Matthew Jones, PhD Candidate

CONTACT

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EDUCATION & TRAINING

Current PhD BIOINFORMATICS, University of California, San Francisco

2017 B.A. COMPUTER SCIENCE, University of California, Berkeley

Research Experience

CURRENT | PhD Student - UC San Francisco & UC Berkeley

Advisors: Jonathan Weissman & Nir Yosef

Development of computational tools and CRISPR/Cas9-based technologies to investigate cancer progression & innate immune system dynamics in the tumor microenvironment.

2017 | Undergraduate Researcher - UC Berkeley

Advisor: Nir Yosef

Computational method development, statistical inference, and software deployment for the analysis of large single cell RNA-seq (scRNA-seq) datasets.

2015-2016 | Undergraduate Researcher - UC Berkeley

Advisors: Rasmus Nielsen & Russell Corbett-Detig

Investigation in the influences of admixture & local adaptation on population structure through simulation & software development.

SELECTED PUBLICATIONS

Jones MG*, Khodaverdian A*, Quinn JJ*, Chan MM, Hussmann JA, Wang R, Xu C, Weissman JS, Yosef N. Inference of Single Cell Phylogenies from Lineage Tracing Data with Cassiopeia. *Genome Biology*. 2020

Quinn JJQ*, **Jones MG***, Okimoto RA, Yosef N, Bivona TG, Weissman JS. Continuous lineage recording reveals rapid, multidirectional metastasis in a lung cancer xenograft model in mouse. BioRxiv. 2020

DeTomaso D*, **Jones MG***, Subramaniam M, Ashuach T, Ye JC, Yosef N. Functional Interpretation of Single-Cell Similarity Maps. *Nature Communications*. 2019

Chan MM*, Smith ZD*, Grosswendt S, Kretzmer H, Norman T, Adamson B, Jost M, Quinn JJ, Yang D, **Jones MG**, Khodaverdian A, Yosef N, Meissner A, Weissman JS. CRISPR-based molecular recording of mammalian embryogenesis. *Nature*. 2019

Corbett-Detig, R. and **Jones**, M. SELAM: Simulation of Epistasis and Local adaptation during Admixture with Mate choice. *Bioinformatics*. 2016

* denotes equal contribution

TEACHING

BP205B: Dynamical Systems Modeling, 2020 - Graduate Teaching Assistant, UCSF

BP205B: Dynamical Systems Modeling, 2019 - Graduate Teaching Assistant, UCSF

CS176: Algorithms for Computational Biology, 2018 - Reader, UC Berkeley

AWARDS & FELLOWSHIPS

UCSF Discovery Fellowship

Best Poster - Quantitative Biology Consortium Retreat, 2019

Best Poster - Quantitative Biology Consortium Retreat, 2018

COMMUNITY SERVICE & OTHER EXPERIENCE

Coordinator for Northern California Computational Biology Student Symposium, 2018-19 UCSF Integrative Program in Quantitative Biology (IPQB) Bootcamp Coordinator UCSF Integrative Program in Quantitative Biology (IPQB) Bootcamp Bioinformatics Leader