



Office of Professional Development **Graduate School**

WHAT IS BRIDGE?

BRIDGE aims to increase the visibility of early-career, underrepresented (UR) scientists in the earth, environmental and sustainability sciences and related fields, highlight exceptional **broader impacts**, and **facilitate mentoring** relationships with grad students. To address these aims, we host 3 events: **BRIDGE2Science**: traditional technical talk in host department **BRIDGE2Impacts**: freeform event (talk, workshop, panel) on broader impacts **BRIDGE2Students**: lunch with graduate students



BRIDGE SCHOLAR: DR. SAMANTHA YING



Dr. Samantha Ying received a B.S. from the University of California Santa Barbara in Physical Geography and Microbiology, and a Ph.D. in Soil Biogeochemistry from Stanford University. Dr. Ying is currently an Assistant Professor in the Department of Environmental Sciences at the University of California Riverside where she investigates metal and metalloid contamination of urban soils and groundwater, microbially mediated soil redox processes, interactions between carbon and metals in arid soils and its impact on the global carbon budget.

MONDAY NOVEMBER 5TH

BRIDGE2Students Campus Center C168

12:00pm - 1:00pm

Join BRIDGE Scholar, Dr. Sam Ying, for lunch! Graduate students from all disciplines are encouraged to attend!

Pizza lunch will be served. *RSVPs are encouraged: https://tinyurl.com/BRIDGE2Students*

BRIDGE2Science: Stockbridge School of Agriculture Seminar

4:00pm - 5:00pm

Soil Biogeochemical Cycles Underlying the Largest Mass Poisoning in Human History

Open to the public. Coffee and Pastries will be served.

TUESDAY NOVEMBER 6TH

BRIDGE2Impacts

Design Building 170

12:00pm - 1:00pm

When I Grow Up... An Unexpected Path into Science, Academia, and Single Parenting

Catered lunch will be served.

RSVPs are encouraged: https://tinyurl.com/BRIDGE2Impacts

For more information visit https://blogs.umass.edu/bridge/ *Email: bridge@umass.edu Twitter: @umassbridge*

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Raquel BRYANT*, Mariela GARCIA ARREDONDO, Nigel GOLDEN & Benjamin KEISLING University of Massachusetts AMHERST

WHY BRIDGE?



Geoscience has a diversity problem. In order to train the next generation of geoscientists, we must attract and retain members of UR groups. **BRIDGE** focuses on departmental colloquia as a platform for achieving this goal. Colloquia provide speakers with visibility, opportunities to share their work, and the possibility of new collaborations. Colloquia also "provide young scholars with models of what speakers look like" (Nittrouer et al. 2018). A lecture series thus offers pratical opportunities to harness departmental energy and resources to promote and retain UR geoscientists.

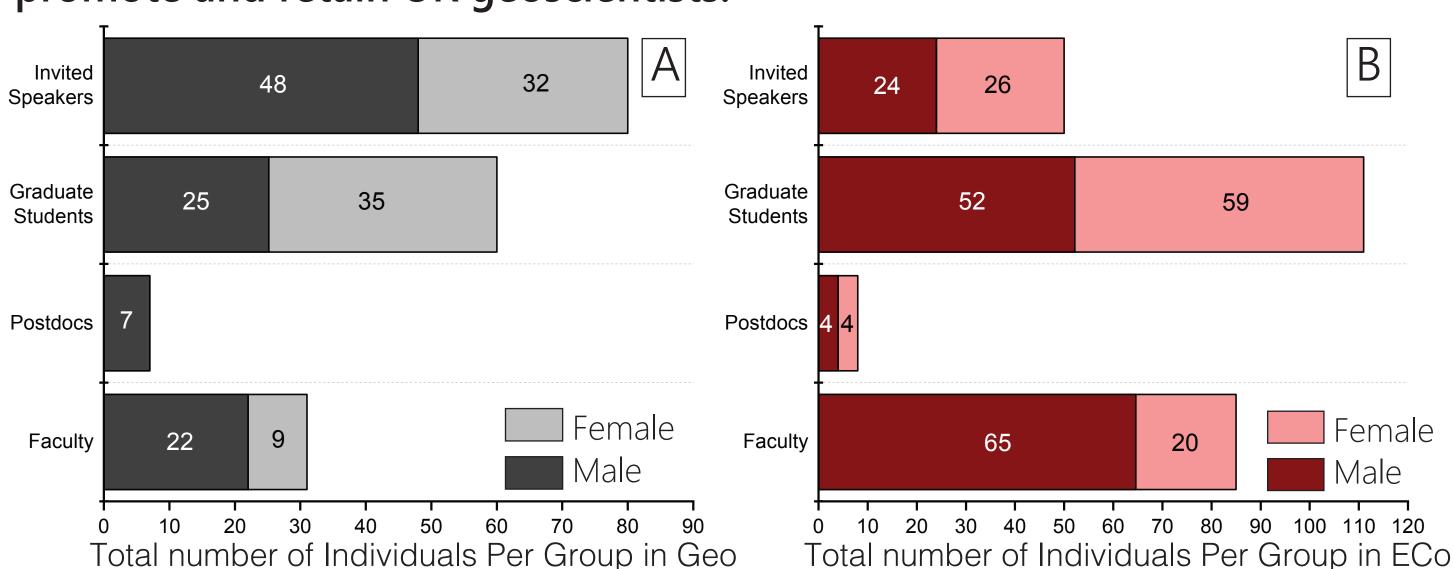


Figure 1. Breakdown of community members and invited speakers in (A) Geosciences (Geo) and (B) Environmental Conservation (ECo) at UMass. Invited speaker counts were combined for 2013–2018 (Geo) and 2012–2017 (ECo); all other numbers are for current department members.

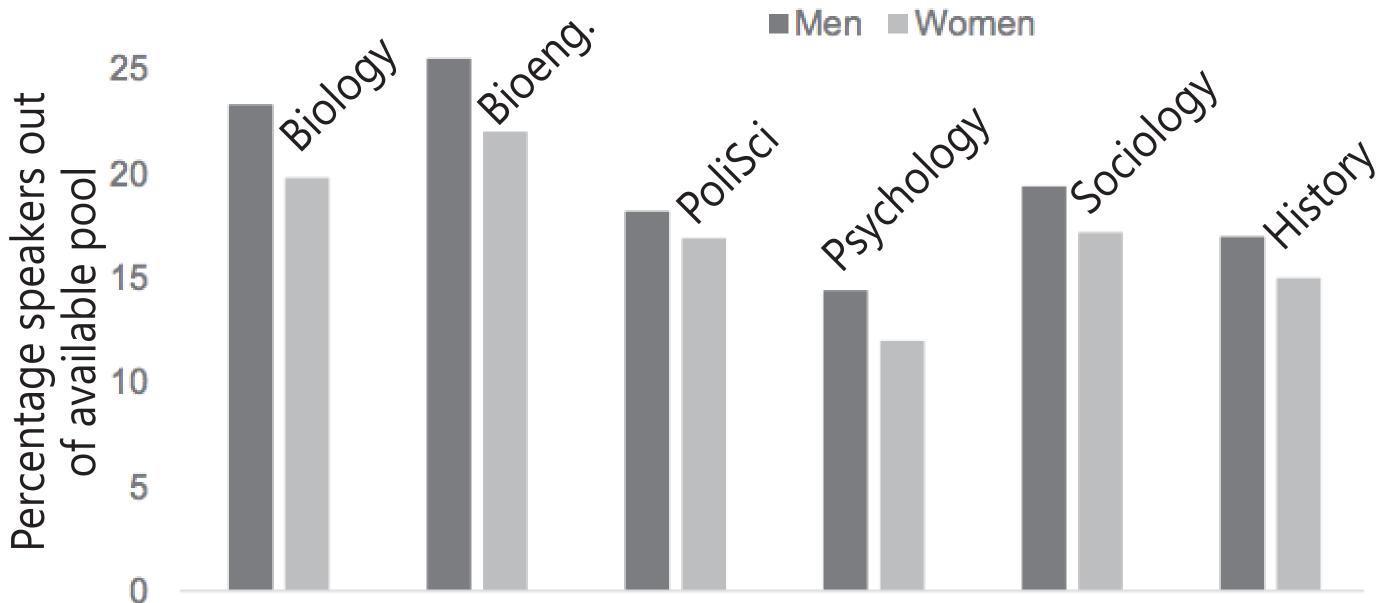


Figure 2. Nittrouer et al. (2018) examined 3657 talks given at 50 insitutions across 6 disciplines during the 2013–2014 academic year. Their results show that, all other things being equal, women are *less likely to be invited* to give a colloqium talk than their male collagues.

SURVEY QUESTIONS FOR BRIDGE2Students/BRIDGE2Impacts EVAULATIONS

1. What did you find most valuable about this event?

- 2. Did this event change your perception of an academic career trajectory?
- 3. Are there any topics/questions that you wish were raised?
- 4. How did this event change your perception of Broader Impacts?
- 5. Is there anything you would change i.e. structure or timing of the event?
- 4. Do you have anything else you would like to share?

What are other questions that could be asked to collect feedback or provide potential future directions?

A GRADUATE STUDENT-LED EFFORT TO INCREASE THE DIVERSITY OF SPEAKERS INVITED TO CAMPUS

Total number of Individuals Per Group in ECo

OUTCOMES & TESTIMONIALS

Increase Visibility of UR/EC Scientists

83 members of the UMass community representing **17** departments have attended BRIDGE2Impacts events • "speaking with a knowledgeable person of color in a faculty position." • "but it has opened my eyes to the type of questions we need to ask ourselves in regards to working in academia as a person of color." • "I find that one of the surest ways to learn about my options in regards to my career is by listening to the stories of scientists and their journey to their current position. Dr. Greenlee was a great example of how when our interests align with opportunity, if we're intentional about it we can do the work that we want to do. Long story short, I find it valuable to know the paths that other people have taken to their current career."

Highlight exceptional Broader Impacts

• "Coming in, I wasn't really sure how to see connections between housing policy and ecology - but Dr. Greenlee changed that perception right away. If we foster a spirit of co-production, our curiosity about our science seems to generate a wealthy amount of research topics and questions." • "It showed me how something I'd consider 'natural' (the occurrence of bedbugs) still has unbalanced patterns within our socioeconomic structure. A fascinating (and terrible) reminder of the disparity between high and low incomes in the US."

• "I never really saw my interdisciplinary work as a broader impact, but I've realized that even the act of community building across disciplines and departments can be a broader impact. Especially if we pool together our stakeholders and are able to produce knowledge that is more useful for them." • "It showed how you could tie fields that usually don't work together to produce something impactful"

Facilitate Mentoring Relationships

38 students have attended BRIDGE2Students from **12** departments • "Dr. Greenlee's discussion at the end of his presentation on how we can work to make our research more interdisciplinary." • "I appreciate the opportunity to sit down with faculty from another institution in a low-stakes environment and having the opportunity to ask questions/discuss topics that are usually not viable in my lab/department." • "I would have liked to understand Dr. Greenlee's framework for developing interdisciplinary collaborations. It's important to know how to decide when to say no when there are so many opportunities to collaborate and the pressure to produce is huge."

- "Hearing about Dr. Greenlee's path to his career."
- is in developing future collaborations."



visit our website!



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• "It helped me think about the necessity of networking and how valuable it