ACADEMIC IMPRESSIONS

CONFERENCE

STEM INSTITUTE FOR STUDENT SUCCESS AND RETENTION

June 10 - 12, 2020 | Denver, CO

Learn practical, holistic solutions for STEM student success from experts in the field.

OVERVIEW

Many institutions struggle to attract and retain STEM students, especially from within historically marginalized populations. Furthermore, incoming STEM students enter higher education under-prepared to handle the rigor of academic programs, with many opting to find new degree paths or leaving the institution entirely. However, creative improvements to curriculum and student support systems tailored specifically to the STEM disciplines can significantly help to retain students.

Join us for a comprehensive program that offers practical solutions to the unique challenges facing STEM students. Our expert instructors will share innovative solutions including:

- Tailored student support systems
- Inclusive teaching and learning experiences
- Holistic approaches to recruit and retain underrepresented students

During this conference, you'll have the chance to participate in two breakout sessions to dive deep into some of the most pressing topics within STEM student retention. Check out the full agenda for more details.

Breakout Session 1

Option 1: Student Support Services for Underrepresented Populations

Option 2: Developing Faculty to Create Engaging Learning Experiences

Breakout Session 2

Option 1: Promoting Student Success through Building Community in STEM

Option 2: Rethinking 2-year/4-year Partnerships

PRE-CONFERENCE WORKSHOP

Space Matters: Designing STEM Learning Environments that Foster Inclusion and Student Success

Contemporary pedagogies, curricula, and cultures that promote inclusion and student success in STEM require consideration of the physical environments that support them. In this session, you and your peers will examine the elements of 21st century STEM learning environments and the strategies employed to bring key stakeholders and resources together to successfully execute a STEM facilities project. Both new construction and renovation projects will be considered.

WHO SHOULD ATTEND

STEM academic administrators will benefit from strategies presented on developing and implementing initiatives that promote student success. This conference will also be valuable for faculty and academic support staff who interact directly with students and who aim to improve student persistence and success.

We encourage you to attend as teams to benefit from the shared training experience.

BRING YOUR TEAM AND SAVE!

Save over 15% when you register three or more colleagues.

AGENDA

Day One

Pre-Conference Workshop

Continental Breakfast (included in workshop registration fee) and Registration for Pre-Con Attendees
8:30 - 9:00 a.m.

Pre-Conference Workshop: Space Matters: Designing STEM Learning Environments that Foster Inclusion and Student Success
9:00 a.m. - 12:00 p.m.

Contemporary pedagogies, curricula, and cultures that promote inclusion and student success in STEM require consideration of the built environments that support them. We will examine the elements that characterize 21st century STEM learning environments and the strategies employed to bring key stakeholders and resources together to successfully execute a STEM facilities project. Both new construction and renovation projects will be considered.

Main Conference

Registration
12:30 - 1:00 p.m.

Welcome and Introductions
1:00 - 1:30 p.m.

Turning Retention Opportunities into Programs
1:30 - 2:45 p.m.

This first session will allow you to start examining current and potential programming options that will serve your retention plan. Our faculty will share examples of new program models to help align current and new efforts.

Break
2:45 - 3:00 p.m.

Redesigning Curriculum to Address Bottleneck Courses
3:00 - 4:15 p.m.

One of the biggest challenges in STEM retention is helping students succeed through first- and second-year bottleneck courses like math and chemistry. We'll explore innovative models for redesigning STEM curriculum to remove the challenging course sequences that cause retention setbacks.

AGENDA

Day One (CONTINUED)

Working Session and Coaching Time
4:15 - 5:00 p.m.

During this session, you will have the opportunity to consider the ideas you have heard in Day 1 and begin to prioritize your institution's specific needs in collaboration with our expert faculty.

Networking Reception (included in registration fee)
5:00 - 6:00 p.m.

This informal reception is your chance to decompress, have some refreshments on us, and expand your network of connections. Our programs are intentionally designed for smaller groups, so this is a great time to catch-up with attendees and speakers whom you may not have connected with yet.

Day Two

Continental Breakfast (included in registration fee)
8:30 - 9:00 a.m.

Proactively Preparing Incoming Students
9:00 - 10:15 a.m.

Underprepared students entering the rigor of post-secondary STEM education pose challenges for faculty, deans, and all student support staff. Waiting on these students to arrive and then trying to accommodate them will deflate both resources and student motivation. We will examine new approaches to secondary intervention and bridge programs to better prepare incoming STEM students.

Break
10:15 - 10:30 a.m.

Inclusive Learning Pedagogies for Student Success in STEM
10:30 - 11:45 a.m.

The success of all STEM students, particularly those underrepresented in STEM fields, depends on classroom and laboratory experiences that are engaging and inclusive. In this interactive session, you will explore through data, example, and practice the ways in which SCALE-UP and other "active learning" pedagogies promote inclusive and effective learning in STEM classes.

Lunch (included in registration fee)
11:45 a.m. - 12:45 p.m.

AGENDA

Day Two (CONTINUED)

Breakout Session 1
12:45 - 2:00 p.m.

Option 1: Student Support Services for Underrepresented Populations

This session is designed to provide ideas for partnering with other institutions and industries and providing resources to increase retention in STEM areas for underrepresented students. You'll hear from our experts about how one institution developed a program that provides financial assistance, mentoring, field trips to 4-year institutions, site visits to engineering companies, and access to additional resources aimed at supporting retention efforts for engineering students from underrepresented populations.

Option 2: Developing Faculty to Create Engaging Learning Experiences

One of the key factors in engaging students and retaining them to graduation is having professors who make STEM content exciting, relevant, and engaging, faculty who know how to reach diverse learners. You will gain ideas for shifting mindsets as well as professional development considerations.

Break
2:00 - 2:15 p.m.

Breakout Session 2
2:15 - 3:30 p.m.

Option 1: Promoting Student Success through Building Community in STEM

A key element of successful, inclusive STEM programs is a strong sense of STEM community cultivated within and beyond the classroom. In STEM communities, students find support systems and cultivate STEM identities that foster resilience and persistence. You will explore models of successful programs including integrated science curricula, living learning communities, and cohort programs to identify opportunities for cultivating STEM communities on your own campus.

Option 2: Rethinking 2-year/4-year Partnerships

Both 2-year and 4-year institutions benefit when they have strong support systems in place for transferring students. By closely partnering with nearby institutions, STEM programs can develop tightly aligned articulation agreements as well as provide social/emotional support for transferring students. In this discussion, you will have the chance to explore how to build a STEM partnership between 2-year and 4-year institutions, mutually benefiting enrollment and completion rates.

Working Session and Coaching Time
3:30 - 4:30 p.m.

We will give you the opportunity to revisit your goals from Day 1 and integrate your takeaways from Day 2 while receiving coaching from our expert faculty.

AGENDA

Day Three

Continental Breakfast (included in registration fee)
8:30 - 9:00 a.m.

Models for Recruiting Underrepresented Students
9:00 - 10:15 a.m.

One of the key factors in getting students to enroll in STEM programs is making certain that they can see themselves being academically and socially successful in these fields. This includes having faculty and peer-mentors from diverse backgrounds so that students feel connected to the program. In this hour, you will hear several models of how institutions have impacted recruiting and enrollment for underrepresented groups in STEM fields.

Break
10:15 - 10:30 a.m.

Evaluating Programmatic Success
10:30 - 11:45 a.m.

This final conference session will focus on strategies for using data to help you evaluate the success of your current STEM retention programs in order to make decisions about which programs to scale up, adjust, downsize, or cut altogether.

Conference Wrap Up, Questions, Evaluations
11:45 a.m. - 12:00 p.m.

INSTRUCTORS

Melissa Dagley, Ed. D.

Executive Director, Center for Initiatives in STEM, University of Central Florida

Dr. Melissa Dagley serves as PI of the NSF-funded STEP 1b program "Convincing Outstanding-Math-Potential Admits to Succeed in STEM (COMPASS)," and Director for the formerly NSF-funded "EXCEL:UCF-STEP Pathways to STEM: From Promise to Prominence". She is a Co-PI for the Girls EXCELling in Math and Science (GEMS) and WISE@UCF industry funded women's mentoring initiatives. In addition to guiding undergraduates towards a successful path in STEM, Dr. Dagley directs the STEM K-12 outreach and teacher training initiatives for the Colleges of Science and Engineering and Computer Science and leads a fellows program for faculty interested in STEM education and education research. Through iSTEM, Dr. Dagley works to promote and enhance collaborative efforts on STEM education and research by bringing together colleges, centers, and institutes on campus, as well as other stakeholders with similar interest in STEM initiatives. Her research interests lie in the areas of student access to education, sense of community, retention, first-year experience, living-learning communities, and persistence to graduation for students in STEM programs.

Steven P. Girardot, Ph.D.

Associate Vice Provost for Undergraduate Education, Georgia Institute of Technology

Steven P. Girardot, Associate Vice Provost for Undergraduate Education, has more than ten years of higher education experience, and earned both a BS in Chemical Engineering and a Master's Degree in Chemistry from Georgia Tech. He completed his doctorate in Chemistry and Environmental Health at Emory University, and a Master of Public Health (MPH) degree in Epidemiology from the Emory University Rollins School of Public Health.

Dr. Girardot has extensive background in student transition, retention, and success. Steven's experience includes serving as the founding director of Georgia Tech's Center for Academic Success and co-chairing Georgia Tech's Complete College Georgia Steering Committee. He also served as the Director of the Office of Success Programs (which included new student orientation, first-year seminars, sophomore programs, tutoring, and academic support programs); Assistant Director for TA and Graduate Student Programs at Tech's Center for the Enhancement of Teaching and Learning (CETL); and Program Coordinator at Tech's Center for Education Integrating Science, Mathematics, and Computing (CEISMC), where he managed tutoring programs that linked Tech students to local elementary schools. In addition to his administrative positions, he teaches Freshman Seminar (GT1000) and Freshman Chemistry.

INSTRUCTORS

Nathan Klingbeil

Professor, Department of Mechanical & Materials Engineering, Wright State University

Prior to his current role, Dr. Klingbeil served as Dean of the College of Engineering and Computer Science from 2013-2018. He is the lead investigator for Wright State's National Model for Engineering Mathematics education, which has been supported by over $5.0M in grants from the National Science Foundation. He held the university title of Robert J. Kegerreis Distinguished Professor of Teaching from 2005-2008, and served as the college's Director of Student Retention and Success from 2007-2009. Prior to his appointment as Dean, he served as Associate Dean for Academic Affairs, where he established the CECS Student Success Center to support large-scale changes in the college's recruitment and retention initiatives. He has received numerous awards for his work in engineering and STEM education, and was named the 2005 Ohio Professor of the Year by the Carnegie Foundation for the Advancement of Teaching and Council for Advancement and Support of Education (CASE).

Dr. Alycia Marshall

Associate Vice President for Learning and Academic Affairs, Full Professor of Mathematics, Anne Arundel Community College

Dr. Alycia Marshall holds a Ph.D. in Mathematics Education from the University of Maryland College Park, a Master of Arts in Teaching from Bowie State University and a Bachelor of Arts in Mathematics from the University of Maryland Baltimore County. Her teaching experience includes three years of high school mathematics and 18 years of college-level mathematics. She also spent five years as the Department Chair of Mathematics at AACC, supervising up to 30 full-time and 90 part-time mathematics faculty.

Marshall is one of the Charles A. Dana Center's Mathematics Pathways Leadership Fellows and has been awarded the Verizon Community Innovator Award (2013), the 2015 INSIGHT Into Diversity Magazine's "100 Inspiring Women in Stem Award," a National Faculty Role Model Award presented by Minority Access Inc. (2015), and the John and Suanne Roueche Excellence Award from the League of Innovation (2017). She was the Principal Investigator and founder of the Engineering Scholars Program at AACC. She is also a member of the Strong Start to Finish (SSTF) Expert Advisory/Knowledge Management Board, in association with the Education Commission of the States, and a member of the Mathematics Advisory Group (MAG) for TPSE (Transforming Post-Secondary Education).

INSTRUCTORS

Erin Pitts

Bridges to Baccalaureate & S-STEM Grants, Front Range Community College

Erin has worked for access and success in higher education for 15 years. She has experience with GEAR UP, TRiO, former foster youth, and degree mapping for completion. Erin currently serves as the Success Coach for Bridges to Baccalaureate (B2B) at Front Range Community College (FRCC) in Fort Collins, CO. She is also the Co-Principal Investigator for the S-STEM Grant called Wolves to Rams Scholars. B2B is funded by the NIH and designed to recruit and retain more diverse students in the biomedical and behavioral sciences, with a focus on transfer from FRCC to Colorado State University (CSU) and involvement in undergraduate research. Wolves to Rams is funded by the NSF and is designed to financially support students so that they can maintain academic momentum by reducing outside work hours. Erin spends most of her time advising students one-on-one, as well as collaborating with her CSU colleagues on deciphering curriculum, policies, and transfer admission.

Jill Sible

Assistant Provost for Undergraduate Education, Virginia Tech

At Virginia Tech, Jill Sible led an innovative cell biology research program for a decade then, six years ago, moved into university administration to work for the improvement of the undergraduate learning experience. She introduced her campus to the SCALE-UP concept and spearheaded the design and construction of SCALE-UP classrooms and adoption of the associated pedagogy at Virginia Tech. She has led over $9M in sponsored research projects including $5M in STEM education grants. She is currently the lead investigator for projects funded by the National Science Foundation, National Institutes of Health, and Howard Hughes Medical Institute, all of which focus on increasing success, retention and diversity among undergraduate programs in STEM.

Sible is a National Academic of Sciences Education Fellow in the Life Sciences. Her current projects include leading a dramatic revision of Virginia Tech's general education curriculum to be more integrated, outcomes-oriented and infused with contemporary pedagogy. She has also worked on the vision and programming for Virginia Tech's new classroom building, scheduled to begin construction this fall. Sible continues to teach courses in cell and molecular biology, developmental biology, and cancer biology and cites the learning experiences she shares with her students as her greatest professional reward.

ACADEMIC IMPRESSIONS STAFF

Jess Landis

Program Manager, Academic Impressions

Jess serves as a program manager at Academic Impressions, creating engaging learning experiences for staff and faculty, with a specific focus on student retention and success, career services, advising, and student transitions. Prior to joining Academic Impressions, Jess worked in Student Affairs at Loyola University Chicago, DePaul University, and Case Western Reserve University. Jess holds a BA from John Carroll University and a MA from the University of Cincinnati.

LOCATION

June 10 – 12, 2020 | Denver, CO

Hotel:

Brown Palace Hotel & Spa

321 17th St.

Denver, CO 80202

303-297-3111

Room rate:

$239 plus tax.

Room block dates:

The nights of June 9, 10, and 11, 2020.

Room block cutoff date:

May 19, 2020.

Reserve Your Room: Please call 303-297-3111 and indicate that you are with the Academic Impressions group to receive the group rate. Please book early - rooms are limited and subject to availability.

The Academic Impressions Experience

Intimate, workshop-style trainings with personalized attention

Trainings are practical and action oriented so you can hit the ground running

Carefully vetted expert instructors who are also practitioners in the field

Learner-centric and designed for interaction and collaboration

Highly recommended: 9 out of 10 participants recommend our trainings to colleagues