Jordan Eli Rossen

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Education	**Harvard University** PhD in Epidemiology - Statistical genetics PhD advisor: Alkes Price	2020 - 2025
	Harvard University M.S. in Biostatistics	2020 - 2025
	Tufts University B.S. with majors in Computer Science and Chemistry Major GPA: 3.95, GPA: 3.89	2013 - 2017

Professional Experience

Harvard University — Alkes Price Group

PhD Researcher — 2020-2025

- Developed MultiSuSiE, an open source Python package for multi-ancestry fine-mapping with higher power and lower computational cost than alternative methods (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 — Cancer Data Science Group

Associate Computational Biologist II — 2019 - 2020
Associate Computational Biologist I — 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).
- Lead assay development analyst 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 Medicine

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

Programming

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

Publications   Cited more than 3,700 times across six 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. and 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, Luke., Ghobrial, I.M., Markley, J.L., Lindquist,m S., Golub, T.R., 2019. Mitochondrial metabolism promotes adaptation to proteotoxic stress. Nature Chemical Biology, 15(7), pp.681-689.