University of Chicago
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Yoav Gilad

Positions

05/2016 - Present	Professor, Dept. of Medicine, University of Chicago
07/2013 - Present	Professor, Dept. of Human Genetics, University of Chicago
11/2009 - 06/2013	Associate Professor, Dept. of Human Genetics, University of Chicago
08/2005 - 10/2009	Assistant Professor, Dept. of Human Genetics, University of Chicago
08/2003 - 08/2005	European Molecular Biology Organization Postdoctoral Fellow in the Genetics Dept., at Yale University, New Haven, CT; *Sponsoring scientist: Kevin P. White*

Leadership Positions

07/2021 – Present	Dean for Biomedical and Health Informatics, University of Chicago
11/2017 - Present	Vice Chair for Research, Dept. of Medicine, University of Chicago
05/2016 - Present	Chief, Section of Genetic Medicine, Dept. of Medicine, University of Chicago
01/2017 - Present	Director, Stem Cell Training Knowledge Center, University of Chicago
04/2010 - Present	Director, Functional Genomics and Sequencing Core Facility, University of Chicago
07/2014 – 07/2018	Chair, Committee on Genetics, Genomics, and Systems Biology, University of Chicago (one of the largest graduate programs at the University of Chicago)

Additional appointments

10/2011 - Present	Committee on Development, Regeneration, and Stem Cell Biology at the University of Chicago
03/2008 - Present	Committee on Immunology at the University of Chicago

05/2007 - Present Fellow of the Institute for Genomics and Systems Biology at the University of Chicago

10/2005 - Present Committee on Genetics, Genomics, and Systems Biology at the University of Chicago

Education

09/2000 - 08/2003 Ph.D. in Molecular Genetics
Weizmann Institute of Science, Rehovot, Israel
Advisor: Doron Lancet; Title: Evolution of the human olfactory receptor gene repertoire

10/1998 - 09/2000 M.Sc., *cum laude* in Molecular Genetics
Weizmann Institute of Science, Rehovot, Israel
Advisor: Doron Lancet

10/1996 - 08/1998 B.Sc. in Molecular Genetics and Biochemistry
Ben Gurion University, Beer-Sheva, Israel

1991 - 1993 First year of B.Sc. degree obtained as a high-school student

Teaching

2005 - 2012 *Fall* Co-teaching graduate "HGEN4700 - Human Genetics"

2006 - Present *Spring* Teaching undergraduate/graduate "HGEN473 - Genomics and Systems biology"

Teaching statement
Genomics is a highly dynamic field that, at its best, addresses biological questions by combining large-scale collection of biological data with rigorous mathematical and statistical design and analysis. In order to provide undergraduate and graduate students with the tool kit required to perform genomic research, I developed a new undergraduate/graduate "Genomics and systems biology" course. In this continuously evolving lecture course, we explore the technologies that enable high-throughput collection of genomic-scale data, including sequencing, genotyping, gene expression profiling, regulatory mechanisms, assays of copy number variation, protein expression and protein-protein interaction. In addition, the course covers issues in study design and statistical analysis of large data sets, as well as how data from different sources can be used to understand regulatory networks, i.e., systems. Statistical tools that are introduced include linear models, likelihood-based inference, supervised and unsupervised learning techniques, methods for assessing quality of data, hidden Markov models, and controlling for false discovery rates in large data sets. The lectures are designed to allow students to learn the relevant statistical tools for each biological question or individual technology. The structure of this course aims at providing an appreciation for the importance of study design as well as analysis of multidimensional functional genomic datasets.

Services

Member of GCAT study section from 2017 to 2021

Session coordinator at the 2014 meeting of the Society of Molecular Biology and Evolution, Puerto Rico.

Symposium co-chair at the 2014 Biology of Genomes meeting, Cold Spring Harbor Laboratory, NY

NIGMS Human Genetic Cell Repository Scientific Advisory Committee (2011-2015)

Associate Editor for BMC Genomics (2010-2013)

Co-chair of the organizing committee for the 2013 Society of Molecular Biology and Evolution annual meeting (Chicago, IL)

Symposium co-chair at the 2011 Biology of Genomes meeting, Cold Spring Harbor Laboratory, NY

Scientific committee of the 2010 European Chemoreception Research Organization Meeting, Avignon, France

Faculty of 1000 (2008 - 2010)

Session coordinator at the 2008 meeting of the Society of Molecular Biology and Evolution, Barcelona, Spain

Session coordinator at the 2007 AchemS meeting, Sarasota, Florida

Session coordinator at the 2005 Gordon conference for Structural, Functional & Evolutionary Genomics, Lewiston, Maine

Co-organizer of BigRoc, the Bioinformatics and Genome Research Open Club at the Weizmann Institute of Science (1999 – 2002)

Ad hoc reviewer for the following grant agencies*: The National Institute of Health (GCAT and GHD study sections, different special emphasis panels), National Science Foundation, The Nebraska Experimental Program to Stimulate Competitive Research (EPSCoR), Israel Science Foundation, U.S.-Israel Binational Science Foundation (BSF), Marsden Fund,* Deutsche Forschungsgemeinschaft (German Research Foundation), National Development and Research Institute, Danish National Research Foundation, Cancer Research UK, Qatar National Research Fund (QNRF), The French National Research Agency.

Reviewer and/or ad-hoc academic editor for the following journals*: eLife, Aging Cell, American Journal of Human Genetics*, *Annals of Human Genetics*, Bioinformatics, BMC journals, *Evolution*, *Gene*, *Genetics*, *Genomics, Genome Biology, Genome Research*, *Human Genomics, Human Molecular Genetics, Molecular Biology and Evolution, Molecular Ecology, Nature, Nature Genetics, Nature Methods, Nucleic Acid Research, PLoS Biology, PLoS Computational Biology, PLoS Genetics, PLoS ONE, PNAS, Science, and Trends in Genetics*

Services at the University of Chicago (beyond leadership positions)

Chair, BSD Graduate student admission committee (2018).

BSD Graduate student admission committee (2006 – 2008, 2010 – 2018, 2020-2023).

Human Genetics curriculum committee (2009 – 2011)

Committee on Genetics, Genomics, and Systems Biology curriculum committee (2014 – 2018)

Oversight committee of the Functional Genomics Facility (2009 – 2011)

Invited Seminars and Talks:

Oct 2023	Seminar at the Department of Biostatistics, University of Pennsylvania, Philadelphia, PA
Sep 2023	Seminar at the Center for Human Genetics, Clemson University, Greenwood, SC
Jan 2023	Seminar at Geisel School of Medicine, Dartmouth College, Hanover, NH
Oct 2022	Speaker at a workshop in the American Society of Human Genetics Meetings, Los Angeles, CA
Jan 2022	Seminar at UCSD Institute for Genomic Medicine, San Diego, CA
Jul 2021	Speaker at the 2021 Society of Molecular Biology and Evolution annual meeting
Jun 2021	Seminar at the New York Stem Cell Foundation Research Institute, New York, NY
Apr 2021	Seminar at University of Massachusetts Medical School, Worcester, MA
Dec 2020	Seminar at the Division of Cardiology, Johns Hopkins University, Baltimore MD
Nov 2020	Speaker at the 2020 PQG conference, Boston, MA
Feb 2020	Speaker at the 2020 Lorne Genome Conference, Lorne, Victoria, Australia
Dec 2019	Seminar at Center for Precision Medicine, Wake Forest School of Medicine, Winston-Salem, NC
Aug 2019	Speaker at the NHGRI meeting titled Perspectives in Comparative Genomics and Evolution, Rockville, MD
May 2019	Seminar at the Center for Public Health Genomics, University of Virginia, Charlottesville, VA
Apr 2019	Speaker at the 2019 Human Genome Organization (HUGO) meeting, Seoul, South Korea
Mar 2019	Speaker at the NAS workshop on "The Promise of Single Cell and Single Molecule Analysis Tools to Advance Environmental Health Research", Washington, DC
Mar 2019	Seminar at the Biochemistry and Molecular Genetics Department, Northwestern University, Chicago, IL
Sep 2018	Keynote speaker at the University of Michigan, Department of Human Genetics annual retreat, Roscommon, MI
Jul 2018	Keynote Speaker at the 2018 ISMB meeting, Chicago, IL
Apr 2018	Seminar at department of biology, MIT, Boston, MA
Apr 2018	'Theory lunch' Speaker at the department of systems biology, Harvard Medical School, Boston, MA
Mar 2018	Speaker at the 'Gene regulation and Evolution' symposium at iOME - Institute of Organismic and Molecular Evolution, Mainz, Germany
Feb 2018	Speaker at the department of Genetics and Molecular Biology, UNC Chapel Hill, NC
Nov 2017	Seminar at department of biological sciences, NC state University, Raleigh, NC
Nov 2017	Seminar at the Carl R. Woese institute for genomic biology at the University of Illinois, Urbana – Champaign, IL
Apr 2017	Speaker at the 2017 Experimental Biology meeting, Chicago, IL
Mar 2017	Speaker at the Statistical and Computational Challenges in Large Scale Molecular Biology workshop, Banff, Ab, Canada
Dec 2016	Seminar at Rush University Medical Center, Chicago, IL
Sep 2016	Ground Rounds Seminar at the department of internal medicine, University of Illinois at Chicago, Chicago IL
Aug 2016	Speaker at the joint meeting of the International Primatological Society and the American Society of Primatologists, Chicago, IL
Aug 2016	Speaker at the 2016 Joint Statistical Meetings, Chicago, IL
Jun 2016	Speaker at a meeting on treating disseminated cancer by targeting the epigenome, McGill University, Montreal, QC, Canada
May 2016	Ground Rounds Seminar at the department of Medicine, University of Chicago, Chicago IL
May 2016	Speaker at the European Society of Human Genetics (ESHG) meeting, Barcelona, Spain
May 2016	Speaker at the 6th International Conference on Primate Genomics, Potomac, MD

Apr 2016	Seminar at the department of Genetics, University of Minnesota, St. Paul, MN
Mar 2016	Seminar at the department of Human Evolutionary Biology, Harvard University, Boston, MA
Mar 2016	Speaker and discussion leader at the 2016 Systems Biology: Global Gene Regulation meeting, Cold Spring Harbor Laboratory, NY
Jan 2016	Speaker at a Barbados Workshop on Epigenomics and gene regulation, Holetown, Barbados
Sep 2015	Speaker at the Non-Human Primate NIH workshop, Bethesda, MD
Aug 2015	Speaker at the Statistical and Computational Challenges In Bridging Functional Genomics, Epigenomics, Molecular QTLs, and Disease Genetic Research workshop, Banff, Ab, Canada
Jul 2015	Speaker at the 2015 Society of Molecular Biology and Evolution annual meeting, Vienna, Austria
Jun 2015	Seminar at Texas Biomedical Research Institute, San Antonio, TX
May 2015	Keynote speaker at the GW Institute for Neuroscience 5th annual symposium, The George Washington University School of Medicine, Washington, DC
Mar 2015	Seminar at Oregon National Primate Research Center, Beaverton, OR
Feb 2015	Seminar at the Department of Biological Sciences, Buffalo State University, Buffalo, NY
Nov 2014	Seminar at the Department of Molecular Genetics at the University of Toronto, Toronto Canada
Sep 2014	Speaker at the Evolution of Genomes workshop, Villars-sur-Ollon, Switzerland
Jun 2014	Speaker at the 2014 Society of Molecular Biology and Evolution annual meeting, Puerto Rico.
May 2014	Seminar at the Institute for Computational Biomedicine, Weill Cornell Medical College, New York, NY
May 2014	Speaker at the 2014 Biology of Genome meeting, Cold Spring Harbor Laboratory, NY
Jan 2014	Seminar at the Semel Institute for Neuroscience and Human Behavior, UCLA, Los Angeles, CA
Dec 2013	Seminar at the Department of Molecular Genetics at the Weizmann Institute of Science, Rehovot, Israel
Aug 2013	Speaker at the 2013 Statistical Data Integration Challenges in Computational Biology workshop, Banff, Ab, Canada
Jul 2013	Speaker at the 2013 ASBMB Special Symposia on Evolution and Core Processes in Gene Regulation, Chicago, IL
Jul 2013	Keynote speaker at the 2013 Clinical and Translational Research Forum, Chicago, IL
Jul 2013	Speaker at the 2013 Society of Molecular Biology and Evolution annual meeting, Chicago, IL
Jun 2013	Speaker at the European Society of Human Genetics (ESHG) meeting, Paris, France
Apr 2013	Speaker at the Fifth Barbados Workshop on computational and evolutionary gene regulation, Holetown, Barbados
Mar 2013	Seminar at the Department of Genetics and the Center for Genome Sciences and Systems Biology at the Washington University School of Medicine, Saint Louis, MO
Feb 2013	Seminar at Genome Science Institute, Boston University, Boston, MA
Feb 2013	Speaker at the Primate Genomics symposium of 'The Future of Genome Sciences' series. University of Washington, Seattle, WA
Nov 2012	Keynote Speaker at the 9th annual RECOMB Conference on Regulatory and Systems Genomics, San Francisco Bay, Redwood City CA
Oct 2012	Seminar at the Institute for Genome Sciences & Policy, Duke University, Durham, NC
Oct 2012	Seminar at the Lewis-Sigler Institute at Princeton University, Princeton, NJ
Sep 2012	Seminar at the Gladstone Institute, UCSF, San Francisco, CA
May 2012	Keynote Speaker at the 20th Annual Symposium New Developments in Prenatal Diagnosis and Medical Genetics. Mount Sinai Hospital, Toronto, Canada.
Jan 2012	Seminar at the Division of Developmental & Cognitive Neuroscience, Yerkes National Primate Research Center, Emory University, Atlanta, GA
Jan 2012	Seminar at the Section of Ecology, Behavior and Evolution, UC San Diego, San Diego, CA
Dec 2011	Seminar at the European Bioinformatics Institute, Wellcome Trust Genome Campus, Hinxton Cambridge, UK
Dec 2011	Seminar at the Department of Pathology, Stanford University, Stanford, CA
Oct 2011	Seminar at the Institute for Computational Biomedicine, Weill Cornell Medical College, New York, NY

Oct 2011	Seminar at the Institute for Systems Biology, Seattle, WA
Sep 2011	Seminar at the Genetics Department at Cornell University, Ithaca, NY
May 2011	Speaker at the 2011 Biology of Genome meeting, Cold Spring Harbor Laboratory, NY
May 2011	Seminar at the Cancer Center of Loyola Medical School, Chicago, IL
Apr 2011	Speaker at the 2011 Genetics of Humanness CARTA symposium, La Jolla, CA
Apr 2011	Seminar at the Ludwig Institute for Cancer Research, UCSD, La Jolla, CA
Mar 2011	Seminar at the Arizona Center for the Biology of Complex Diseases, University of Arizona, Tucson, AZ
Feb 2011	Seminar at the Center for Study of Gene Structure and Function, Hunter College, New York, NY
Dec 2010	Seminar at the Genomes and Genetics Department of the Institut Pasteur, Paris, France
July 2010	Speaker at the 2010 Statistical Genomics in Biomedical Research workshop, Banff, Ab, Canada
Apr 2010	Keynote Speaker of the 2010 Frontiers in Life Science Seminar, Loyola University, Chicago, IL
Jan 2010	Seminar at the Department of Molecular Genetics at the Weizmann Institute of Science, Rehovot, Israel
Jan 2010	Seminar at the Department of Human Molecular Genetics & Biochemistry at the Sackler Medical School of Tel Aviv University, Tel Aviv, Israel
Aug 2009	Seminar at the Channing Laboratory, Brigham and Women's Hospital, Harvard Medical School, Boston, MA
Jun 2009	Speaker at the SMBE meeting, Iowa City, Iowa
May 2009	Seminar at the Biology department, Stanford University, Stanford, CA
Apr 2009	Speaker at the AchemS meeting, Sarasota, Florida
Mar 2009	Speaker at the American Association of Physical Anthropology meeting, Chicago, IL
Feb 2009	Seminar at the Walter and Eliza Hall Institute of Medical Science, Melbourne, Australia
Jan 2009	Seminar at the Ecology and Evolution department, University of Arizona, Tucson, AZ
Nov 2008	Seminar at the Department of Biology, Indiana University, Bloomington, IN
Oct 2008	Seminar at the Department of Biology and Center for Evolutionary Genomics Institute for Genome Sciences & Policy. Duke University, Durham, NC
Sep 2008	Seminar at the Weizmann Institute of Science, Rehovot, Israel
May 2008	Speaker at the 28th Minerva-Gentner Symposium on Sensory Signaling and Information Processing, Hamburg, Germany
Apr 2008	Speaker at the Fourth Barbados Workshop on computational gene regulation, Holetown, Barbados
Jan 2008	Seminar at the department of Molecular Genetics, University of Toronto, Toronto, Canada
Oct 2007	Seminar at the Walter and Eliza Hall Institute of Medical Science, Melbourne, Australia
Apr 2007	Speaker at the AchemS meeting, Sarasota, FL
Mar 2007	Seminar at the Wyne State University school of medicine, Detroit, Michigan
Mar 2007	Seminar at the University of Uppsala, Uppsala, Sweden
Feb 2007	Seminar at the Department of Ecology and Evolutionary Biology, University of California at Irvine, Irvine, CA
Dec 2006	Seminar at Tel Aviv University, Tel Aviv, Israel
Nov 2006	Seminar at the Department of Biology, University of Maryland, College Park, Maryland
Sep 2006	Speaker at the ComBio2006 meeting, Brisbane, Australia
Jun 2006	Speaker at the American Diabetes Association 66th scientific sessions, Washington, DC
May 2006	Speaker at the SMBE meeting, Tampe, AZ
Apr 2006	Speaker at the AchemS meeting, Sarasota, FL
Jun 2005	Seminar at the Unitat de Biologia Evolutiva, Universitat Pompeu Fabra, Barcelona
Apr 2005	Speaker at the AchemS meeting, Sarasota, FL
Sep 2004	Keynote Speaker at the European Chemoreception Research Organization meeting, Dijon, France
Apr 2004	Speaker at the American Association for Physical Anthropology meeting, Tampa, Florida
Nov 2003	Speaker at the American Society of Human Genetics meeting, Los Angeles, CA
Apr 2003	Speaker at the AchemS meeting, Sarasota, FL
Mar 2003	Seminar at the Division of Medical Genetics, University of Geneva Medical School, Switzerland

Mar 2003 Seminar at the Institute of Ecology, University of Lausanne, Switzerland
Mar 2002 Seminar at the Whitehead Institute, Boston, MA
Aug 2001 Speaker at the Northwest Microarray Conference, Seattle, Washington
Nov 2000 Speaker at the "Human genetics in the post- genomic age" meeting, Maagan, Israel

Fellowships and Grants

Ongoing (as PI)

R21HG011170 06/01/22 – 05/31/24
NIH/NHGRI
No Cell Left Behind: Using Embryoid Bodies to Understand Human Biology
The goal of this grant is to establish Embryoid Bodies as a new model for gene regulatory studies.

1R35GM131726 (PI) 06/01/19 – 05/31/24
NIH/NIGMS
Characterizing and Understanding Variation in Gene Regulatory Mechanisms Within and Between Species
This is a MIRA grant, to fund all NIGMS related work in the Gilad lab.

1R01HG010772-01 (PI) 09/01/19 – 08/31/27
NIH/NHGRI
Development of iPSCs for comparative genomics in primates
The goals of this grant are to develop panels of iPSCs from humans, chimpanzees, and rhesus macaques, and use these panels to comparatively study molecular phenotypes in these species. *The renewal application received a 6% score and is expected to be funded.*

Ongoing (in roles other than PI)

5P30 CA014599-38 (PI: K. Odunsi: Scientific Director, Genomics) 05/01/10 - 03/31/24
NIH/NCI
The University of Chicago Comprehensive Cancer Center
The purpose of this facility is to generate both transgenic and gene targeted mouse models for biomedical research.

Completed (as PI)

2 R01 HL092206 (PI) 04/15/09 - 04/14/22
NIH/NHLBI
Integrating genomics and gene expression analyses to map CVD-associated loci
The purpose of this work was to combine gene expression analysis in differentiated cardiomyocytes, comparative genomics and genetic associations to identify genes or regulatory regions that contribute to variability in susceptibility to and severity of cardiovascular disease (CVD).

1R01GM122930 (PI) 07/01/17 – 03/31/20
NIH/NIGMS
Using single cell RNA-seq to study regulatory noise and robustness
The goals of this study are to characterize regulatory noise in single-cell gene expression data, identify genomic loci in which genetic variation is associated with inter-individual differences in regulatory noise (robustness QTLs), and

develop an understanding of the mechanisms that underlie gene regulatory robustness. This grant was closed on March 2020 as it was replaced by the MIRA grant.

2 R01 MH084703 (MPI) 07/25/13 – 08/31/16
NIH/NIMH
Analysis and interpretation of noncoding regulatory variation
The purpose of this project was to improve our understanding of the mechanistic links between genetic variation and differences in gene regulation across individuals by collecting different types of genomic data on the same set of samples.

1 R01 AI087658 (PI) 01/01/11 - 12/31/15
NIH/NIAID
Mapping eQTLs that affect susceptibility to Tuberculosis
The goals of this project were to map response eQTLs for infection with *Mycobacterium tuberculosis* (MTB*),* the etiological agent causing tuberculosis (TB), as well as to identify regulatory variation that is associated with differences in susceptibility to TB.

2 R01 GM077959 (PI) 04/01/06 - 03/31/15
NIH/NIGMS
Natural Selection on Gene Regulation in Humans
The purpose of this grant was to study the contribution of changes in different genetic and epigenetic regulatory mechanisms to the evolution of gene regulation in primates.

1 R01 HG006123 (PI) 03/01/11 - 03/31/15
NIH/NHGRI
Mapping QTLs Associated with Variation in RNA Decay Rates
The goals of this project were to study inter-individual variation in RNA decay rates in humans and to map associated RNA decay eQTLs. At the conclusion of this work, we gained a better understanding of RNA decay mechanisms, the associated regulatory elements, and their role in determining overall variation in transcript and gene expression levels.

1 R01 GM084996 (PI) 03/01/10-02/28/14
NIH/NIGMS
The Evolution of Human Specific Regulatory Pathways
The goals of this work are to identify a first set of regulatory pathways that have been remodeled in humans, and to learn about the genetic basis of gene regulatory changes in primates.

DDRCC P30 DK42086 (PI) 11/01/2011–10/31/2012
Pilot and Feasibility Project Grant
The genetic basis for variation in the human gut microbiome
The goal of this pilot project was to explore genetic and environmental (e.g., diet) factors that might explain variation in the human gut microbiome.

Alfred P. Sloan Research fellowship 09/01/07-08/31/09

DDRCC P30 DK42086 (PI) 11/2005–11/2006
Pilot and Feasibility Project Grant
Identifying human specific adaptations in the regulation of genes expressed in liver and kidney.

The aim of this pilot grant was to collect preliminary results on functional differences in promoter regions in humans and chimpanzees using reporter gene assays.

EMBO postdoctoral Fellowship 8/2003-8/2005
European Molecular Biology Organization
The purpose of this fellowship was to collect preliminary data on gene expression differences between primates using a pilot multi-species cDNA array.

Honors

2021 Elected fellow of the American Association for the Advancement of Science (AAAS)

2013 ISCB Top Ten Papers in Regulatory and Systems Genomics for 2012 (Degner FD, Pai AP, Pique-Regi R, Veyrieras JP, Gaffney JD, Pickrell, JK, De Leon S, Michelini K, Lewellen N, Crawford GE, Stephens M, **Gilad Y**, and Pritchard JK. *DNaseI sensitivity QTLs are a major determinant of human expression variation*. Nature 2012 Feb 5 [Epub ahead of print]

2012 ISCB Top Ten Papers in Regulatory and Systems Genomics for 2011 (Pique-Regi R, Degner FJ, Pai AA, Gaffney DJ, **Gilad Y**, and Pritchard JK. *Accurate inference of transcription factor binding from DNA sequence and chromatin accessibility data.* Genome Research 2011 Mar;21(3):447-55)

2012 Selected to deliver presentation at the plenary session of the 2012 American Society of Human Genetics meeting.

2007 Alfred P. Sloan Research fellowship in Computational and Molecular Evolutionary Biology

2004 The John F. Kennedy Prize, Weizmann Institute of Science
Highest prize of the Feinberg graduate school

2003 The Walter M. Fitch Prize for best student paper, given by the Society for Molecular Biology and Evolution

2002 Clore Foundation Doctoral Prize
Graduate fellowship awarded to top ten Science doctoral students in Israel

2002 Weizmann Institute Scholarship for Distinguished Graduate Students

2001 "Best M.Sc. Prize", Weizmann Institute of Science
Awarded to the top ten M.Sc. students

1999 Kreitman Foundation Fellowship, Ben Gurion University (declined)
Graduate fellowship offered to Valedictorian of first degree in Biology

1996 Roll of Distinction of the Dean of the Department of Life Science, Ben Gurion University

Honors and awards received by trainees

2009	AHA pre-doctoral fellowship awarded to graduate student Athma Pai
2009	University of Chicago postdoctoral fellowship awarded to postdoctoral scholar Jenny Tung
2009	NIH NRSA fellowship awarded to postdoctoral scholar George Perry
2009	EMBO fellowship awarded to postdoctoral scholar Luis Barreiro
2009	HFSP fellowship awarded to postdoctoral scholar Luis Barreiro
2011	Sir Henry Wellcome Postdoctoral fellowship awarded to postdoctoral scholar Irene Gallego Romero
2011	Marie Curie fellowship awarded to postdoctoral scholar Julien Roux
2012	NIH NRSA fellowship awarded to postdoctoral scholar Zia Khan
2013	CSTA pre-doctoral fellowship awarded to graduate student Courtney Kagan
2014	NIH NRSA fellowship awarded to graduate student Nicholas Banovich
2014	EMBO fellowship awarded to postdoctoral scholar Michelle Ward
2015	NIH NRSA fellowship awarded to postdoctoral scholar Brett Engelmann
2015	T32 pre-doctoral fellowship awarded to graduate student Bryan Pavlovic
2016	NSF Research Fellowship awarded to graduate student Lauren Blake
2018	AHA pre-doctoral fellowship awarded to graduate student Katherine Rhodes
2019	NIH NRSA fellowship awarded to graduate student Katherine Rhodes
2019	NIH NRSA fellowship awarded to graduate student Briana Mittleman
2020	NIH NRSA fellowship awarded to postdoctoral scholar Genevieve Housman
2021	NIH NRSA fellowship awarded to graduate student Anthony Hung
2022	Selected for plenary talk at ASHG – graduate student Wenhe Lin
2023	NIH NRSA fellowship awarded to graduate student Erik McIntire
2023	T32 pre-doctoral fellowship awarded to graduate student Hsin-Chiao Huang

Trainees and Staff Scientists.

Name	Status	Tenure	Project title	Funding source	Current Position
Current Trainees					
Katie Rhodes	Staff Scientist	2021-present	Mapping dynamic regulatory QTLs during differentiation	NRSA fellowship	N/A
Erik McIntire	Pre-doc	2021-present	Mapping dynamic eQTLs using EBs	R01 to YG	N/A
Elizabeth (Geena) Woo	Pre-doc	2023-present	Establishing a registry of mother-child pairs to investigate the impact of maternal clinical history and exposures on health outcomes in children	MSTP program	N/A
Anna Cormack	Pre-doc	2023-present	Establishing hepatic guided culture as an in vitro model for regulatory studies	R01 to YG	N/A
Benjamin Umans	Postdoc	2020-present	Dynamic eQTL mapping in differentiated neurons	R01 to YG	N/A
Wenhe Lin	Pre-doc	2019-present	Analysis of circadian rhythm using single cell data	R01 to YG	N/A
Kenneth Barr	Staff Scientist	2017-present	Functional and mechanistic dissection of regulatory elements	R01 to YG	N/A
Brendan Jamison	Pre-doc	2023-present	Analysis of dispersion in single cell gene expression levels	CVD-T32	N/A
Benjamin Fair	Staff Scientist	2018-present	Mapping of regulatory QTLs in humans and chimpanzees	R01 to YG	N/A
Hsin-Chiao Huang	Pre-doc	2022-present	Comparative studies of gene regulation in primates using EBs	GRTG	N/A

Previous Trainees					
Alexander Chen	Statistics MS	2022-2023	Analysis of variation in single cell gene expression levels	Statistics Dept.	Graduate student at the University of Chicago
Ayodeji Adegunsoye	Pre-doc	2019-2023	Integrating genomics into management of fibrotic lung disease	NIH K08	Assistant Professor (Physician Scientist) at the University of Chicago
Anthony Hung	Pre-doc	2018-2022	eQTL mapping in differentiated Osteoblasts in response to strain and stress	MSTP program / NRSA predoctoral fellowship	Medical Student (University of Chicago)
Genevieve Housman	Postdoc	2017-present	Comparative gene regulation in differentiated Osteoblasts	NRSA postdoctoral fellowship	Assistant professor at MPA-EVA in Germany
Reem Elobany	Pre-doc	2016-2020	Classifying CVD clinical outcomes based on functional genomics data	MSTP program	Medical Student (University of Chicago)
Katie Rhodes	Pre-doc	2016-2021	Mapping dynamic regulatory QTLs during differentiation	NRSA fellowship	Staff Scientist at the Gilad lab
Briana Mittleman	Pre-doc	2017-2020	Mapping dynamic poly-A and elongation QTLs	NRSA predoctoral fellowship	Law School at Stanford
Ittai Eres	Pre-doc	2015-2020	Estimating the contribution of evolution in *cis/trans* regulatory elements to human phenotypes	Genetics NIH training grant	Senior Associate Scientist at Amgen
Michelle Ward	Postdoc	2013-2020	A comparative study of the effects of hypoxia on cardiomyocytes in primates	EMBO Fellowship	Assistant Professor at University of Texas Medical Branch
Lauren Blake	Pre-doc	2015-2019	Dissecting tissue-specific gene regulatory mechanisms	NSF Graduate Research Fellowship	Data Scientist at Alto Neuroscience
Po-Yuan Tung	Postdoc	2014-2018	QTL mapping of regulatory robustness	T32 post-doctoral fellowship (Cardiology)	Scientist at Berkeley Lights
Joyce Hsiao	Postdoc	2015-2019	Analysis of single cell expression data	R01 to YG	Senior Scientist at Moderna Therapeutics
John Blischak	Pre-doc	2011-2017	Mapping immune response eQTLs in the context of MTB infection	Genetics NIH training grant	Postdoctoral fellow at the University of Chicago
Bryan Pavlovic	Pre-doc	2013-2018	Comparative studies in primates using iPSC derived motor neuron cells	T32 pre-doctoral fellowship	Postdoctoral fellow at the UCSF
Nicholas Banovich	Pre-doc	2012-2017	Characterizing and mapping regulatory variation in cell types differentiated from	NRSA pre-doctoral fellowship	Associate Professor at Translational Genomics

			iPSCs		Research Institute and Mayo Clinic
Samantha Thomas	MTSP Pre-doc	2013-2017	Characterizing and mapping functional variation in hepatocytes differentiated from iPSCs	MSTP program	Medical Resident (University of Chicago)
Sidney Wang	Postdoc	2013-2016	Comparative study of translational regulation in primates	R01 to YG	Assistant Professor at McGovern Medical School
Brett Engelmann	Postdoc	2013-2015	Characterizing inter-individual variation in protein phosphorylation levels	NRSA post-doctoral fellowship	Senior Scientist at AbbVie
Courtney Kagan	Pre-doc	2011-2015	Characterizing regulatory response to pharmacological toxicity in cardiomyoctyes	CSTA pre-doctoral fellowship	Commercial Leadership at Abbvie
Irene Gallego Romero	Postdoc	2011-2015	Comparative genomics of IPS cells and developmental pathways in primates	Sir Henry Wellcome Postdoctoral fellowship	Assistant Professor at Melbourne University
Julien Roux	Postdoc	2011-2014	Evolution of regulatory variation within and between primates	Marie Curie fellowship	Group Leader at the University of Lausanne
Emily Davenport	Pre-doc	2010-2014	QTL mapping of microbiome phenotypes in the Hutterites	Genetics NIH training grant	Assistant Professor at Penn State University
Darren Cusanovich	Pre-doc	2009-2014	Integrating genomics and gene expression analyses to map CVD-associated loci	Genetics NIH training grant	Assistant Professor at the University of Arizona
Zia Khan	Postdoc	2011-2013	Characterizing inter-individual variation in protein expression levels and the associated regulatory mechanisms	NRSA fellowship	Assistant Professor at University of Maryland
Orna Man	Postdoc	2011-2013	Bioinformatics of the human microbiome	R01 to YG	Software developer at Affymetrix
Allegra Petti	Research Associate (Assistant Professor)	2012-2013	Mapping the genetic basis for variation in transcription rates	R01 to YG	Assistant Professor at Washington University
Carolyn Cain	Pre-doc	2007-2012	Evolution of transcription factors and their targets in primates	Genetics NIH training grant	Medical Writer at MedLogix Communications
Athma Pai	Pre-doc	2008-2012	Characterizing mechanisms underlying regulatory variation within and between species	AHA pre-doctoral fellowship	Assistant Professor at UMass Medical School
Russell Bainer	Pre-doc	2007-2012	Functional characterization of speciation and adaptation of the p53 network during recent primate history	Genetics NIH training grant	Postdoctoral fellow at UCSF
Jenny Tung	Postdoc	2010-2012	The genetic/epigenetic basis for social and physical environmental effects	University of Chicago postdoctoral fellowship	Associate Professor at Duke University
George Perry	Postdoc	2008-2011	Characterizing protein regulation within and between primates	NRSA Fellowship	Associate Professor at Penn State University
Luis Barreiro	Postdoc	2008-2010	Evolution of innate immune response in primates	HFSP Fellowship	Professor at the University of Chicago
Ran Blekhman	Pre-doc	2005-2010	Differentially expressed regulatory pathways that contribute to phenotypic differences between primates	R01 to YG	Associate Professor at the University of Chicato
Paola De Candia	Postdoc	2005-2008	Mapping transcriptional pathways that have been remodeled in human evolution	R01 to YG	Senior Researcher at University of Milano – Bicocca

Publications (135)

A. Preprints

- Gallego Romero I, Gopalakrishnan, S and **Gilad Y**. *Widespread conservation of chromatin accessibility patterns and transcription factor binding in human and chimpanzee induced pluripotent stem cells*. bioRxiv; 466631

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B. Peer Reviewed Publications (127)

B1. Research papers – not including reviews (115)

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- Ward MC, Banovich NE, Sarkar A, Stephens M, and **Gilad Y**. *Dynamic effects of genetic variation on gene expression revealed following hypoxic stress in cardiomyocytes*. *Elife*. 2021 Feb 8;10:e57345.

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