

Department of Biochemistry

2019 Axelrod Distinguished Lectures

Jennifer Nemhauser

HHMI Scholar; Professor, Department of Biology
University of Washington

Tuesday, April 9

3:30 - Deans Auditorium (PFEN 241)

Institution Logic: Partnering with artists for better biology education, outreach and mentorship

Wednesday, April 10

3:30 - Deans Auditorium (PFEN 241)

Plant Logic: Discovering and re-engineering design rules governing plant form



Claire Cowie, *Terminology I*, 2016

Institution Logic: Partnering with artists for better biology education, outreach and mentorship

For change to come to science, we have to hear from more people. And each of us must take a hard look at our own biases, especially as they relate to sources of authority, and try to see how each choice we make—about what to study or what to write or speak about—is a choice that either reinforces existing hierarchies or works to dismantle them. One way I am trying to see the impact of my own choices more clearly is by creating opportunities to engage with artists and art institutions. In this talk, I will share my experiences co-leading an art project, hosting artists-in-residence in my lab, and engaging with my lab members in science outreach at an arts festival.

Plant Logic: Discovering and re-engineering design rules governing plant form

Life in the Anthropocene has many challenges, among the most urgent is widespread global hunger and malnourishment. What if every community of small-hold farmers could improve their own heritage crops to their own specifications? Realizing this DIY vision would require radical innovations in the way we conceptualize and execute crop improvement. Synthetic biology, sitting at one of the intersections of engineering and biology, offers theoretical and practical tools to guide such efforts. My group is interested in exploring the limits of rational re-tuning of developmental pathways to customize plant form for local agricultural conditions, while simultaneously striving to understand the molecular tuning knobs that control fundamental components of eukaryotic signaling (e.g., ubiquitin-mediated protein degradation, transcriptional repression/activation).

About the Axelrod Lectures:

Dr. Bernard Axelrod served as Head of the Department of Biochemistry. His efforts were instrumental in founding the biochemistry program at Purdue University. On the occasion of his 70th birthday, colleagues and friends established this lectureship in honor of Dr. Axelrod's many contributions to the field of biochemistry and its community of scientists. Dr. Axelrod passed away in 2011 at the age of 97.