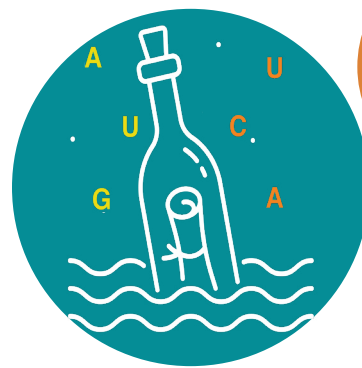


# Message in a Bottle

A communication of the Science Education Alliance



September  
2024

Dear SEA Faculty,

As the new academic year gets underway, we wanted to share with you some of the exciting things that are taking place in SEA and beyond. We look forward to another year collaborating with you and your students and can't wait to see what new discoveries this year will hold!

The SEA Team

## Celebrating SEA

Over the past year, the SEA set sail on a lively virtual SEA Symposium and had a wonderful reunion at the in-person June SEA Faculty Meeting. We collectively discovered >2,500 new phages, cloned hundreds of phage genes, and all the cool CATs met to annotate hundreds of newly discovered phage genomes!

**Thank you all for another excellent year!**



## New faces in SEA

### Welcome PHAGES Cohort 17!

Emory University  
GateWay Community College  
Indiana University-Bloomington  
Maryville University of Saint Louis  
Mesa Community College  
Mississippi University for Women  
Montgomery College  
Phoenix College  
Rowan University  
Scottsdale Community College  
University of Maryland Eastern Shore  
University of Pittsburgh at Greensburg  
University of Texas at Dallas  
University of the Incarnate Word  
University of Tulsa



2024 Phage Discovery Workshop A

### Five SEA schools joined GENES Cohort 6!

Florida International University  
Lee University  
Mount Saint Mary College  
University of Mary Washington  
University of Wisconsin-River Falls

## Welcome new SEA team member!



**Denise Monti, PhD**  
Program Officer II

Long time SEA faculty member, Denise Monti, will be joining the HHMI SEA team this September, continuing her work to support the science and pedagogy done by our SEA community!

## Spread the word!

Applications to join PHAGES are due **Oct 31, 2024**  
[More info>](#)

GENES Program Officer Danielle will be on maternity leave this fall. For schools interested in joining GENES Cohort 7, applications will be due on **Oct 31, 2025** [More info >](#)

Looking to get more involved in SEA or host a regional meeting?

[More opportunities >](#)

## Cool Science Corner

### Splits Tree 6 App

The makers of Splits Tree have released an updated app with even more capabilities! Download the app and play today!

[Read more >](#)

### Phage DisCo!

Researchers in Michael Baym's lab used a novel (and colorful!) isolation method they call Phage DisCo to discover many diverse phages that infect their hosts in a plasmid-dependent manner!

[Read more >](#)

### Let's fold them all!

To address the lack of viral structures in existing AlphaFold databases, researchers in Jennifer Doudna's lab predicted the structure of >67,000 proteins from >4,000 different eukaryotic viruses. In case you

needed any more reason to try AlphaFold, now you can search your predicted phage protein structures against this new viral database!

[Read more >](#)

## Upcoming SEA Meetings

Mark your calendars for another year of SEA meetings:

**2025 Virtual SEA Symposium:** You and your students are invited to set sail on the yacht, April 25-27, 2025. Look for registration details in early 2025!

**2025 In-person Faculty Meeting:** We look forward to seeing faculty at HHMI HQ in Chevy Chase, MD June 6-9, 2025. Registration will happen in spring!

**Virtual Faculty Meeting Series:** This year's series will kick-off September 27! Check out the full schedule [here](#).

[SEA-PHAGES Timeline >](#)

[SEA-GENES Timeline >](#)

**Does your school need re-training? Write to us about availability at this year's workshops!**

## Troubleshooting Tidbits

Struggling with CaCl<sub>2</sub> precipitation in your PYCA top agar? Eric Engstrom from Monmouth College found that switching from Fisher-brand peptone to Bacto peptone can clear this up!

[Read more >](#)

Any GENIES having trouble growing Msmeg transformed with pExTra plasmids? Try 7H11 agar instead of 7H10!

[Read more >](#)

## Housekeeping!

Please make sure to update your institution page on [seaphages.org](http://seaphages.org), with correct primary and other faculty member info, legal contact, and shipping address!

Questions about your MTA? Please write to Emily Ginser [EMG190@pitt.edu](mailto:EMG190@pitt.edu)

## Program Updates

### Guidelines on Collaborations and Publishing SEA data

As our community grows and continues to collaborate on exciting science, the SEA team has drafted guidelines to help us all navigate collaborations, data usage, authorship, and publishing. These guidelines will continue to evolve along with our community. We have also created a dedicated forum for folks to share what projects they are working on, get community input, and seek out collaborators. Please review these guidelines, share on the forum space, and reach out to us with any additional questions or suggestions!

[Guidelines >](#)

[Forum >](#)

### Phage Discovery Guide en Español

Check out the translated guide [here](#)!

### Review to Improve (R2I)

All phage genomes that were submitted for QC by the May 1, 2024 deadline have been QC'd. Genomes submitted after the deadline will be QC'd, as time permits, by Feb. 2025. Once your annotation has been QC'd, don't forget to utilize the [R2I function](#) and schedule a time to meet with a member of the QC team (SMART) to go over changes made.

## Making Waves!

**Check out these new publications from SEA!**

**An inclusive Research and Education Community (iREC) model to facilitate undergraduate science education reform** [Monti et al. >](#)

**The Professional Identity of STEM Faculty as Instructors of Course-based Research Experiences** [Hanauer et al. >](#)

**SEA-PHAGES and SEA-GENES: Advancing Virology and Science Education** [Heller et al. >](#)

**A Bioinformatic Ecosystem for Bacteriophage Genomics: PhaMMSeqs, Phamerator, pdm-utils, PhagesDB, DEPhT, and PhamClust** [Gauthier and Hatfull >](#)

**Thank you for all your contributions to this work!**