## Jordan Eli Rossen

Contact jordanerossen@gmail.com 319-541-0640 Google Scholar Profile Link Information Github Link Education **Harvard University** 2020 - 2025 PhD in Epidemiology - Statistical genetics PhD advisor: Alkes Price 2020 - 2025 **Harvard University** M.S. in Biostatistics **Tufts University** 2013 - 2017 B.S. with majors in Computer Science and Chemistry

Professional Experience

## **Harvard University**

Major GPA: 3.95, GPA: 3.89

Alkes Price Group

PhD Researcher

2020-2025

- Developed MultiSuSiE, an open source Python package for multi-ancestry finemapping with higher power and lower computational cost than alternative methods and applied the method to analyze 200,000 whole genome sequences from All of Us (Rossen et al. 2024 bioRxiv).
- Studied differences in heritability components across ancestries using hundreds of thousands of whole genome sequences from All of Us (Rossen and Price 2024 American Society of Human Genetics Conference).

Broad Institute of MIT and Harvard Cand	cer Data Science Group
Associate Computational Biologist II Associate Computational Biologist I	2019 - 2020 2017 - 2019

- Developed data processing methodology for DepMap Achilles, a public, high-throughput CRISPR-Cas9 genome-scale knockout dataset (Dempster et al. 2019 BioRxiv, >1,000 cell lines x 20,000 genes).
- Led assay development analysis for PRISM, a high-throughput, in-vitro drug screening platform (Corsello et al. 2020 Nature Cancer, >500 cell lines x 4,500 drugs).
- Analyzed public high-throughput drug screening datasets to identify promising small molecules (Tsvetkov et al. 2019 Nature Chemical Biology, Tsvetkov et al. 2022 Science).

Pfizer Inc.Precision MedicineMolecular Data InternSummer 2016

 Designed and implemented an internal metabolomics biomarker database using RShiny.

**University of Illinois**Kami Hull Organometallic Catalysis Group
REU researcher
Summer 2015

• Expanded the reaction scope of ex-situ, Pd-catalyzed, chloroform-based alkoxy-carbonylation reactions.

## **Tufts University**

Lin Computational Chemistry Group

Research Assistant

2013 - 2014

 Programmed molecular dynamics simulations of liquid argon, oxygen, and water using Fortran.

# Teaching Assistant

### **Harvard University**

Department of Epidemiology

Causal Inference (EPI207), Jamie Robbins

Fall 2022, Fall 2023

Advanced Population and Medical Genetics (EPI511), Alkes Price

Spring 2023

## **Tufts University**

Department of Computer Science

Algorithms (COMP160), Gregory Aloupis

Fall 2017, Spring 2017

#### Awards

Iowa State Policy Debate Tournament - 2nd place	2013
Snyder Scholarship - UIUC, Department of Organic Chemistry	2015
Deans List - Tufts University	2013 - 2017
Spot Award - Broad Institute, Level 2	2019
F31 Grant - National Institutes of Health	2023
Platform Talk - American Society for Human Genetics	2023

## Programming

- Proficiency in R and Python
- Experience in C, C++, and Matlab

#### **Publications**

**Rossen, J.**, Shi, H., Strober, B., Zhang, M.J., Kanai, M., McCaw, Z.R., Liang, L., Weissbrod, O., Price, A.L., 2024. MultiSuSiE improves multi-ancestry fine-mapping in All of Us whole-genome sequencing data. medRxiv.

Strober, B.J., Zhang, M.J., Amariuta, T., **Rossen, J.**, Price, A.L., 2024, Fine-mapping causal tissues and genes at disease-associated loci. in press at Nature Genetics.

Tsvetkov, P., Coy, S., Petrova, B., Dreishpoon, M., Verma, A., Abdusamad, M., **Rossen, J.**, Joesch-Cohen, L., Humeidi, R., Spangler, R.D. and Eaton, J.K., Frenkel, E., Kocak, M., Corsello, S.M., Lutsekno, S., Kanarek, NM., Santagata, S., Golub, T.R., 2022. Copper induces cell death by targeting lipoylated TCA cycle proteins. Science, 375(6586), pp.1254-1261.

Dempster, J.M., Rossen, J., Kazachkova, M., Pan, J., Kugener, G., Root, D.E., Tsherniak, A., 2019. Extracting biological insights from the project achilles genome-scale CRISPR screens in cancer cell lines. BioRxiv, p.720243.

Corsello, S.M., Nagari, R.T., Spangler, R.D., **Rossen, J.**, [33 others], Golub, T.R., 2020. Discovering the anticancer potential of non-oncology drugs by systematic viability profiling. Nature Cancer, 1(2), pp.235-248.

Tsvetkov, P., Detappe, A., Cai, K., Keys, H.R., Brune, Z., Ying, W., Thiru, P., Reidy, M., Kugener, G., **Rossen, J.**, Kockac, M., Kory, N., Tsherniak, A., Santagata, S., Whitesell, L., Ghobrial, I.M., Markley, J.L., Lindquist, S., Golub, T.R., 2019. Mitochondrial metabolism promotes adaptation to proteotoxic stress. Nature Chemical Biology, 15(7), pp.681-689.