



2018 Winter Massachusetts PKAL Regional Network Meeting

## SUPPORTING ALL STUDENTS IN STEM

Bridgewater State University  
January 10, 2018



# AGENDA

### EVENT OBJECTIVES

- ❖ To help STEM faculty and administrators from 2- and 4-year colleges understand and apply principles of Inclusive Excellence in their work
- ❖ To increase the professional skills of students of color in STEM fields, and to assist attending students in creating new, or strengthening existing, STEM Student of Color Student Organizations
- ❖ To share the experience of students of color in STEM with STEM faculty and administrators through direct dialogue

8:00-8:45 AM      **REGISTRATION, COFFEE & NETWORKING**      *Main Hall, East Campus Commons*

8:45-8:55 AM      **WELCOMING REMARKS**      *Main Hall, East Campus Commons*  
❖ Dean Kristen Porter-Utley, Bridgewater State University

9:00-10:00 AM      **KEYNOTE ADDRESS**      *Main Hall, East Campus Common*  
***Your Dream Is Your Dream: We're Here to Help***

- ❖ Dr. Keith Crawford, Director, Center for Molecular Orthopedic Medicine, Brigham & Women's Hospital

Keith D. Crawford, M.D., Ph.D. is the Director of the Center for Molecular Orthopedic Medicine in the Department of Orthopedic Surgery. Dr. Crawford's primary research efforts are in the areas adult stem cell biology and regenerative medicine, with a primary research emphasis on the role of adult stem cells in osteoarthritis. Recently, he discovered a novel adult stem cell named the ELA stem cell (early lineage adult stem cell), which is phenotypically and functionally distinct from mesenchymal stem cells (MSCs), MAPCs, MIAMI, and VSEL adult stem cells. In addition to Dr. Crawford's research efforts, he sits on the Culturally Competent Care Education Committee for the Combine Orthopaedic Residency Program. The responsibility of this committee is to foster the development of faculty and curricula to prepare students and residents with the knowledge, skill, and attitude to practice culturally competent medicine; thereby diminishing healthcare disparities.



10:15-11:05 AM	<p><b>FACULTY PLENARY</b> <b><i>Cultivating a Practice of Mindfulness: Minimizing Unconscious Bias</i></b></p> <ul style="list-style-type: none"><li>❖ Dr. Robbin Chapman, Associate Provost &amp; Academic Director of Diversity &amp; Inclusion, Wellesley College</li></ul> <p>A hallmark of effective leadership is the ability to exercise good (informed, balanced) judgement. However, there is an unconscious influence on our judgement called “bias.” Our assumptions and stereotypes can intensify our bias filtering and even external events can trigger bias behaviors. In this session, we will unpack how bias works and introduce practices for reducing the influence of those biases on our actions and decisions, and our interactions with others.</p>	<p><i>Lecture Hall, Room 120, Dana Mohler-Faria Science Building</i></p>
10:15-11:05 AM	<p><b>STUDENT PLENARY</b> <b><i>Shared Experiences as STEM Students</i></b></p> <ul style="list-style-type: none"><li>❖ Mr. Samora Lopes &amp; Mr. Claudio Eshun, Executive Officers, Inclusive Advancement of Multicultural Students in STEM, Bridgewater State University</li></ul> <p>Identifying common themes of struggle, as well as common experiences of success, will help student leaders in STEM from different institution types and across the region bond. Identifying factors promoting success of all STEM students will provide a foundation for work throughout the day in strengthening or building new STEM Student Organizations.</p>	<p><i>Main Hall, East Campus Commons</i></p>
11:15-12:05 PM	<p><b>FACULTY PLENARY</b> <b><i>Exploring Class and Gender in Supporting STEM Students</i></b></p> <ul style="list-style-type: none"><li>❖ Dr. Laura Ramsey, Associate Professor of Psychology, Bridgewater State University</li><li>❖ Dr. Colby King, Assistant Professor of Sociology, Bridgewater State University</li></ul> <p>This session explores how gender and class shape students’ experiences in STEM fields. In particular, the culture of STEM disciplines may be mismatched with the cultural expectations of women and working-class students, which can create barriers to these students’ success and motivation in STEM. This session will offer highlights from the research on gender and class as it relates to STEM education, as well as recommendations for STEM faculty who wish to create a more inclusive environment.</p>	<p><i>Lecture Hall, Room 120, Dana Mohler-Faria Science Building</i></p>

11:15-12:05 PM

**STUDENT PLENARY**

***Setting and Achieving Goals***

- ❖ Ms. Sydne Marrow, Director, Center for Multicultural Affairs, Bridgewater State University
- ❖ Dr. Cindy Kane, Special Assistant to the Provost for Academic Innovation, Bridgewater State University

You've decided you want to make a difference in improving the student experience – so what next? This workshop will help you to take what you know about your current campus environment and consider what next steps might make the most positive impact. Whether your plan becomes the development of a new student organization or the strengthening of existing initiatives, this session will offer a framework for planning that will help you to make your vision for improving your campus a reality.

Main Hall, East Campus  
Commons

12:10-1:45 PM

**LUNCH & PLENARY PANEL**

***Journeys in STEM***

- ❖ Student Leaders from Across Massachusetts

Listening to student voices is the best way to understand student experiences. This panel of STEM students from across the New England region will help all better understand and respond to student needs.

Main Hall, East Campus  
Commons

2:00-3:15 PM

**FACULTY PARALLEL WORKSHOPS**

***Applying Inclusive Excellence in the Faculty Workplace***

**SESSION I**

***Utilizing Culturally Relevant Materials***

- ❖ Dr. Catherine Buell, Mathematics, Fitchburg State University

Participants will be invited to bring a social justice, ethical issue, or culturally relevant topic they'd like to incorporate to their class. They will then work with peers from across the region to start, expand, or hone a lesson or assignment that will engage students with a social justice topic using STEM-based tool-kit. The presenter will provide several example of lessons used in various mathematics courses as well as potential STEM applications.

DMF 440, Dana Mohler-  
Faria Science Building

## **SESSION II**

### ***Supporting Isolated Students***

- ❖ Ms. Charlana Simmons, Director of Office of Multicultural Affairs, Worcester Polytechnic Institute

Supporting successful student integration into campus culture can sometimes be a difficult task. There are several instances where students isolate themselves from peers, faculty, and staff or become excluded from community building opportunities. This session will identify potential causes for isolation (self-imposed and systematic), and assist faculty and staff in identifying students who are isolating themselves or being excluded. Participants in this session will learn how to identify students who are having difficulty finding community institutionally, academically, and socially, and identify ways to help those students access community in various venues across the campus.

*DMF 120, Dana Mohler-Faria Science Building*

## **SESSION III**

### ***Making STEM's Relevance Clear***

- ❖ Dr. Adrienne Wooters, Physics and Academic Affairs, Massachusetts College of the Liberal Arts

There is ample research that shows that students who take STEM courses that address personal and/or socially relevant issues through project-based learning are more engaged and are more likely to succeed in those courses. These courses strengthen students' critical thinking skills and heighten their levels of civic engagement. This workshop will cover the basic building blocks of creating, integrating, and assessing project-based assignments. Participants will then work to develop project-based assignments that engage students in relevant real-world issues.

*DMF 465, Dana Mohler-Faria Science Building*

## **SESSION IV**

### ***Advising for Success***

- ❖ Dr. Luis Paredes, Director of the Office of Institutional Diversity, Bridgewater State University

Multiple studies indicate the importance of students finding a mentor and connecting with faculty outside the classroom. When used effectively, advising can provide a platform for faculty and students to identify strengths, set goals, and develop as a student, professional, and person. Participants will learn the basics of Appreciative Advising, consider several examples of materials & practices that can effectively aid advising, and work with peers to develop better advising practices in an area of choice.

*DMF 442, Dana Mohler-Faria Science Building*

**SESSION V**

***Supporting Underserved Students as a STEM Administrator***

- ❖ Dr. Kristen Porter-Utley, Dean, Bartlett College of Science and Mathematics, Bridgewater State University
- ❖ Dr. James McKenna, Associate Dean, Bartlett College of Science and Mathematics, Bridgewater State University

DMF 278, Dana Mohler-  
Faria Science Building

In this round-table style discussion, STEM administrators will share insights into programs and mechanisms that assist traditionally underserved students be successful in STEM fields.

**SESSION VI**

***Help Students Navigate your Courses and Programs with Backwards Design***

- ❖ Dr. Thomas Kling, Physics, Bridgewater State University

DMF 463, Dana Mohler-  
Faria Science Building

Backwards Design is an organizing principle that can help you create interventions that help students better meet your course and program objectives. Participants in this workshop will learn the basic principles of backwards design, and begin to apply them at the individual course and a program levels.

2:00-3:25 PM

**STUDENT PLENARY**

***Creating New, or Strengthening Existing, STEM Student Organizations***

- ❖ IAMSSTEM Student Leaders

Main Hall, East Campus

Working with student leaders from their institution, participants will consider who a student organization at their home school will serve, the goals and activities of that organization, and identify campus resources that will lead to strong and lasting implementation of a student organization that supports the success of all STEM students.

3:30-3:45 PM

**CLOSING**

***Commitment of Faculty and Student Teams to Action***

- ❖ Dr. Sabrina Gentlewarrior, Vice President for Student Success and Diversity, Bridgewater State University

Main Hall, East Campus  
Commons