

# Out to Innovate *Bulletin*

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Out to Innovate, PO BOX 91803, Pasadena CA 91109, phone/fax: 626 791-7689, www.noglstp.org

## Recipients of Out to Innovate's Professional Development Fellowships for Trans, Intersex, and Non-Binary People in STEM

The Out to Innovate™ Professional Development Fellowship, formerly known as the Ben Barres Fellowship, is a \$2000-\$5000 award for professional development of trans, intersex, and non-binary graduate students and post-doctoral fellows in the fields of science, technology, engineering, and mathematics (STEM). The fellowships are merit-based awards, with the support provided intended for the recipient's professional development. Here we present a group of this year's recipients. Congratulations to all.

### Eli Chlan



Eli is a PhD student at Emory University, studying neuroscience, with an interest in glial cells and pathologies of the eye, especially diabetic neuropathy, and is also interested in communications in science and outreach through art. Eli plans to use the fellowship funding to attend two conferences to promote collaboration and networking with other researchers.

“Receiving the Out to Innovate Career Development Fellowship marks the start of my journey in exploring the compelling intersection of science and art. With its support, I have the opportunity to travel and meet with a diverse array of scientists to determine how to effectively utilize art as an innovative means of science communication and outreach. While learning how to give the most enthralling elevator talk is adequate for engaging with fellow scientists, I am inspired to push the boundaries of archetypal science communication. The use of interactive art serves as a way to scientifically engage and educate a wide range of audiences through the transformation of complex concepts into engaging visual representation that proves accessible across social demographics. Beautiful in its capacity for interpretation, art presents an exciting avenue to extend overarching scientific themes to the public. However, to break convention is an arduous task that is never done in isolation. To gauge the best way I can immerse diverse audiences while staying true to modern concepts of science, I will be collaborating with fellow researchers in my field of neuroscience and beyond. It is through this lens of interactive art that I aim to make science accessible and welcoming to all.”

### Taylor Flaherty

Taylor is a PhD candidate at the University of Nevada, Las Vegas in forensic anthropology, with research focus on systemic vulnerabilities, interpersonal violence, and post-mortem identification of transgender and gender-diverse individuals, and on development of CT technology to enhance identification capabilities. Fellowship funds will be used for upgraded technology to better download, display, and work with CT images.

Taylor is currently the Manager of the UNLV Forensic Anthropology and Bioarchaeology Laboratory where they assist in forensic anthropology casework, and is affiliated with the Trans Doe Task Force, a trans-led non-profit organization that aids in LGBTQ+ forensic cases and manages the LGBTQ+ Accountability for Missing and Murdered Persons (LAMMP) Database. For their dissertation, Taylor will be analyzing CT images from individuals using gender-affirming hormonal therapies to assess how skeletal sex indicators used in anthropological methods are expressed in transgender and gender-variant individuals.



“I am so excited to be named an Out to Innovate Career Development Fellow! This is a huge relief to me financially, and it is such an honor to be recognized in this way. I am incredibly grateful to Out to Innovate for continuing to support gender diverse scientists and the LGBTQ+ community. This funding will help me to access the technology necessary to analyze CT images, which in turn will ensure that I can continue spearheading research and advocating for my community.”

### Silas Fischer



Silas is a PhD candidate in wildlife ecology at the University of Toledo, studying songbirds that are present in arid zones, evaluating demography, migration, and responses to climate-change-induced environmental stressors. The fellowship will fund attendance at a conference, peer-reviewed journal page charges, and provide supplies and other support for research.

“I never would have imagined the existence of a fellowship specific to trans, intersex, and non-binary scientists! As a trans/non-binary ecologist and artist, I am humbled to accept such an award and to join a network of others like me. Thanks to this fellowship, I will be able to purchase supplies related to my dissertation research on desert songbird responses to climate change, as well as journal page charges to publish my findings. Awards such as the Out to Innovate Fellowship are critically important to support

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## Fellowship Recipients

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and celebrate LGBTQIA+ scientists in a discipline where our voices and those of other underrepresented groups are slowly starting to be recognized. Thank you again for this opportunity and more broadly for supporting LGBTQIA+ scientists!”

### Christine Hamadani

Christine is a PhD candidate in Chemistry/Bioengineering at the University of Mississippi, working on development of more effective and targeted intravenous nanotherapies for cancer drug delivery. The fellowship will support experimental and analytical costs for research and attendance at a conference.

“I grew up without role models in STEM that I could relate to, both in appearance and in life experiences. As someone who is committed to creating solutions for blood-based diseases, The Out to Innovate Fellowship has opened a door that will drastically impact and



change the trajectory of my career, allowing for me to obtain specialized resources for high-impact work that we would otherwise have difficulty acquiring, as well as supporting my travel to one of the biggest international conferences in my field. Most importantly, I feel honored and so grateful to receive a fellowship which recognized me as a non-gender conforming person of color with the potential to

break barriers and serve as a mentor for others like me who want to contribute to the biomedical field through STEM.”

### Claire Hansel

Claire is a PhD candidate at the University of Colorado, Boulder, doing research in high-energy accelerator physics, focusing on the study of radiation from beams traveling through plasma, with applications for ion channel lasers as well as for plasma based incoherent radiation sources and diagnostics for experiments at the FACET-II at the SLAC National Accelerator Laboratory. Fellowship funds will be used in attending an international conference and spending two weeks conducting research at the SLAC National Accelerator Laboratory.



“I’m extremely grateful to be chosen as a recipient of the Out to Innovate Career Development Fellowship. This fellowship will allow me to travel to SLAC National Accelerator Laboratory and contribute to the experimental program there. I am thankful to the trans\* community for fighting and continuing to fight for the societal acceptance which has allowed me to pursue this career, and I hope to give back by being a role model to younger queer scientists.”

### Em Lim



Em is a PhD candidate in marine ecology at Simon Fraser University, studying coral reef environments and the comparative effects of animal-mediated nutrient provisioning on marine plants and seaweeds in tropical and temperate regions. The funds from the fellowship will be used for research expenses in conducting reef surveys.

“It is an incredible honour to receive this award as a non-binary grad student. This funding will go a long way towards furthering my research studying marine ecosystems, which will assist in advancing my career. Trans and non-binary students face many barriers in

STEM and in their lives, so it means a lot to me to win an award specifically designated to help our community succeed.”

### Parker K Lund



Parker is a graduate student at Humboldt State University studying marine microbial ecology, with work focused on identifying the temperature thresholds under which invasive sea anemones have the ability to guard the microbial communities living in their mucus, tissue, and gut against environmental stresses. These effects may influence the diversity of microbial communities with climatic variations and changes in host availabilities. Funds from the fellowship will be used to perform sequencing measurements on samples collected in the study.

“Receiving this fellowship has fully funded the rest of my thesis research for my master's degree. It has provided me with invaluable hands-on experience in molecular techniques and substantially increased the odds I am able to pursue research in the marine field (which continues to struggle in retaining a diversity of perspectives). I am honored to be selected for this opportunity, and want to thank NOGLSTP for directly increasing the representation of transgender and non-binary people in science.”

### Riley Pizza

Riley is a PhD candidate in ecology at Michigan State University, with research focused on restoration ecology and investigating the effects of seed sourcing on prairie habitat restoration. Funds from the fellowship will be used for supplies for the field tests and travel to field test areas.



“The funds from this fellowship are allowing me to conduct an experiment that's been bouncing around in my head for the last three years. Even greater than that, though, is to now be connected to an amazing group of trans and non-binary scientists to remind me that I'll always belong in STEM.”

### Drew Powell

Drew is a PhD candidate in Environmental Health at the University of Maryland, Baltimore County studying the effectiveness of tree cover in mitigating heavy-metal atmospheric pollution in a majority Black community. These findings may assist urban planners in determining the optimal types of trees and their distributions to produce the greatest benefits. Fellowship funds will be used in collection, preparation and analysis of samples.



“I am deeply honored and grateful to have received the 2021 Out to Innovate Career Development Fellowship. Not only will this award help me to continue my air pollution research, it also affirms my belief that supporting trans, non-binary, and intersex people in STEM contributes to innovation and the diversification of our field. Thank you Out to Innovate for creating a community that empowers the LGBTQ+ students and professionals.”

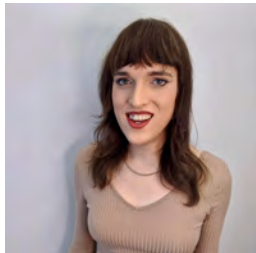
### Courtney Willett

Courtney is a PhD candidate in plant biology at Emory University, studying the relationship between the developmental potentials of cells and chromatin dynamics. The fellowship will support attendance at an advanced course hosted by the Cold Springs Harbor Laboratory.

"I am so honored to be a recipient of the Ben Barres Fellowship. This fellowship has provided me with an incredible opportunity to attend an advance course hosted by the Cold Springs Harbor Laboratory. In addition to making me a more well-rounded scientist, I am also excited to provide more representation of non-binary scientists."



### Mila Halgren



Mila is a graduate student at the Massachusetts Institute of Technology, studying in the field of brain and cognitive science, with research focused on understanding fundamental cortical physiology by comparing brain microelectrode recordings in both humans and mice. Funds from the fellowship will be used to purchase microelectrodes to conduct research.

"I'm deeply honored to receive an OTI Career Development Fellowship. I plan to use this funding to study how brain activity changes across mammalian species, as well as advocate for transgender rights and representation within academia. Many thanks to NOGLSTP for funding trans, intersex & non-binary researchers!"

### M Wittkop

M is a graduate student in computational chemistry at Montana State University, with interest in electron excitations in bioinorganic compounds, with applications to common monomers used in conductive polymer systems. The fellowship funds will be used for a more powerful computer for use in computational chemistry work, and for travel to a conference.



"I am so honored to be an Out to Innovate 2021 Career Development Fellow. I don't really think I can put in to words how I am feeling right now. This is a genuinely life-changing opportunity for me, especially so early in my career. I am so excited to continue researching quantum chemistry with the support of Out to Innovate, and to pay it forward with other young, queer scientists."

### Hannah Young



Hannah is a graduate student at the University of Utah, studying evolutionary genetics and host-pathogen interactions. Fellowship funds will be used to attend a course on zebrafish at Woods Hole Oceanographic Institute.

"As a queer Latinx graduate student, I rarely meet people who look like me or have similar identities to me in my field of research. This fellowship means creating a community of support for trans, non-binary, and intersex scientists. From a scientific perspective, this fellowship will allow me to take advantage of resources that will help me gain expertise in zebrafish immunity."

## Carolyn Bertozzi Awarded Wolf Prize in Chemistry

Carolyn Bertozzi has received the 2022 Wolf Prize in Chemistry for pioneering work on cell-cell communication through surface membrane glycosylation. These contributions are significant for drug discovery and development of novel therapeutic approaches. Dr. Bertozzi, a professor at Stanford University, was recognized by Out To Innovate in 2007 as Scientist of the Year. The Wolf Prize is an international award given by the Wolf Foundation, which recognizes "outstanding scientists and artists from around the world ... for achievements in the interest of mankind and friendly relations among peoples." Prizes are given in the categories of medicine, agriculture, mathematics, chemistry, physics, painting and sculpting, music and architecture.

## IS IT TIME TO RENEW YOUR MEMBERSHIP DUES?

Check your mailing label. Your renewal date is in the upper right section of your address block. Your membership number is just to the left of your expiration date. You may renew online at <https://www.noglstp.org/memberservices>, or fill out the form below (and on the other side of this page), and return it with your check to NOGLSTP, PO Box 91803, Pasadena CA 91109. You may also use this form to inform us of any address or area code changes. LAGLS members: please renew through your regional group to enjoy discounts on dues.



### Membership Form

To renew your Out to Innovate membership or become a member of Out to Innovate, complete this form and send it with a check or money order (US Funds only) to: Out to Innovate, PO Box 91803, Pasadena CA 91109.

Annual membership dues enclosed:

- \$40 for working professionals
- \$20 for post-docs
- \$10 for students and unemployed
- \$1000 for Lifetime Membership

Circle payment type:

Renewal      New      Info change only

Date:

Name:

Address (don't forget your zip code!):

Circle newsletter preference:    print    email

Your pronouns:

Telephone:

Email:

URL:

Latest Degree/Subject:

Job Title:

Employer (or school if student):

Alum of (latest degree):

Do you want your name and contact information in the Out to Innovate membership roster (to be released to other Out to Innovate members)?

Yes

No



Don't forget to fill out the other side →

# Chris Bannochie Running for ACS District IV Director

Out to Innovate Board member Chris Bannochie is a candidate for District IV Director for the American Chemical Society. Voting by ACS members begins April 1, and the term of office is from 2023 to 2025. District IV includes sections in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, and Texas.

## OTI Awards Ceremony

Save the date! The Out To Innovate 2022 Awards Ceremony will be held May 28 from 4-6 p.m. Eastern time. This awards ceremony will be fully virtual. It will celebrate the Professional Development fellows highlighted in this issue and the Recognition Award winners soon to be announced. Details will be posted to the Out To Innovate website.



Membership Form (continued)

Special Techno-interests or expertise:

Please list any other professional societies that you belong to:

Are you a member of any of these groups?

- American Astronomical Society
- American Chemical Society
- American Geophysical Union
- American Institute of Chemical Engineers
- American Nuclear Society
- L'GASP Lesbian, Gay, Bisexual Audiologists and Speech-Language Pathologists
- LAGLS: Los Angeles Gay and Lesbian Scientists
- Mathematics Association of America or American Mathematical Society
- National Postdoctoral Association
- NOGLSTP at Oklahoma State University
- NOGLSTP at Purdue
- NOGLSTP at U Nebraska - Lincoln
- PrideSTEM at Texas Tech
- Queer Science (U Minnesota)
- Queer in STEM at CSUN
- QSTEM of Lake Nona High School

For new members: How did you learn of Out to Innovate?

What would you like to help us with?

- Serve on Board of Directors
- Serve as Chair or Secretary
- Help at AAAS events
- Organize or host local event
- Write newsletter articles
- Edit the newsletter
- Speak about/on behalf of Out to Innovate at an event
- Serve on recognition awards committee
- Assist with the Mentoring Program
- Assist with Out to Innovate career summit
- Write a grant proposal
- Evaluate scholarship applications
- Help with fundraising
- Start/represent an LGBTQ+ caucus at my professional society: \_\_\_\_\_
- Don't know, but would like to help with something

## Looking for Ways to Help Out To Innovate?

The Programs, Communications, and Membership committees are looking for volunteers! The Programs committee focuses primarily on scholarships, recognition awards, and fellowships as well as events like the biennial Out To Innovate Summit. The Communications committee handles social media, branding, press releases, website content, this quarterly newsletter, and more. And finally, the Membership committee is currently analyzing member data and looking for ways to better serve you, our members! Whether you have prior experience and relevant skills or are just interested in these opportunities, all are welcome to join.

If you're interested, please contact:

Membership - Rebecca Callahan (rc-board@noglstp.org)

Communications - Dane Samilo (ds-board@noglstp.org)

Programs - Christine Bland (rcb-board@noglstp.org)

### ABOUT Out to Innovate

Out to Innovate is NOGLSTP dba as Out to Innovate. NOGLSTP is a 501(c)(3) educational organization and professional society of gay, lesbian, bisexual, transgender, asexual, queer people, and allies employed or interested in science, technology, engineering, or mathematics (STEM) fields. Out to Innovate empowers LGBTQ+ individuals in STEM by providing education, advocacy, professional development, networking, and peer support. Out to Innovate educates all communities regarding scientific, technological, and medical concerns of LGBTQ+ people. Surface mail may be addressed to: Out to Innovate, PO BOX 91803, Pasadena, CA, 91109-9813. For more information, see our website at [www.noglstp.org](http://www.noglstp.org).

### Board of Directors (append each address with noglstp.org)

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Christine Bland, Member at Large, Denver CO, cb-board@  
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### Affiliates: (more info at: <https://tinyurl.com/y9kq2lps>):

500 Queer Scientists  
AAS SGMA: American Astronomical Society (AAS) Committee for Sexual Orientation and Gender Minorities in Astronomy  
AIChE (American Institute of Chemical Engineers).  
CSUN QueerSTEM  
gAyGU (American Geophysical Union)  
L'GASP: Lesbian, Gay, Bisexual Audiologists and Speech-Language Pathologists  
LAGLS: Los Angeles Gay and Lesbian Scientists  
LGBTQ Chemists and Allies (ACS PROF Gay and Transgender Chemists and Allies)  
NOGLSTP at Oklahoma State University  
NOGLSTP at Purdue  
NOGLSTP at University of Nebraska - Lincoln  
Diversity and Inclusion in American Nuclear Society Committee (formerly NuclearPride)  
LBGTQ STEM at Oklahoma State University  
PrideSTEM at Texas Tech  
QSTEM of Lake Nona High School  
Queer Science (University of Minnesota)  
Spectra: The Association for LGBT Mathematicians  
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