

A Strategic Plan to Increase the  
Diversity of Participation in STEM  
Higher Education and Research in  
South Carolina

*Innovative Integration Board*

**SC EPSCoR/IDeA** 

# Introduction

In 2009, South Carolina was awarded a \$20 million cooperative agreement with the National Science Foundation to improve the statewide research infrastructure and to assemble a diverse alliance of institutions. The ten participating institutions include comprehensive research universities, predominately undergraduate institutions, and technical colleges. Because of the diversity of the alliance and their proposed activities, program leadership identified the need for the Innovative Integration Board (IIB) to facilitate discussion among minority-serving science, technology, engineering and mathematics (STEM) programs and promote the infusion of diversity throughout the state's research and higher education programs.



An initial meeting to constitute the Innovative Integration Board was held on January 11, 2010 in Columbia, South Carolina. Invited attendees included principal investigators and directors of National Science Foundation, National Institutes of Health, or other institutionally-driven research and higher education programs that serve substantial numbers of underrepresented minorities in STEM fields. These stakeholders delineated a strategic plan as outlined herein.

## Mission

*The Innovative Integration Board will advocate, communicate and enable the integration of externally-funded and institutionally-driven programs that increase the participation of underrepresented groups in STEM research and higher education.*

## Core Values

*Student Development:* The IIB is devoted to the academic growth and success of STEM students

*Workforce and Economic Development:* The IIB is committed to the human resource needs of South Carolina's future economy

*Sustainability:* The IIB is dedicated to the long-term effort to bring the underrepresented community into full STEM participation

## Vision

*Within the decade, the South Carolina STEM research and higher education population will reflect the diversity of the state's population.*



# Strategies

**Strategy I: Advocate** – Increase awareness of the need for and accomplishments of externally-funded and institutionally-driven diversity programs

*Supporting Activities*

- » Educate elected officials and private-sector allies to build support for ongoing diversity initiatives
- » Broaden public understanding of the need for increased participation of minorities in STEM fields

*Provisional Indicators:*

Presentations to the General Public and Government Agencies, Frequency of Communication with Key Stakeholders, Attendance at State and National Meetings



Source: Joseph Flaherty/Coker College

**Strategy II: Communicate** – Foster statewide communication among STEM programs

*Supporting Activities*

- » Convene the Innovative Integration Board (IIB) twice annually
- » Explore ways to establish creative alliances between existing and future diversity programs
- » Identify and share best practices for the recruitment and retention of STEM students
- » Develop a central resource of data necessary for program design and assessment

*Provisional Indicators:*

IIB Meetings and Minutes, Electronic Data Resources, Inter- and Intra-institutional Partnerships



Source: Joshua Summers/Clemson University

**Strategy III: Enable** – Leverage existing and implement new diversity programs

*Supporting Activities*

- » Identify potential funding opportunities and build teams to respond to these opportunities
- » Establish pathways to increase linkages between STEM bridge programs
- » Offer service learning opportunities to undergraduate, graduate and postgraduate students, combining instruction with community service
- » Increase the number of underrepresented faculty in STEM disciplines

*Provisional Indicators:*

Program Solicitations Released, Extramural Proposals Submitted, Students Transitioning Between Academic Career Development Programs, Courses Instructed and Students Mentored, Minority Applicants for Faculty and Postdoctoral Fellow Positions



Source: SC EPSCoR/IDeA

*This document represents a dynamic strategic plan, with activities, goals, and metrics that will be revised on an as-needed basis.*

# Appendix A

## Innovative Integration Board Membership

**Dr. Alvin Schexnider (Chair)**

President

Thomas Nelson Community College

**Dr. Deborah Deas**

Senior Associate Dean for Diversity, College of Medicine

Medical University of South Carolina

**Dr. John McFadden**

Mays Professor Emeritus and Special Advisor to the Provost for Future Faculty Development

University of South Carolina

**Dr. Rebecca Bullard-Dillard**

Assistant Vice President for Research

Clafin University

**Dr. Kenneth Lewis**

Dean of the College of Science, Math and Engineering Technology

South Carolina State University

**Ms. Shirley Mills**

Director, Governmental and Community Relations

University of South Carolina

**Dr. John Wheeler**

Professor of Chemistry and Director of Integrative Research

Furman University

**Dr. James “Bob” Couch**

Director, Career and Technology Education

South Carolina Department of Education

**Dr. Leon Wiles**

Chief Diversity Officer

Clemson University

**Dr. Walter Tobin**

Vice President for Academic Affairs

Orangeburg-Calhoun Technical College