



# Bridging Community College to University Gap: Effective Recruitment of URM into Summer REUs -- Preparing for Successful Academic and Social Transition

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DMACC  
DES MOINES AREA  
COMMUNITY COLLEGE

1872  
DOANE  
COLLEGE

EASTERN IOWA COMMUNITY COLLEGES  
CLINTON ♦ MUSCATINE ♦ SCOTT

HAWKEYE  
COMMUNITY COLLEGE

GRINNELL COLLEGE



IOWA VALLEY  
COMMUNITY COLLEGE DISTRICT

IOWA STATE  
UNIVERSITY

Kirkwood  
COMMUNITY COLLEGE

Little Priest  
Tribal College

LUTHER COLLEGE

NEBRASKA  
WESLEYAN  
UNIVERSITY

THE  
UNIVERSITY  
OF IOWA

University of  
Northern Iowa

UPPER IOWA UNIVERSITY  
Established in 1857\*

Wartburg  
College

# Bridging the CC to University Gap:



## Challenges to REU participation by URM CC students

- Feeling of unpreparedness for research
- Lack of adequate guidance from home institution
- Lack of REU opportunities at home institution
- Family and job responsibilities hampering full-time commitment to standard REU programs



# Bridging the CC to University Gap



- Pre-REU Strategies and Best Practices
  - 1 to 1 and 1 on 1 connections with students at the CC
  - Strong Mentoring at the CC
  - Dedicated advising
  - Exposure of CCs to REU opportunities
  - Start *early* with applications!
- REU Program Implementation Strategies (RISE<sup>UP</sup>)
  - Flexible program (hours, duration, topics)
  - Mentoring the whole student
  - Developing peer networks during the program
  - Relating student research to society



# RISE<sup>UP</sup> : Program Goals



- Pilot a program that seeks to address underrepresentation in STEM workforce by attracting, recruiting, and supporting the academic advancements of URM CC students in STEM disciplines
- Promote early engagement in STEM research before transfer to 4Y institutions
- Enhance CC student advancement and success through mentoring and activities that bolster self-efficacy, confidence, and perseverance.



# RISE<sup>UP</sup> Pre-selection Questionnaire



- What STEM research area(s) would be of primary interest to you this summer?
- What do you hope to accomplish from participating in the RISE<sup>UP</sup> program?
- Are you open-minded about doing research and creative activity in a field/disciplines other than yours?
- What are your professional career aspirations?
- How do you think participation in RISE<sup>UP</sup> will impact your educational goals?



# RISE<sup>UP</sup> Implementation



- Flexible program: 3 days a week for 8 weeks
- Relating research to society: Research topics focus on
  - Effect of genes on cancers experienced by children
  - Development of smartphone App for virtual blood glucose sensor
  - Geospatial mapping of climate change vulnerability and climate refugee
  - Geographic analysis of built environment on childhood obesity
- Team-based research
- Peer mentoring by URM students at Iowa State
- Mentoring the whole student rather than just research
- Exposure to all aspects of REU Site programs



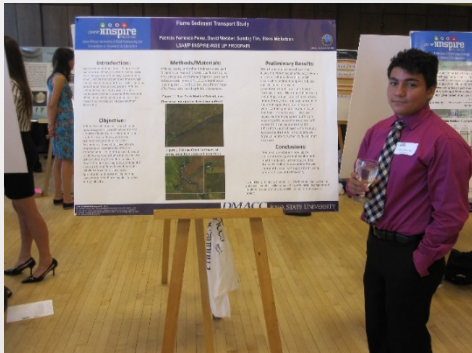
# RISE<sup>UP</sup> Pilot Program Summer 2015



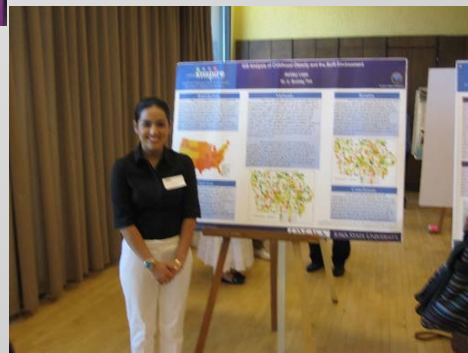
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Roxana Zazueta  
Charla Wilson  
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Patricio Perez



Ashley Lepe

