

Dylan Kotliar
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Education

PhD Harvard University, Systems Biology 2014-2020
MD Harvard University, Health Sciences & Technology 2012-Present
BA Columbia University, Summa Cum Laude 2008-2012
Major: Biology, Minor: Economics

Research experience

Graduate student - Advisor: Pardis Sabeti, Harvard University 2014-2020

- Conducting GWAS of susceptibility to Lassa Fever and Ebola virus disease
- Single-cell profiling of immune cells in a macaque model of Ebola infection
- Developing computational methods for exploring single-cell RNA-Seq data

Undergraduate researcher - Advisor: Dana Pe'er, Columbia University 2008-2012

- Inferred regulatory networks in Ovarian and breast cancer from microarray data
- Implemented statistical analyses for exploring and visualizing gene expression

First author publications

Kotliar D*, Lin AE*, Logue J, Hughes TK, Khoury NM, Raju SS, Wadsworth MH, Chen H, Kurtz JR, Dighero-Kemp B, Bjornson ZB, Mukherjee N, Sellers BA, Tran N, Bauer MR, Adams GC, Adams R, Rinn JL, Melé M, Schaffner SF, Nolan GP, Barnes KG, Hensley LE., McIlwain DR, Shalek AK, Sabeti PC, Bennett RS. **Cell**. 2020

Identifying gene expression programs of cell-type identity and cellular activity with single-cell RNA-Seq. Kotliar D*, Veres A*, Nagy MA, Tabrizi S, Hodis E, Melton DA, Sabeti PC. **eLIFE**. 2019

Medical education in the United States: do residents feel prepared? Chen CA*, Kotliar D*, Drolet BC*. **Perspectives on Medical Education**. 2015

Selected collaborative publications

Detecting genome-wide directional effects of transcription factor binding on polygenic disease risk. Reshef YA, Finucane HK, Kelley, DR, Gusev A, Kotliar D... Price AL. **Nature Genetics**. 2018

Direct Identification of Hundreds of Expression-Modulating Variants using a Multiplexed Reporter Assay. Tewhey R, Kotliar D, ... Sabeti PC. **Cell**. 2016

Integration of genomic data enables selective discovery of breast cancer drivers. Sanchez-Garcia F Villagrasa P, Matsui J, Kotliar D ... Pe'er, D. **Cell**. 2014

An Integrated Approach to Uncover Drivers of Cancer. Akavia UD, Litvin O, Kim J, Sanchez-Garcia F, Kotliar D... Pe'er D. **Cell**. 2010

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Business experience

- Nextgenjane - Bioinformatics consultant 2016-2018
- Implemented cloud computing infrastructure for data analysis
 - Identified DNA methylation biomarkers predictive of endometriosis and ovarian cancer
 - Implemented cloud-based somatic mutation calling pipeline

Teaching experience

- Teaching Assistant, Harvard University, CS109 - Data Science Fall 2015
- Lead recitations and office hours covering advanced topics in machine learning
- Teaching Assistant, Columbia University, W4115 - Game Theory Spring 2012
- Lead recitations and offices hours for undergraduate course in game theory

Additional activities

- Learning Meaningful Representation of Life Workshop Co-organizer December 2019
- Lead interactive session of >300 participants
- Steering committee, Broad Institute Models Inferences and Algorithms Seminar 2017-Present
- Co-organizer of a weekly 2-hour seminar series on computational methods in biology
- Crimson Care Collaborative – Senior clinician 2015-2016
- Performed H&Ps in a student lead primary care clinic at Massachusetts General Hospital
- Resident tutor, Leverett House, Harvard 2013-2015
- Residential advisor and pre-professional advisor for pre-medical students.
- Volunteer and Project Coordinator for Health Leads 2009-2011
- Volunteered at Harlem Hospital referring clients to social services
 - Recruited and supervised new volunteers, organized weekly reflection sessions
 - Worked on program development with full time employees.
- Associate Editor, Columbia Undergraduate Science Journal 2009-2012
- Incorporated reviews from several undergraduate editors into final decisions

Awards and honors

- 2013 Abstract Achievement Award for Amer. Soc. Of Hematology Conference
- 2012 Medical Scientist Training Program for MD/PhD at Harvard Medical School
- 2012 Graduate Summa Cum Laude, Columbia University
- 2012 Inaugural Recipient of Bridges and Sturtevant Prize in Biological Sciences
- 2012 Phi Beta Kappa Honors Society
- 2010 Project Health Summer Fellow
- 2009 Summer Undergraduate Research Fellowship, Columbia University
- 2008-2012 Dean's List, Columbia University

- 2008 National Merit Scholarship Finalist
- 2008 National AP Scholar – For receiving grades of 5 on all 10 AP Exams taken
- 2007 Katherine Gorrie Internship Award, Stonybrook Watershed, for excellence as an environmental educator
- 2007 Prix d'Excellence, Princeton University Dept of French, A prize awarded to a student of the French language in each of twelve schools in New Jersey for demonstrating excellence in this field
- 2007 Ranked 10th in the nation in Le Grand Concours, annual American Association of Teachers of French Competition