BAPG Fall 2022

UC Berkeley, 10/15/22

We are very excited to announce the 20th Bay Area Population Genomics (BAPG) Conference at UC Berkeley! Thank you to everyone who has signed up to present either a talk or a poster. We have posted the speakers, talk titles, and poster presenters on the schedule below.

Thank you to our sponsors <u>Ancestry</u>, <u>Variant Bio</u>, <u>D2G Oncology</u>, and <u>Personalis</u> for helping us put on this great conference!









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nime: 7:30am - 5pm, Saturday, October 15 (breakfast and check-in begins at 6:30am)

Transportation to UC Berkeley: For those planning on driving to Berkeley, visitor parking is available at a number of campus-owned parking lots. The closest ones to Stanley Hall will be the <u>La Loma Parking Structure</u>, the <u>Lower Hearst Parking Structure</u>, and the <u>Foothill Lot</u>. Visitor parking on the weekends is \$2 per hour. See <u>Berkeley's visitor parking page</u> for more details. Please follow all posted signs and directions for campus parking lots, which all look something like <u>this</u>. For those looking to take public transportation, <u>BART</u> stops one block west of campus at the Downtown Berkeley station. From there, it is a <u>very scenic walk</u> up through campus to Stanley.

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8:30-9:30am Check-in and breakfast, atrium of Stanley Hall

9:30-10:30 Session 1

9:30-9:45: Silu Wang, Coop Lab, UC Davis, "On the synthesis of Recombination Effect, Large X Effect, Snowball Effect underlying speciation"

9:45-10:00: Frederik Filip Vinggaard Staeger, Section for Computational Biology, University of Copenhagen, "The unique genetic architecture of common diseases in Greenland"

10:00-10:15: Elise Kerdoncuff, Moorjani Lab, UC Berkeley, "Reconstructing patterns of admixture through time: Insights from whole genome sequencing of South Asian populations"

10:15-10:30: Nicolas Lou, Sudmant Lab, UC Berkeley, "Time-series data reveal the genomic ramifications of a fishery collapse"

10:30-11:00 Coffee Break, Stanley Hall Atrium

11:00-12:00 Session 2

11:00-11:15: **Tristram Dodge**, Schumer Lab, Stanford, **"The genetic architecture of sexual mimicry in swordtail (Xiphophorus) fishes"**

11:15-11:30: Lenore Pipes, Nielsen Lab, UC Berkeley, "Estimating the relative proportions of SARS-CoV-2 haplotypes from wastewater samples"

11:30-11:45: Xiran Liu, Rosenberg Lab, Stanford, "A Dirichlet model of alignment cost in mixed-membership clustering results of ancestry inference"

11:45-12:00: Serena Caplins, Bay Lab, UC Davis, and Williams Lab, UC Berkeley, "A life-history polyphenism along temporally and geographically shifting environmental factors in the sea slug Alderia willowi"

12:00-1:30 Lunch, Stanley Hall Atrium

1:30-2:30 Session 3

1:30-1:45: Joao Ascensao, Hallatschek Lab, UC Berkeley, "Adaptive landscapes after diversification: what do they look like and what do they do?"

1:45-2:00: Zhiru Liu, Good Lab, Stanford, "Dynamics of bacterial recombination in the human gut microbiome"

2:00-2:15: Hakhamanesh Mostafavi, Pritchard Lab, Stanford, "Limited overlap of eQTLs and GWAS hits due to systematic differences in discovery"

2:15-2:30: William Dewitt, Song Lab, UC Berkeley, "Evolutionary dynamics of antibody affinity maturation in replica germinal centers"

2:30-3:00 Keynote Talk

Chuck Langley, UC Davis, "Haplotypes spanning the centromere proximal regions of Drosophila and humans"

3:00-5:00 Poster Session and Happy Hour, Stanley Hall 1st Floor Atrium

Alexander loannidis - "Ancestry-specific methods in population genetics"

Allison Gaudinier - "Characterizing Mimulus guttatus adaptation to serpentine soil"

Ar asia Lyulina - "Linkage equilibrium between rare alleles"

A. W Vaughn - "Bayesian inference of admixture graphs on Native American and Arctic populations"

Daniel Wong - "Quantifying the adaptive landscape of commensal gut bacteria using high-resolution lineage

James Female - Evolution of Evolvability in Adapting Formiations

Kaleda Denton - "Re-examining the evolution of altruism"

Maike Morrison - "FSTruct: An Fst-based tool for quantifying ancestry variability"

Marianna Karageorgi - "Adaptive tracking in response to seasonal insecticide pressure in Drosophila" Matthew Aguirre - "Simulating effects from genetic and experimental perturbations to gene regulatory

networks"

Maya Lemmon-Kishi - "A Penalized Likelihood Approach for Estimating Haplotypes from Environmental DNA" Nico Ayala - "Inferring Non-Additive Multi-Locus Selection in Admixed Populations Using Hidden Markov Model"

Noah Simon - "Evidence for polygenic, directional cis-regulatory evolution in Southeast Asian mice"

Olivia Ghosh - "Emergent evolutionary forces in spatial models of luminal growth in the human gut microbiota"

Ren Hamm - "Evolutionary dynamics of stress-activated mobile elements in Mimulus guttatus"

Sophie Jean Walton - "Within-host evolution and strain dynamics in the human gut microbiome during and after antibiotic perturbations"

Sylvia Durkin - "Gene regulatory basis of parallel environmental adaptation in house mice (Mus musculus domesticus)"

Yulin Zhang - "Recovering signatures of ghost admixture using ancestral recombination graphs"

Yun Deng - "A new framework for efficiently inferring ancestral recombination graph"

Yuval Simons - "Simple scaling laws control the architectures of complex traits"

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