

STEM Education

2017 - 2018 Seminar Series

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Dr. Cissy Ballen

Postdoctoral Associate, Biology Teaching and Learning, University of Minnesota

Monday, December 11

12:15 - 1:15 p.m.

Location:

School of Medicine

Hope Memorial Building, Rm. 110

315 Cedar Street

New Haven, CT

How increasing equity in the science classroom can drive social change:

Science coursework in higher education equips students with an understanding of scientific ideas and processes that they can use to succeed as members of the STEM workforce or to inform decisions in their everyday lives. A strong foundation of science knowledge is required to choose among various medical treatment options, distinguish science from pseudo-science, and engage in major public policy discussions. However, pervasive barriers unrelated to course content still negatively impact the learning and performance of historically underserved groups in STEM. Through large-scale experimental and observational efforts, I analyzed patterns of performance gaps and their underlying mechanisms among undergraduate students in biology. My results demonstrate barriers to - and solutions for - promoting equity in the science classroom, with an emphasis on scientific teaching and high stakes exams. Through rigorous assessment of learning environments, in a manner consistent with the way STEM researchers address their own scientific questions, we can clarify positive strategies to make science accessible to all students.

Dr. Ballen will also serve as a panelist for the "Road to Academia Panel" at 1:30-2:30 pm in the same room. This panel will give an insider's view on the academic career path, featuring postdocs currently on the job market and newly hired assistant professors from several institutions. Feel free to stay and join the Yale Postdoctoral Association at this panel!

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