Scan the QR code to sign in and to access the poster abstracts!

3rd Annual Engelpalooza

12 October 2021

Poster #	Presenter	Poster Title	Available for Q&A
1	Meghana Kamineni	Computational analysis of Brome Mosaic Virus Replication Protein 1a to determine potential docking sites, mutations, and membrane association region structure	1:35-2:35 p.m.
2	Joanna Reinhold	Feeding preference of *Culex territans* and Bd prevalence and transmission in its amphibian hosts	12:25-1:25 p.m.
3	Tam Nguyen	Towards the discovery of virulence and survival factors in Fusobacterium using host-mimicking DNA methylation to transcend genetic barriers	12:25-1:25 p.m.
4	Kevin Williams	Unveiling complement system resistance mechanisms in Fusobacterium	12:25-1:25 p.m.
5	Maegan Gabby	High-throughput drug screen to identify new therapeutics to eradicate *Borrelia burgdorferi*, the causative agent of Lyme disease	1:35-2:35 p.m.
6	Mara Kushelman	The unusual cell wall of the Lyme disease spirochaete *Borrelia burgdorferi* is shaped by a tick sugar	12:25-1:25 p.m.
7	Molly Simek	Antimicrobial metabolites produced by Streptomyces isolated from Marine eggs	11:15 a.m. - 12:15 p.m.

Engelpalooza is sponsored by Virginia Tech's Biochemistry Department, and made possible by the Howard Hughes Medical Institute (HHMI) Inclusive Excellence initiative.

Poster #	Presenter	Poster Title	Available for Q&A
8	Anthony Briganti	Molecular docking and computational analysis of azido-pleuromutilin derivative antibiotics to predict binding efficacy	11:15 a.m. - 12:15 p.m.
9	Mecaila McClune	Understanding the role of peptidoglycan in Lyme disease pathogenesis	12:25-1:25 p.m.
10	Aaron Brock	Motility is the driving factor for peptidoglycan layering in the Lyme disease causing Spirochete — *Borrelia burgdorferi*	12:25-1:25 p.m.
11	Shannon Pollock	Evolutionary precursors to sulfate reduction enzymes in Methanogens: Construct for complex isolation	1:35-2:35 p.m.
12	Benjamin Lewis	Biochemical characterization of a new 7,8-dihydro-6-hydroxy-methylpterin pyrophosphokinase (HPPK) from *Methanocaldococcus jannaschii*	1:35-2:35 p.m.
13	Truitt Elliott	Using molecular dynamics simulations to probe the influence of HIV-gp41 cytoplasmic tail exerts over membrane stability	1:35-2:35 p.m.
14	Zoie Sadler	Comparison of an archaeal Lysine-2,3-aminomutases from *Methanococcus maripaludis* C7 to well characterized bacterial Lysine-2,3-aminomutases	1:35-2:35 p.m.
15	Madison Payne	The impact of elevated inositol pyrophosphates on root physiology in *Arabidopsis thaliana*	12:25-1:25 p.m.
16	Andrew Pedraza	A suicide diiron oxygenase in p-aminobenzoate biosynthesis in *Chlamydia trachomatis*	1:35-2:35 p.m.
17	Colin Short	Use of opentrons OT-2 robot in the determination of MIC for a drug combination for treating MDR/XDR TB and Bradford Protein Assay	1:35-2:35 p.m.
18	Megan Toms	Ligand influence on Sphingosine kinase: Assessing the dynamics and structure of Sphingosine kinase using molecular dynamics simulations	11:15 a.m. - 12:15 p.m.

General schedule

Opening remarks / Welcome	11-11:15 a.m.
Poster session I	11:15 a.m. – 12:15 p.m.
Poster session II	12:25-1:25 p.m.
Poster session III	1:35-2:35 p.m.
Closing remarks	2:35-2:50 p.m.

Information booths

Biochemistry study abroad opportunities – Michael Klemba

ASBMB-degree certification – Peter Kennelly

VT Biochemistry Club – Kristopher Hite

Engelpalooza is sponsored by Virginia Tech's Biochemistry Department, and made possible by the Howard Hughes Medical Institute (HHMI) Inclusive Excellence initiative.