BAPG XIX

Bay Area Population Genomics XIX Stanford University, 4/30/22

We are excited to announce the 19th iteration of the Bay Area Population Genomics Conference, sponsored by <u>Personalis Genomics</u>.

If you registered on line you are all set! Please also join the BAPG google group to stay in the loop in the future!

COVID19 policy: We expect everyone to be vaccinated and if possible to take a rapid test before coming to BAPG. While inside the building we encourage everyone except the speaker to wear a mask. It is optional for the speakers.

PARKING: is free on the weekends at all A and C parking spots. Please check the map: <u>https://drive.google.com</u>/<u>file/d/1gXviAXUVCCgZrXvvz4c9ple4qnxtrLGO/view</u>

Roth Way and Roth Way Garage are particularly close places to park.

Location: Sapp Center for Science Teaching and Learning, Stanford University
 Address: 376 Lomita Dr, Stanford, CA 94305
 Time: 9:30am-4:30pm, Saturday April 30th.

Schedule:

8:30-9:25am: Check-in & breakfast, Location: Courtyard Behind Sapp

9:25-11am: Welcome Remarks & Session 1, Moderator, Dmitri Petrov

9:30- 9:50AM Moises Exposito Alonso, Carnegie Institution for Science & Stanford University, "The population genetics of species range loss in the Anthropocene"

9:50 - 10:10AM Alyssa Lyn Fortier, Jonathan Pritchard Lab, Stanford University, "Ancient Trans Species Polymorphism at the Major Histocompatibility Complex in Primates"
 10:10 - 10:30AM QinQin Yu, Oskar Hallatschek Lab, UC Berkeley, "Lineage frequency time series reveal

10:10 - 10:30AM QinQin Yu, Oskar Hallatschek Lab, UC Berkeley, "Lineage frequency time series reveal elevated levels of genetic drift in SARS-CoV-2 transmission in England"

10:30 - 10:50AM Rishi De-Kayne, Simon Martin Lab, University of Edinburgh, "Stepwise supergene evolution in a butterfly: multiple duplications preceded multiple inversions"

10:50-11:30am: Coffee Break, Location: Courtyard Behind Sapp

11:30am - 1pm: Session 2 , Moderator Benjamin Good

11.50 - 12:10AM Jeffrey Groh, Graham Coop Lab, UC Davis, "The temporal and genomic scale of

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12:10 Pl2:30AM Kaleda Denton, Marc Feldman Lab, Stanford University, "Models of evolution under conformity and anti-conformity"

12:30 - 12:50AM **Krzysztof M. Kozak**, Michael Nachman Lab, Museum of Vertebrate Zoology, UC Berkeley and California Conservation Genomics Project, **"Winding paths to convergence in an iconic mimicry system"**

12:50 pm-2pm: Lunch

<u>2-2:30pm: Keynote talk</u> Uri Alon, Weizmann Institute, "Theory of evolutionary tradeoffs"

2:30-4:30pm: Poster Session & Happy Hour

Poster presenters:

- Jose Aguilar-Rodriguez, Stanford University, "The modulation of a natural genotype-phenotype map by global epistatic modifiers"
- Jameel Ali & Meris Johnson-Hagler, San Francisco State University, "Predicting Antibiotic Resistance Through the Utilization and Comparison of Machine Learning Algorithms"
- MaryGracy Antony, San Francisco State University, "Estimating the rate of antibiotic resistance using phylogenetic trees"
- Mara Baylis, UC Santa Cruz, "Selection against mitochondrial mutations occurs across life stages in Drosophila"
- Lorena Benitez-Rivera, San Francisco State University, "Finding patterns of antibiotic-resistant infections through the diversity of pathogenic sequence types"
- José Cerca, Norwegian University of Science and Technology, "The genomic basis of repeated evolution in Hawaiian Tetragnatha"
- Lucas Czech, Carnegie Institution for Science, "Efficient analysis of allele frequency variation from whole-genome pool-sequencing data"
- Oskar Hallatschek, UC Berkeley, "Who acquires infection from whom? Neutral allele frequency fluctuations can tell"
- Marianna Karageorgi, Stanford University, "Adaptive tracking in response to seasonal insecticide pressure in Drosophila"
- Meixi Lin, UCLA, "Inference of the distribution of fitness effects of new mutations in the fin whale, a large-bodied mammal"
- David Manahan, UC Berkeley, "Regulation of adaptive gene expression through alternative splicing in temperate and subtropical house mice"
- Jaime Morin, Norwegian University of Science and Techhology, "What does the feather say?
 i) chaeogenomics in Arini parrots"

- Habbamanach Mactafavi Stanford University "Why GWAS hits are not aOTIc"

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- Shaila Nus Karoff, Stanford University, "Genetic interactions drive heterogeneity in causal variant effect sizes for gene expression and complex traits"
- Evlyn Pless, UC Davis, "Predicting environmental and ecological drivers of human population structure"
- Megan Ruffley, Carnegie Institution for Science at Stanford, "Mapping genetic constraints of drought adaptation strategies in the eco-evolutionary model, Arabidopsis"
- Prajjval Pratap Singh, Banaras Hindu University, "Genomic Diversity of Bangladeshi Populations"
- Susanne Tilk, Stanford University, "Cancers adapt to their mutational load by buffering protein misfolding stress"
- Florentine van Nouhuijs, San Francisco State University, "Using phylogenies to determine antibiotic resistance in E. coli"