Office of STEM Education Units and Contact Information

The **Office of STEM Education** is part of the SAS Office of Undergraduate Education and oversees efforts related to reforms in undergraduate education in the STEM and quantitative disciplines, outreach to the community, and technological developments targeted at improving the quality of undergraduate education.

Contact: Ronald Ransome (<u>osedean@sas.rutgers.edu</u>), Associate Dean for STEM Education

The Cyberlearning Innovation and Research Center (CIRC) is an innovation center that serves as a platform for developing new tools in educational technology to create solutions to real-world classroom problems and discover novel ways to engage instructors with students and students with each other.

Contact: Darrin York (Darrin.York@rutgers.edu), Director

The STEM Transformations using Research-based Instructional practices, Assessment and Dissemination coalition (TRIAD) serves as a research and organizing center for implementation and assessment of course transformations based on discipline based education research.

Contact: Mary Emenike (me293@chem.rutgers.edu), Director

The Math & Science Learning Center (MSLC) provides a space for student collaboration and learning, public outreach programs to K-12 students and teachers, promotes collaboration among outreach programs across the university, and fosters the development of programming which brings together the educational expertise and rich array of research initiatives of faculty and graduate students in the STEM disciplines. Among the major outreach activities are the Rutgers Science Explorer, a mobile lab that visits local middle schools, and the historic Geology Museum.

Contacts:

Kathleen Scott (scott@biology.rutgers.edu), MSLC Patricia Irizarry (irizarry.patty@gmail.com), Rutgers Science Explorer Lauren Adamo (Ineitzke@eps.rutgers.edu) , Geology Museum

Office of STEM Education Open House

September 13, 2019 9:00 am - noon Allison Road Classroom Building, Third floor



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Office of STEM Education Open House September 13, 2019

9:00 am Breakfast and Networking

Opening Session (Room 306)

9:30 am	Welcome and Inauguration of Rutgers Science Explorer Station Ron Ransome, OSE & Department of Physics and Astronomy
9:50 am	Panel: The Role of Active Learning in STEM Education Mary Emenike, OSE & Department of Chemistry, facilitator Chaz Ruggieri, OSE & Physics and Astronomy John Taylor, Chemistry and Chemical Biology Gregg Transue, Division of Life Sciences

10:10 am Posters and Demonstrations

Room 336	Concurrent Sessions
10:40 am	Three Easy Ways to Enhance your Teaching David Goldman, SAS Teaching, Learning, and Assessment
11:00 am	Designing More Effective Broader Impacts and Community Engagement Grant Programs Patricia Irizzary, Rutgers Science Explorer Lauren Adamo, Rutgers Geology Museum and EPS
10:40 am	Designing Effective Exams Marc Muñiz, OSE, CIRC
11:00 am	Broadening Participation: Diversity, Equity, and Inclusion Geraldine Cochran, OSE, Physics & Astronomy
11:20 am	Posters and Demonstrations

Posters and Demonstrations

Outreach (Room 336)

Using a Mobile Laboratory to Engage Graduate Students in the Development and Delivery of Precollege STEM Outreach

Patricia Irizarry, Susan Coletta, Kathleen Scott, OSE

Designing More Effective Broader Impacts and Community Engagement Grant Programs

Patricia Irizarry and Lauren Adamo, OSE, RSE, Geology Museum

Rutgers Geology Museum: Crafting for Science Education

Julie Criscione, Geology Museum

A 21st- Century Science Museum in Rutgers Geology Hall

Patricia Irizarry, Lauren Adamo, Kathleen Scott, Carla Yanni

Outreach Activities from the Rutgers Science Explorer and Geology Museum

Assessment and Technology (Room 307)

Paperless Grading and Effective Data Collection

James Chun, OSE, CIRC

Sleuth: A Gamified Framework for STEM Problem Solving

Emily Atieh, Marc N. Muñiz, CIRC

Teaching Microbiology Laboratory with Tablets

Alex Walczak, Sue Skelly, Jennifer Goff, Life Sciences

Designing Effective Exams

Marc Muñiz, OSE, CIRC

Paperless Grading and Effective Data Collection

Darrin York and James Chun, CIRC

Course Transformations (Room 332)

ISLE-based Introductory Physics Lab Reform

Joshua Rutberg, Eugenia Etkina, Diane Jammula, GSE, Physics (Newark)

Designing General Biology Research Lab

Monica Torres, Gregg Transue, Martha Haviland, Life Sciences

Transforming Introductory Computer Science

Ana Paula Centeno, France Trees and Ananda Gunawardena,

Department of Computer Science

Using Network Analysis to Evaluate Community in an Engineering Physics Course Geraldine Cochran, OSE, Department of Physics

P2C2: Rethinking Mathematics Education

Shadi Tahvildar-Zadeh, Eric Carlen, Department of Mathematics

Supporting Research on Teaching and Learning

Mary Emenike, Chaz Ruggieri, Geraldine Cochrane, Marc N. Muñiz, Eugaria Etkina, Paga Pagagas, TDIAD

genia Etkina, Ron Ransome, TRIAD

Demonstrations of active learning activities from Biology, Chemistry, Physics

OSE Partners and Friends (Room 332)

Active Learning Community: Supporting Teaching Together

Stacey Blackwell, Mary Emenike, Chris Morett, and Dave Wyrtzen.

The Rutgers Learning Assistant Program

Stacey Blackwell and Corey Ptak, Rutgers Learning Centers

The Aresty Program

Vadim Levin, Earth & Planetary Sciences