sup>st</sup> public institution to admit women and men equally (1855)
- 1<sup>st</sup> African American law degree, MFA, PhDs in History, Music, Political Science

# Graduate College Diversity Efforts

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## **Undergraduates:**

- CIC Summer Research Opportunity Program (SROP; 1986)
- Iowa Biosciences Advantage
- Lincoln University
- Nanoscience REU
- R. McNair
- LSAMP (OVPR)

## **Graduates:**

- Dean's Graduate Research Fellowships  
( $\approx$  20-25 per year; > 100 total; all doctoral programs eligible; multiyear support)
- Diversity tuition scholarship
- Matching funds to campus diversity grants (e.g. GAANNs, VIGRE, IGERT)
- NSF-AGEP 1.0, 1.5, 2.0
- CGS – Attrition-Completion Project – project partner
- CIC Free App., GEM Project 1000
- ACT scholars
- Office of Graduate Inclusion (academic success, social support)

# Improvement at the University of Iowa

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## Increased diversity

- 1995: 3.5% URM in STEM fields/8.5% overall
- 2011: 7.8% URM in STEM fields/12.8% overall

## Improved academic success

- AGEP fellows: 62% doctoral completion, median TTD 5.5 yrs
- DGR Fellows: 64% doctoral completion, median TTD 6.3 yrs

# NSF-CGS DIMAC at Iowa

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## Objectives:

- a. Collect and interpret information on policies, procedures, & practices within programs & university wide
- b. Develop best practices to share with graduate programs
- c. Expand the pool of qualified URM students in STEM

**Goal:** Improve overall academic success rate of URM students in STEM fields

# NSF-CGS DIMAC at Iowa

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## Original proposal (Feb 2012)

- 34 STEM fields
  - 13 Biomedical-Life Sciences
  - 2 Health Sciences
  - 3 Physical Sciences
  - 4 Mathematics
  - 6 Engineering
  - 6 Social Sciences
- 100 URM Students
  - 55 African American
  - 35 Hispanic-Latino
  - 10 Native American

## Current

- 7 additional STEM fields (41 total)
- 10 additional URM students (110 total URMs currently enrolled in STEM)

# NSF-CGS DIMAC at Iowa

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Template A-1: institutional characteristics (24)

- 17 are being met in programs/institution

Egs: Targeted recruitment of URMs

Hand books

Orientation programs

Travel grants

Teaching assistance

Multi-year funding

Regular review of graduate programs

Emerging best practices (attrition/completion)

# Summary at This Point

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- Continued Communication!
- Changing program leadership (DGS', DEOs)
- Best practices initiatives
- Supplement and strengthen current efforts
- “fill in” gaps
- Create w holistic view of graduate student success

**Knowledge → Awareness → Attitude → Behavior**