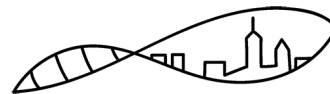


# REMNet Newsletter



February 2024 | Issue 21

## Upcoming Events

**MVASM:** 03/08/24 - 03/10/24

**AMR - Genomes, Big Data, and  
Emerging Technologies:** 03/13/24 -  
03/15/24

**TXASM:** 03/21/24 - 03/23/24

**OBASM:** 04/05/24 - 04/06/24

**ESA Mid-Atlantic:** 04/06/24

**MI-ASM:** 04/06/24

**SCASM:** 04/06/24

**AZSNVASM:** 04/13/24

**Intermountain ASM:** 04/13/24

**NCASM:** 04/13/24

**KY/TN ASM:** 04/19/24 - 04/20/24; 11/08/24  
- 11/09/24

**RMBASM:** 04/20/24

**17th International Congress on**

**Toxoplasmosis:** 05/26/24 - 05/30/24

**EOMW:** 05/28/24 - 05/31/24

**ASM Microbe:** 06/13/24 - 06/17/24

**ABLE:** 06/25/24 - 06/29/24

**SABER:** 07/11/24 - 07/14/24

**BIOME:** 07/15/24 - 07/18/24

**ESA:** 08/04/24 - 08/09/24

**EPAASM:** Monthly

**FLASM:** 10/25/24 - 10/27/24

**ABASM:** 11/01/24 - 11/02/24



## News from REMNet

Happy New Year!

We're hoping you're all enjoying teaching your classes and doing your research as we head into spring. As always, we're here at REMNet, ready to support and celebrate your teaching and microbiome-related research - continue sharing the good news.

We welcome the following:

1. Papers that you've published
2. Conferences you've presented at
3. Student success stories
4. Grant success stories or calls for proposals
5. Upcoming events - webinars, conferences, seminars
6. REUs of relevance to our students

We are pleased to announce that we are organizing a final meeting in San Antonio, TX for this summer to conclude REMNet's activities. We have two options for when we would like to hold this meeting and want to know which you would prefer. Please click the link to let us know your preferences. More details about the meeting will be announced later, so be on the lookout!

**MEETING DATE SURVEY**

NABT: 11/14/24 - 11/17/24

ASMCUE: 11/15/24 - 11/17/24

**REMNET FINAL MEETING: TBD**

If you have other events we can share here

Email us: [ugmicronet@gmail.com](mailto:ugmicronet@gmail.com)

## REMNet went to ASMCUE 2023

Theo and Davida attended ASMCUE 2023 in Phoenix, AZ last November. The team managed a promotional booth which had 19 people register for our workshop. We ran a *From Genomes to Metagenomes with the MinION: Getting Started with Nanopore Sequencing Technology* workshop for ~80 participants!



## News from our members



### A&M-San Antonio has its own ASM student chapter!

Texas A&M in San Antonio has launched its very own student chapter of ASM. They held their first event on Friday with students playing Pandemic and taking part in a microbiology-themed Kahoot quiz. Thanks to Texas Ambassador Jessica Obery for helping them get up and running, Follow them on Instagram @asmtamusa

## Announcing BEDE

The Biological and Environmental Data Education Network (BEDE Network) has partnered with QUBES to develop and share teacher-training workshops, curricular designs, teaching modules, and best practices to help integrate computational data science skills into all levels of the biological and environmental sciences curriculum. They are holding their Annual Meeting June 10-12 2024. The application is



due Feb 26th.

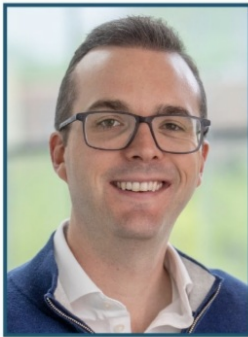
[Application form here](#)

## BREWMOR

Bridging Research and Education with Model ORganisms held its annual microbrew on Integrating Bioinformatics into the Undergraduate Curriculum. REMNet superstar Sean Coleman was the host and several sessions on microbiome and bioinformatics-related experiences for undergraduates were described.

[microbrew-2024](#)

# INTEGRATING BIOINFORMATICS INTO THE UNDERGRADUATE CLASSROOM



Phillip Compeau



Davida Smyth



## BREWMOR

FEBRUARY 9, 2024

**Keynote Speakers**

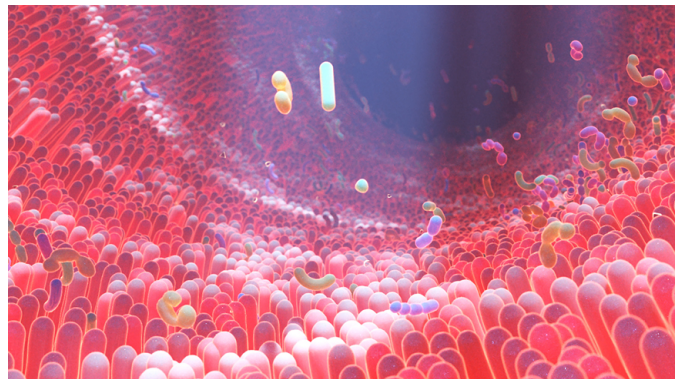
2:30–4:00 p.m. EST

**Lightning talks from the community**

4:00–5:00 p.m. EST



## ASM FALL 2024 WEBINAR RECORDINGS

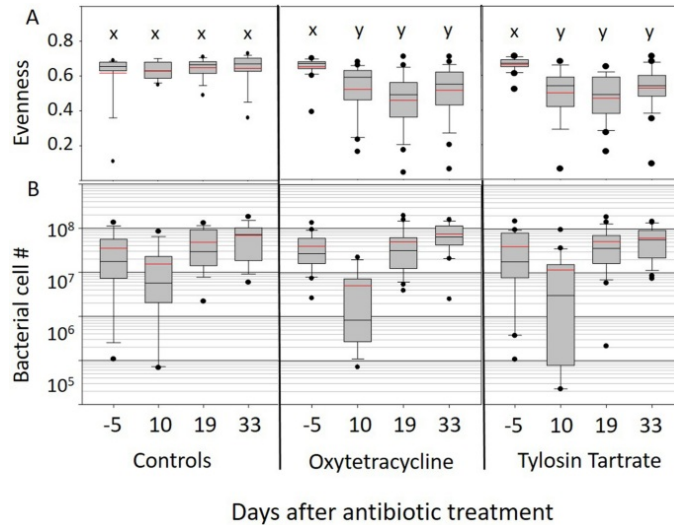


## Microbiomes For All: Tools for Student Microbiome Research

Our ASM webinar videos from last fall will be uploaded and available on the Youtube channel soon. If you would like to be notified as soon as a new video is uploaded, you can subscribe to our channel here. <https://www.youtube.com/@remnetrcn>

[Read More](#)

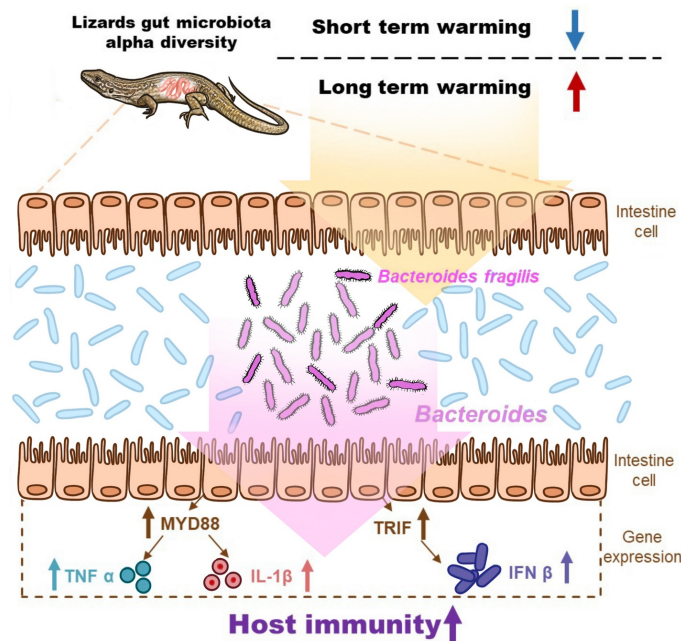
# Exciting Recent Microbiome Studies and News



## A longitudinal field study of commercial honey bees shows that non-native probiotics do not rescue antibiotic treatment, and are generally not beneficial - Scientific Reports

Probiotics are widely used in agriculture including commercial beekeeping, but there is little evidence supporting their effectiveness. Antibiotic treatments can greatly distort the gut microbiome, reducing its protective abilities and facilitating the growth of antibiotic resistant pathogens. Commercial beekeepers regularly apply antibiotics to combat bacterial infections, often followed by an application of non-native probiotics advertised to ease the impact of antibiotic-induced gut dysbiosis.

[Read More](#)



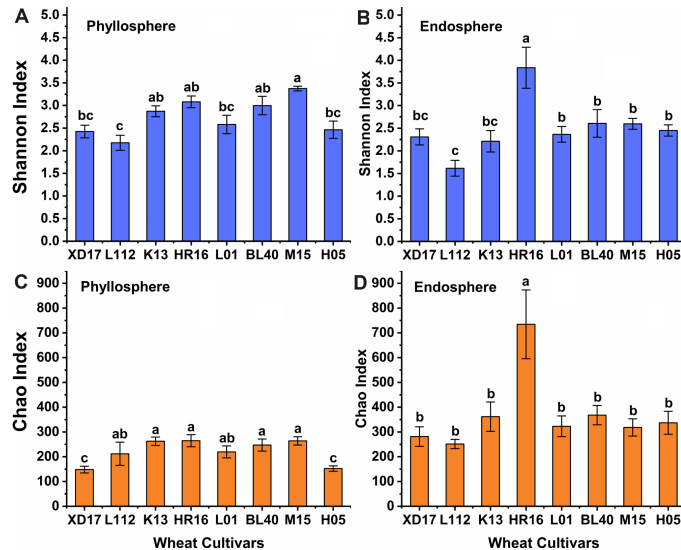
## Gut microbiota modulation enhances the immune capacity of lizards



## under climate warming - Microbiome

Background Host-microbial interactions are expected to affect species' adaptability to climate change but have rarely been explored in ectothermic animals. Some studies have shown that short-term warming reduced gut microbial diversity that could hamper host functional performance.

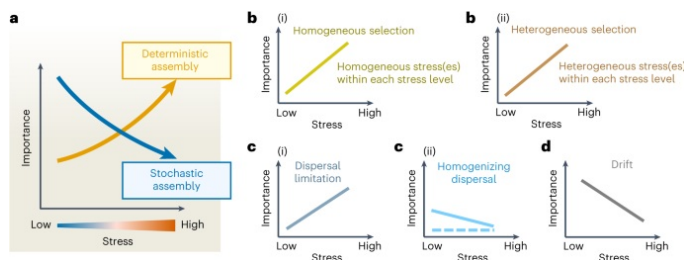
[Read More](#)



## Exploration of phyllosphere microbiomes in wheat varieties with differing aphid resistance - Environmental Microbiome

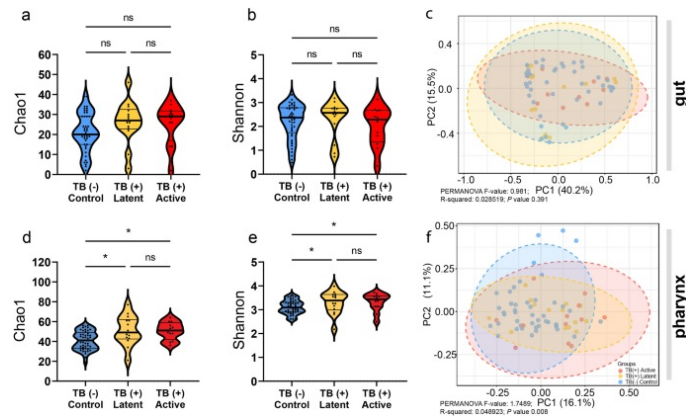
Background Leaf-associated microbes play an important role in plant development and response to exogenous stress. Insect herbivores are known to alter the phyllosphere microbiome. However, whether the host plant's defense against insects is related to the phyllosphere microbiome remains mostly elusive.

[Read More](#)



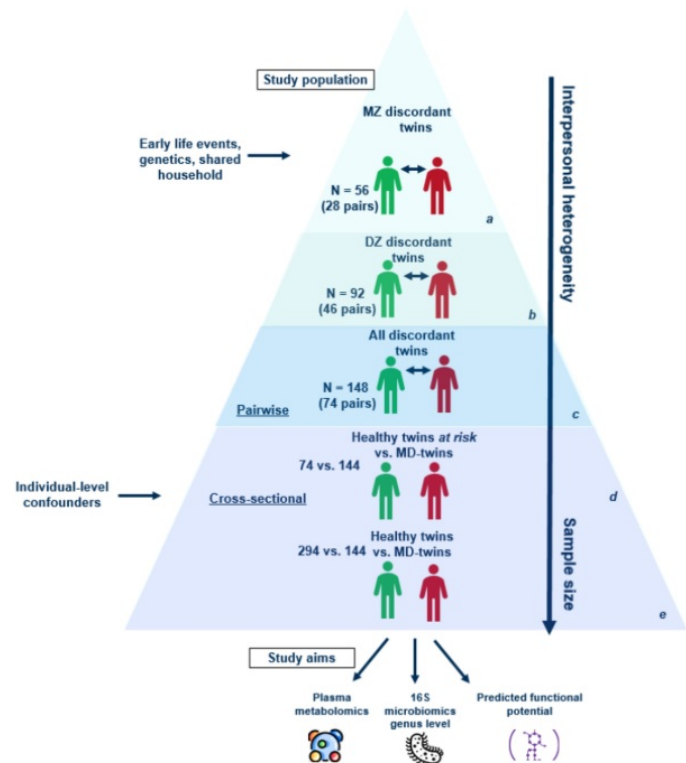
## Environmental stress mediates groundwater microbial community assembly - Nature Microbiology

Community assembly describes how different ecological processes shape microbial community composition and structure. How environmental factors impact community assembly remains elusive. Here we sampled microbial communities and >200 biogeochemical variables in groundwater at the Oak Ridge Field Research Center, a former nuclear waste disposal site, and developed a theoretical framework to conceptualize the relationships between community assembly processes and environmental stresses.



## Full-length 16S rDNA sequencing based on Oxford Nanopore Technologies revealed the association between gut-pharyngeal microbiota and tuberculosis in cynomolgus macaques - Scientific Reports

Tuberculosis (TB) is an infectious disease caused by the Mycobacterium tuberculosis complex (Mtb), which develops from asymptomatic latent TB to active stages. The microbiome was purposed as a potential factor affecting TB pathogenesis, but the study was limited.



## Systematic identification of the role of gut microbiota in mental disorders: a TwinsUK cohort study - Scientific Reports

Mental disorders are complex disorders influenced by multiple genetic, environmental, and biological factors. Specific microbiota imbalances seem to affect mental health status. However, the mechanisms by which microbiota disturbances impact the presence of depression, stress, anxiety, and eating disorders remain poorly understood. Currently, there are no robust biomarkers identified.

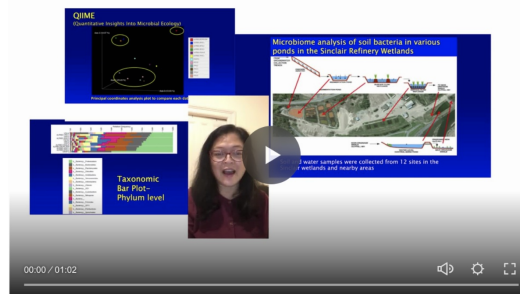
[Read More](#)



We need your help. Our online journal club needs you! We've been uploading articles and stories but welcome more. Consider using this as a classroom assignment or even sharing papers among the REMNet community that are interesting and useful.

To join the REMNet journal club, you'll need to install [hypothes.is](https://web.hypothes.is/start/) – here are the instructions –  
<https://web.hypothes.is/start/>

Once you've finished installing hypothes.is, to join our group go here –  
<https://hypothes.is/groups/2oo1Vo3q/remnet>



We need your testimonials. We love to share your stories and would like to have more short videos of what you've done and are doing with your students in your classes. Here are three stories from Christine Girtain, Alice Tarun, and Carlos Goller.

<https://www.microbiomesforall.com/resources/video-testimonials>

## ASM Microbiome Resources

### Microbiome Resources from ASM

ASM has a variety of resources available to support your teaching and research needs. Check this out

[ASM Resources](#)



Our website is getting more content and we're looking for content. If you have anything you can share please get in touch with us [MicrobiomesforAll](#)



Sent bytheodore@remnet.ccsend.compowered by



Try email marketing for free today!