Plantae Presents
Navigating a STEM Career as a Member of the LGBTQ+ Community

Featuring
Sterling Field
Tim Mak
Kelly Gómez-Campo
Isabel Martínez Rugerio
Michel Geovanni Santiago-Martínez

Wednesday, June 21, 2023
8:00 AM PDT | 11:00 AM EDT | 5:00 PM CEST | 11:00 PM MYT
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Tim Mak            Isabel Martinez Rugerio
Michel Geovanni Santiago-Martínez
Webinar outline:

- Speaker introductions
- Brief overview of the status of the LGBTQ+ community in STEM
- Discussion with invited speakers over four main topics
- Q&A session
  - Attendees: Please type your questions in the Q&A box (问答/ Preguntas y respuestas) during the Q&A session
- Concluding remarks
Isabel is a doctoral student in the The Pennsylvania State University. She studies **photobiology of coral reefs**. Her research interests are in understanding the molecular and biophysical mechanisms by which photoreceptor proteins operate, how they influence coral's physiological processes, and how they evolved in the context of endosymbiosis.

Contact information: mim68@psu.edu
Sterling Field studies plant stress on the cellular level and leads the LGBTQ+ Plant Biologist network

Sterling is a postdoctoral research in the Rhee lab at the Carnegie Institution for Science, at Stanford, researching how plants survive stress at the cellular level, particularly through altered regulation of phase separated membrane-less organelles. He finished his PhD in Biochemistry & Cellular and Molecular Biology at the University of Tennessee, and his masters at East Carolina University, in North Carolina. He earned his bachelors at the Ohio State University, where he majored in Plant Cellular and Molecular Biology. Outside of the lab he leads the LGBTQ+ Plant Scientist Network, advocates for LGBTQ+ visibility and support in STEM, and enjoys hiking, gardening, and reading science fiction.

Contact information:

email: sterlingfield.sf@gmail.com, or @Sterling_Field
Geo (he/him/his) is a microbiologist interested in the regulation of cellular processes in methane-producing archaea and how energy status influences their ability to survive in environmental stress conditions. His research goal is to understand the role of archaea in biogeochemical cycling and host-associated microbiomes. He is also interested in bringing up-to-date archaean knowledge into classrooms and outreach activities, as well as promoting more inclusive science through mentoring and service initiatives.

Contact information:
email: geo_santiagom@uconn.edu or @GeoSantiagoM
Speaker:
Kelly Gómez-Campo, MSc, PhD

Assistant Research Professor
Eberly College of Science, Baums Lab
The Pennsylvania State University

As a research scientist, Kelly aims to understand **acclimatory and adaptive processes in photo-symbioses**, such as the symbiotic relationship between zooxanthellae and reef-building corals, fascinating due to its intricate and mutually beneficial nature. By combining photobiology, functional genomics, and ecology she investigates how these organisms respond to changes in light conditions, and how these responses modulate their energetic resources to grow/reef growth and perform under stress. In her free time, she likes hiking and traveling with her wife and dog. She engages in science communication activities, creating safe spaces and equal opportunities. “I stand today as a scientist empowered by the many women and queer folk before me that paved the way for equal opportunities”.

Contact information: kjg27@psu.edu, twitter @kellogs82
Tim Mak is a seasoned professional in the biotech/pharma industry, focusing on R&D innovation. In addition to his current role, he is a co-founder of a startup centered around the human microbiome. Tim holds a Ph.D. from the Max Planck Institute in Berlin, Germany, and has gained valuable experience through postdoctoral positions at the University of Cambridge, UK, and Aarhus University, Denmark. Prior to his current endeavors, he served as a Senior Scientist at a prominent pharmaceutical company, J&J. Tim is also actively involved in supporting diversity, equity, and inclusion (DEI) efforts as a member of the Rainbow network.

Contact information
Email: tim.mak@trilliome.com
Twitter/Linkedin: @timnmak
Laura (she/her) is a passionate plant biologist and researcher specializing in plant bioinformatics. Currently nearing the completion of her Ph.D., her research focuses on **modeling transcriptional regulation in Arabidopsis thaliana with machine-learning algorithms.**

In addition to her research, Laura enjoys organizing events for Ph.D. students, fostering a sense of community in the lab and facilitating valuable networking opportunities. When she is not in the lab, Laura likes to **climb and read comic books.**

Contact information:
[laura.turchi@cea.fr](mailto:laura.turchi@cea.fr) or @turchi_l
Kumanan is conducting research to develop a **multi-omics gene prioritization framework using machine learning**. His focus is on identifying **stress response genes for food crop development**. To maintain his sanity amidst the scientific pursuit, he immerses himself in **literature and philosophy**. Currently, he is reading works by Tash Aw, Kazuo Ishiguro and Milan Kundera.

Contact information:

Email: kumanan@um.edu.my

Twitter: @NGKumanan
Navigating a STEM Career as a Member of the LGBTQ+ Community
Scientists are not that open about their LGBTQ+ identity

Fig. 1 LGBT+ scientists aren’t all that out of the lab closet. STEM professionals rate their openness about LGBTQ+ identities in different contexts, from 0 (no one knows) to 5 (everyone knows) [1]

Barres et al., *Coming out: the experience of LGBTQ+ people in STEM*, Genome Biology, 2017
The lab is not always a comfortable place for LGBT+ scientists

**LGBT+ EXPERIENCES**

In a UK survey of LGBT+ physical scientists, non-binary and transgender people were most likely to feel uncomfortable at work and to experience exclusionary behaviour.

**How comfortable do you feel at work?**

- Very uncomfortable
- Neither comfortable nor uncomfortable
- Uncomfortable
- Comfortable

<table>
<thead>
<tr>
<th>Group</th>
<th>Very uncomfortable</th>
<th>Neither comfortable nor uncomfortable</th>
<th>Uncomfortable</th>
<th>Comfortable</th>
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</thead>
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<tr>
<td>Men</td>
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<td>40</td>
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<tr>
<td>Non-binary</td>
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</tr>
<tr>
<td>Transgender</td>
<td>20</td>
<td>40</td>
<td>40</td>
<td>20</td>
</tr>
</tbody>
</table>

Cisgender people identify with the gender they were assigned at birth.

Gibney, *Discrimination drives LGBT+ scientists to think about quitting*, 2019, Nature
Discussion with the Speakers

The content shared in this webinar is based solely on the speakers' personal experiences and should not be taken as professional advice or universally applicable guidance.
Support

- Is it important to let your friends or colleagues know about your identity?

- Do you feel supported at your workplace?

- What would you suggest to someone who does/did not receive the same support?
Acceptance

- How can one perceive acceptance?
- Does a STEM career complicate your journey to self-acceptance?
Action

- What should be done to reduce discrimination against LGBTQ+ in STEM?
- How can make our labs more inclusive?
Resources

- Are there any resources or associations that you especially recommend?
Q&A Session

Attendees:

Please type your questions in the Q&A box (问答 / Preguntas y respuestas)
Questions Answered

- How to handle non-acceptance for trans/non-binary people? - Lasair
  Call out discriminatory behaviours, document incidents, learn about your workplace policies and find your support. - Isabel

- What can allies in STEM do to support LGBTQ+? - Joanne
  Conduct networking sessions for LGBTQ+ people and show visible support such as using pronouns and rainbow icons. - Sterling
Thank you!

Q&A (including questions we did not get to answer during this session) will be made available after the webinar along with the recording.
Bonus questions

What would you tell your younger self?

Would you do anything differently?