ADAM WEINER

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EDUCATION

Weill Cornell Graduate School of Medical Sciences *July 2019 - Present*
Tri-Institutional Ph.D. Program in Computational Biology & Medicine

University of California, Los Angeles *Sept 2015 - June 2019*
B.S. in Bioengineering, technical breadth in Computer Science
GPA: 3.67 overall / 3.86 junior-senior science

RESEARCH EXPERIENCE

Dr. Sohrab Shah - Memorial Sloan Kettering Computational Oncology *Jan 2020 - Present*

- Building telomere length estimation tool for scDNA-seq data.
- Investigating replication timing in scDNA

Dr. Marcin Imielinski - Weill Cornell & New York Genome Center *Sept 2019 - Dec 2019*

- Investigated multi-way chromatin contacts in cancer genomes with Pore-C technology.

Dr. Olivier Elemento - Weill Cornell Computational Biomedicine *July 2019 - Sept 2019*

- Mined cancer drug combination therapy clinical trial results to build a machine learning pipeline for predicting specific adverse events.

Dr. Aaron S. Meyer - UCLA Bioengineering *Sept 2017 - July 2019*

- Built an ODE model for common γ-chain cytokines and then used tensor factorization to map how native and mutant cytokines preferentially activate specific immune cell populations.
- Built a lineage tree hidden Markov model that uses phenotypic measurements to evaluate tumor heterogeneity within the context of single-cell response to cancer drug combinations and acquired resistance to therapy.

Drs. Peter Reiher & Leonard Kleinrock - UCLA CompSci *Sept 2018 - May 2019*

- Awarded $7,500 and lab space by UCLA Computer Sciences Internet Research Initiative (IRI).
- Used hemagglutinin sequencing data to predict flu vaccine efficacy against circulating strains.

Drs. Thomas Vallim & Elizabeth Tarling - UCLA Biological Chemistry *Summer 2017*

- Developed ChIP-seq analysis pipeline to quantify the dimerization patterns of Maf family transcription factors which play a role in bile acid and lipid metabolism disorders.

PUBLICATIONS, PRESENTATIONS, POSTERS, ETC.

A.M. Farhat*, A.C. Weiner*, C. Posner, Z.S. Kim, B. Orcutt-Jahns, S.M. Carlson, A.S. Meyer, "Modeling cell-specific dynamics and regulation of the common gamma chain cytokines", *Cell Reports*. 2021; **35**: 109044. doi: https://doi.org/10.1016/j.celrep.2021.109044.

A.M. Farhat*, A. Lim*, N.K. Namiri*, S. Visagan*, A.C. Weiner*, A.S. Meyer, "Lineage tree hidden Markov model quantifies intratumor heterogeneity in cancer therapy", poster & presentation at UCLA Bioengineering Symposium, Los Angeles, March 2019.

A.C. Weiner, A.M. Farhat, A.S. Meyer, "Building a Reaction Model for Common γ-chain Cytokines", poster at Biomedical Engineering Society Annual Meeting, Atlanta, October 2018.

A.C. Weiner, J.C. Link, E. Tarling, T.A. Vallim, "Integrating chromatin immunoprecipitation sequencing data to identify patterns of the small Maf family of transcription factors in HepG2 cells", poster at BIG Summer Poster Day, Los Angeles, August 2017.

HONORS AND AWARDS

UCLA Bioengineering Symposium - Best Poster in Devices and Diagnostics *March 2019*
Awarded by UCLA Bioengineering and Medicine Faculty

UCLA Internet Research Initiative Prize Winner *2018 - 2019*
Awarded by UCLA Computer Science Department

Stanley H. Black Memorial Scholarship (x2) *2017 - 2019*
Awarded by UCLA Engineering and Jewish Foundation of LA

UCLA Deans Honor List (x5) *2016 - 2018*

EXTRA-CIRRUCULAR

Chair, CBM Research in Progress Series *2021*

Admissions Committee, MSK Comp Bio Summer Program (CBSP) *2021*

Organizer, Tri-I CBM Annual Retreat *2020*

Phonebank Volunteer, Florida Democratic Party *2020*

Mentor, UCLA Engineering (MentorSEAS) *2016 - 2017*

RELEVANT COURSEWORK

Foundations of Graphical Models
Dr. David Blei, Columbia (not for credit)

Applied Machine Learning
Dr. Nathan Kallus, Cornell Tech

Functional Interpretation of High-Throughput Data
Dr. Jan Krumsiek, Weill Cornell

Data Structures and Algorithms in Computational Biology
Dr. Iman Hajirasouliha, Weill Cornell

Algorithms in Bioinformatics
Dr. Eleazar Eskin, UCLA

Computational Genetics
Dr. Eran Halperin, UCLA

Machine Learning and Data-Driven Modeling in Bioengineering
Dr. Aaron Meyer, UCLA

Systems Biomodeling
Dr. Joe DiStefano III, UCLA

Biotransport and Bioreaction Processes
Dr. Daniel Kamei, UCLA