

Erik C. Andersen

Assistant Professor Northwestern University

Department of Molecular Biosciences

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Major Professional Interests:

Understanding the genetic basis of complex traits and genome evolution using high-throughput phenotyping, molecular genetics, and computational tools

Education:

2000-2008 Ph.D. in Biology

Massachusetts Institute of Technology (MIT), Cambridge, MA

Advisor: Dr. H. Robert Horvitz

Dissertation: The synthetic Multivulva genes and their suppressors regulate opposing cell fates

through chromatin remodeling

1996-2000 B.S. in Biological Sciences with departmental honors

> Stanford University, Stanford, CA Advisor: Dr. Matthew P. Scott

Dissertation: in vivo analysis of Drosophila heart-tube formation

Pre-doctoral Awards, Honors, and Fellowships:

2005 - 2006	Anna Fuller Cancer Graduate Research Fellowship
2000	Firestone Medal for Excellence in Undergrad. Research (top Biological Sciences researcher)
1999, 1998	Howard Hughes Medical Institute Summer Research Fellowship
1998	Stanford University Undergraduate research small grant recipient
1996-1998	Robert C. Byrd Honors Scholarship recipient

Post-doctoral Recognitions:

2015 - 2019	American Cancer Society Research Scholar
2015 - 2017	March of Dimes Basil O'Connor Research Scholar
2014 - 2018	Pew Scholar in the Biomedical Sciences
2012 - 2013	Howard Hughes Medical Institute Post-doctoral Fellow
2011 - 2012	National Cancer Institute Post-doctoral Fellow
2009 - 2011	Ruth L. Kirschstein National Research Service Award Recipient

Employment:		
2014 -	Member of Northwestern Institute on Complex Systems (NICO)	
2013 -	Assistant Professor of Molecular Biosciences, Northwestern University	
	Full Member of the Robert H. Lurie Comprehensive Cancer Center	
	Member of the Chemistry of Life Processes Institute (CLP)	
	Preceptor for the Interdisciplinary Biological Sciences Graduate Program (IBiS)	
	Preceptor for the Northwestern Univ. Interdepartmental Neuroscience Grad. Program (NUIN)	
2008 - 2013	Post-doctoral fellow, Princeton University, Princeton, NJ, Advisor: Dr. Leonid Kruglyak	
2000 - 2008	Graduate student in Biology Department at Massachusetts Institute of Technology (MIT),	
	Cambridge, MA, Advisor: Dr. H. Robert Horvitz	

Research Support:

Present:	
2015 - 2019	American Cancer Society Research Scholar Grant Elucidating the genetic causes of variation in chemotherapy-based toxicity PI (\$787,658)
2015 - 2017	March of Dimes Basil O'Connor Starter Research Grant Identification of hookworm anthelmintic resistance genes to ameliorate maternal and infant anemia PI (\$150,000)
2014 - 2018	National Institutes of Health (R01 GM107227) Direct determination of the distribution of fitness effects of spontaneous mutations consortium PI (\$360,000) with PI Dr. Charlie Baer (University of Florida)
2014 - 2018	Pew Charitable Trust, Scholars Program in the Biomedical Sciences Elucidating the genetics of anthelmintic resistance in nematode-borne neglected tropical diseases PI (\$240,000)
2016	Amazon Web Services Optimization of computational pipelines to support the C. elegans Natural Diversity Resource PI (\$3,000)
2016 - 2018	National Institutes of Heath (R21 Al121836) Discovery and validation of avermectin resistance loci in free-living and parasitic nematodes Co-PI (\$275,000) with Dr. Michael Kimber (Iowa State University)
2016	Weinberg College Research Innovation Grant, Northwestern University The Caenorhabditis elegans Natural Diversity Resource - a powerful tool to facilitate biomedical discovery PI (\$40,000)
2016-2017	IDP/Sherman Fairchild Research Innovation Challenge Award, Robert H. Lurie Comprehensive
	Cancer Center Validating individual differences in cytotoxicity to improve personalized chemotherapy treatment regimens
	Co-PI (\$37,500) with Dr. Paul Burridge (Northwestern University)
Past: 2013 - 2014	American Cancer Society, Institutional Research Grant [93-037-18] Elucidating the genetic causes of variation in chemotherapy-based toxicity PI (\$30,000)
2013 - 2014	Chemistry of Life Processes, Chairman's Innovation Award Using perturbations of heavy metal homeostasis to treat nematode-borne neglected tropical diseases Co-PI (\$28,000) with Dr. Thomas O'Halloran (Northwestern)
2016	Data Scientist Initiative, Northwestern University A novel statistical model to predict the removal of mobile genetic elements PI (\$20,000)

2014 - 2016 Chicago Biomedical Consortium, Catalyst Grant
Uncovering "missing heritability" in an experimentally tractable model organism
Co-PI (\$120,000) with Dr. Ilya Ruvinsky (University of Chicago)

<u>Publications undergraduate co-authors in italics, corresponding authors underlined:</u> h-index=12 (all and since 2010), i10-index=16 (all and since 2010)

- Cook DE, Zdraljevic S, Tanny RE, Seo B, Riccardi DD, Noble LM, Rockman MV, Alkema MJ, Braendle C, Kammenga JE, Wang J, Kruglyak L, Felix MA, Lee J, <u>Andersen EC</u> (2016) The genetic basis of natural variation in *C. elegans* telomere length. *Genetics* July 22; [Epub ahead of print] genetics.116.191148
- Large EE, Xu W, Zhao Y, Brady SC, Long L, Butcher RA, Andersen EC, McGrath PT (2016)
 Selection on a Subunit of the NURF Chromatin Remodeler Modifies Life History Traits in a
 Domesticated Strain of Caenorhabditis elegans.
 PLoS Genetics July 28; 12(7):e1006219
- 3. Zamanian M and **Andersen EC**. (2016)

Prospects and challenges of CRISPR/Cas genome editing for the study and control of neglected vector-borne nematode diseases.

FEBS Jun 14; [Epub ahead of print]

4. Farhadifar R, Ponciano JM, **Andersen EC**, Needleman DJ, <u>Baer CF</u>. (2016)

Mutation Is a Sufficient and Robust Predictor of Genetic Variation for Mitotic Spindle Traits in *Caenorhabditis elegans*.

Genetics Jun 22 [Epub ahead of print] genetics.115.185736

5. Sterken MG, Snoek LB, <u>Kammenga JE</u>, <u>Andersen EC</u>. (2015) The laboratory domestication of *C. elegans*.

Trends in Genetics Mar; 31(5) 224-231

6. Thompson OA, Snoek LB, Nijveen H, Sterken MG, Volkers RJM, Brenchley R, van't Hof A, Bevers RPJ, Cossins AR, Yanai I, Hajnal A, Schmid T, Perkins JD, Spencer D, Kruglyak L, **Andersen EC**, Moerman DG, Hillier LW, Kammenga JE, <u>Waterston RH</u>. (2015)
Remarkably divergent regions punctuate the genome assembly of the *Caenorhabditis elegans* Hawaiian strain CB4856.
Genetics May 19; 200(3) 975-989

- 7. Andersen EC, Shimko TC, Crissman JR, Ghosh R, Gerke JP, Seidel HS, Kruglyak L. (2015)

 A powerful new quantitative genetics platform combining Caenorhabditis elegans high-throughput fitness assays with a large collection of recombinant strains.

 G3 Mar 13; 5(5) 911-920
- 8. Farhadifar R, Baer CF, Valfort AC, **Andersen EC**, Muller-Reichert T, Delattre M, <u>Needleman DJ</u>. (2015) Scaling, Selection, and Evolutionary Dynamics of the Mitotic Spindle. *Current Biology* Mar 16; 25(6) 732-740
- 9. Balla K, **Andersen EC**, Kruglyak L, <u>Troemel E</u>. (2015)

A wild *C. elegans* strain has enhanced epithelial immunity to a natural microsporidian parasite. *PLoS Pathogens* Feb 13; 11(2)e1004583

10. Etienne V*, **Andersen EC***, Ponciano JM, Blanton D, Cadavid A, Joyner-Matos J, Matsuba C, Tabman B, Baer CF. (2015)

The Red Death Meets the Abdominal Bristle: Polygenic Mutation for Susceptibility to a Bacterial Pathogen in *Caenorhabditis elegans*.

Evolution Feb; 69(2) 508-519 *equal contribution

11. Shimko TC, Andersen EC. (2014)

COPASutils: an R package for reading, processing, and visualizing data from COPAS large-particle flow cytometers.

PLoS One Oct 20; 9(10):e111090

12. **Andersen EC**, Bloom JS, Gerke JP, Kruglyak L. (2014)

The neuropeptide receptor *npr-1* is a major determinant of *Caenorhabditis elegans* growth and physiology.

PLoS Genetics Feb; 10(2):e1004156

 Felix MA, Jovelin R, Ferrari C, Han S, Cho YR, Andersen EC, Cutter AD, <u>Braendle C</u>. (2013) Species richness, distribution and genetic diversity of *Caenorhabditis* nematodes in a remote tropical rainforest.

BMC Evolutionary Biology 13(1), 10

14. Ghosh R, Andersen EC, Shapiro JA, Gerke JP, Kruglyak L. (2012)

Natural variation in a chloride channel subunit confers avermectin resistance in *C. elegans. Science* 335(6068): 574-578.

- 15. **Andersen EC***, Gerke JP*, Shapiro JA*, Crissman JR, Ghosh R, Bloom JS, Felix MA, <u>Kruglyak L</u>. (2012) Chromosome-scale selective sweeps shape *Caenorhabditis elegans* genomic diversity *Nature Genetics* 44(3): 285-290. *equal contribution
- 16. **Andersen EC**. (2011) PCR-directed *in vivo* plasmid construction using homologous recombination in baker's yeast.

Molecular Methods for Evolutionary Genetics, 772; 409-421. *Invited book chapter

17. Raj A, Rifkin SA, **Andersen EC**, <u>van Oudenaarden A</u>. (2010)

Variability in gene expression underlies incomplete penetrance.

Nature 463(7283): 913-918.

18. Bessler JB, **Andersen EC**, <u>Villeneuve AB</u>. (2010)

Differential localization and independent acquisition of the H3K9me2 and H3K9me3 chromatin modifications in the *Caenorhabditis elegans* adult germ line.

PLoS Genetics 6(1): e1000830.

19. Reddy KC*, **Andersen EC***, <u>Kruglyak L</u>, and <u>Kim DH</u>. (2009)

A polymorphism in *npr-1* is a behavioral determinant of pathogen susceptibility in *C. elegans*. *Science* 323(5912): 382-384. *equal contribution

20. Andersen EC, Saffer AM, and Horvitz HR. (2008)

Multiple levels of redundant processes inhibit *Caenorhabditis elegans* vulval cell fates. *Genetics* 179(4): 2001-2012.

21. **Andersen EC** and Horvitz HR. (2007)

Two *C. elegans* histone methyltransferases repress *lin-3* EGF transcription to inhibit vulval development.

Development 134(16): 2991-2999.

22. Reddien PW, **Andersen EC**, *Huang M*, and Horvitz HR. (2007)

DPL-1 DP, LIN-35 Rb, and EFL-1 E2F act with the MCD-1 Zinc-finger protein to promote programmed cell death in *C. elegans*.

Genetics 175(4): 1719-1733.

23. Andersen EC, Lu X, and Horvitz HR. (2006)

C. elegans ISWI and NURF301 antagonize an Rb-like pathway in the determination of multiple cell fates.

Development 133(14): 2695-2704.

24. Furlong EE, *Andersen EC*, Null B, White KP, and <u>Scott MP</u>. (2001)

Patterns of gene expression during *Drosophila* mesoderm development.

Science 293(5535): 1629-1633.

Professional talks:

Departmental seminars and invited conference presentations:

2016 Molecular and Cellular Biology of Helminth Parasites X, Hydra, Greece

Computational Research Day, Northwestern University, Evanston, IL

Evolutionary Biology of Caenorhabditis and other nematodes, CSHL, Cold Spring Harbor, NY

Department of Genetics, University of Utah, Salt Lake City, UT

Department of Biology, University of Iowa, Iowa City, IA

Department of Biomedical Sciences, Iowa State University, Ames, IA

Anthelmintics: Discovery to Resistance II, San Diego, CA

2015 Program in Systems Biology, University of Massachusetts Medical School, Worcester, MA

Evolution seminar series, University of Wisconsin, Madison, WI

Biotechnology Training Program, Northwestern University, Evanston, IL

Department of Biology, Johns Hopkins University, Baltimore, MD

Department of Biology, University of Maryland, College Park, MD

Department of Pharmacology, Feinberg School of Medicine, Northwestern University, Chicago, IL

Midwest Neglected Infectious Disease Meeting, Notre Dame University, South Bend, IN

Quantitative genetics workshop, 20th International *C. elegans* meeting, UCLA, Los Angeles, CA Michigan Area Worm Meeting, van Andel Institute, Grand Rapids, MI

2014 Northwestern Institute on Complex systems, Northwestern University, Evanston, IL

Fondation de Treilles: Revisiting the roles of phenotypic plasticity in evolution, Provence, France Biology Department, Marquette University, Milwaukee, WI

Pharmacogenomics group, University of Chicago, Chicago, IL

2013 Quantitative genetics workshop, 19th International C. elegans meeting, UCLA, Los Angeles, CA

2012 Molecular Bioscience Department, Northwestern University, Evanston, IL

Program in Systems Biology, University of Massachusetts Medical School, Worcester, MA

Biology Department, Dartmouth University, Hanover, NH

Human Genetics Department and Life Sciences Institute, University of Michigan, Ann Arbor, MI

Genetics Department, University of Georgia, Athens, GA

Biology Department, Case Western Reserve University, Cleveland, OH

Biology Department and BioDesign Institute, Arizona State University, Phoenix, AZ

Center for Computational and Integrated Biology, Rutgers University, Camden, NJ

- 2012 Biology Department, University of Florida, Gainesville, FL Evolution workshop, 18th International C. elegans meeting, UCLA, Los Angeles, CA 2011 Laboratory of Toxicology, NIEHS, Research Triangle Park, NC 2010 Institute for Evolutionary Biology Department, University of Edinburgh, Edinburgh, UK Featured talk at C. elegans Aging, Stress, and Pathogenesis meeting, Madison, WI 2008 2000 Undergraduate research symposium, Stanford University, Stanford, CA **Contributed presentations:** (*selected for oral presentation) *Midwest Neglected Infectious Disease meeting, U. of Notre Dame, Notre Dame, IN 2015 2015 *Bridging the divide, 20th International C. elegans meeting, UCLA, Los Angeles, CA 2013 *19th International C. elegans meeting, UCLA, Los Angeles, CA Society for Molecular Biology of Evolution, Chicago, IL 2012 *Evolutionary biology of Caenorhabditis and other nematodes meeting, CSHL, NY *18th International C. elegans meeting, UCLA, Los Angeles, CA 2011 18th International *C. elegans* meeting (poster), UCLA, Los Angeles, CA 2010 *Evolutionary biology of Caenorhabditis and other nematodes meeting, Hinxton, UK Evolutionary biology of Caenorhabditis and other nematodes meeting (poster), Hinxton, UK Cold Spring Harbor Labs Automated Imaging and High-throughput Phenotyping, CSHL, NY *17th International C. elegans meeting, UCLA, Los Angeles, CA 2009 Gordon Research Conference on Quantitative Genetics and Genomics, Galveston, TX 2007 Department of Biology Annual Retreat, MIT, ** poster prize winner C. elegans Evolution and Development meeting. Univ. of Wisconsin, Madison, WI 2006 *15th International C. elegans meeting, UCLA, Los Angeles, CA 2005
- Peer review and related activities:

Editorial board:

2004 2003

Trends in Genetics

Reviewing activity: Academic Journals

Biological Journal of the Linnean Society, BMC Evolutionary Biology, BMC Genetics, BMC Genomics, Cell, Development, EMBO, Genes and Development, G3, Genetics, Genome Research, Heredity, Nature, Nature Scientific Reports, Nature Genetics, PLoS Genetics, PLoS ONE, PNAS, Science, Trends in Genetics

Reviewing activity: Grants and fellowships

2014 Ad hoc reviewer for Human Frontiers Science Program
2014 Ad hoc reviewer for National Science Foundation

Chromatin Structure and Function meeting, Nassau, Bahamas

*14th International *C. elegans* meeting, UCLA, Los Angeles, CA
 East Coast *C. elegans* meeting, University of New Hampshire, Durham, NH

East Coast C. elegans meeting, Yale, New Haven, CT

Professional affiliations and service:

Membership in Professional Societies:

Genetics Society of America, member Society of Molecular Biology and Evolution, member

Professional service:

2015 Organizing committee for the 20th International *C. elegans* meeting

Poster judge, 20th International C. elegans meeting - Evolution and Genomics section

2015 Genetics Soc. of America Mentor Lunch, *Postdoc search*, 20th International *C. elegans* meeting

2014 Panelist, NUIN Post-doc Association, *Interviews and Start-up packages*

Poster judge, Northwestern Undergraduate Research Symposium

Panelist, Pathways to the Professoriate, How to prepare for a job interview?

2013 Poster judge, Northwestern Undergraduate Research Symposium

Panelist, Bioscientist Freshman seminar; How to find a research lab?

Poster judge, 19th International C. elegans meeting - Evolution and Genomics section

Teaching and advising:

Undergraduate teaching:

2016 Biological Sciences 393: *Genetic Analysis* (spring, 17 students)

2015 Guest Lecture: University of Wisconsin-Madison Biology 675 - Evolution seminar

(fall, 8 students)

Biological Sciences 393: Genetic Analysis (spring, 12 students) - new course

Biological Sciences 398: *Tutorial in Biology* (spring, Lautaro Cilenti)
Biological Sciences 399: *Independent Research* (spring, Kreena Patel)
Biological Sciences 399: *Independent Research* (spring, Hillary Tsang)
Biological Sciences 399: *Independent Research* (winter, Kreena Patel)
Biological Sciences 399: *Independent Research* (winter, Hillary Tsang)
Biological Sciences 398: *Tutorial in Biology* (fall, Mazeed Aro-Lambo)

Biological Sciences 398: *Tutorial in Biology* (fall, Kreena Patel) Biological Sciences 398: *Tutorial in Biology* (fall, Hillary Tsang)

Graduate teaching:

2014

2016 Interdisciplinary Biological Sciences: *Graduate Computational Biology Bootcamp*

(fall, 19 students) - www.GitHub.com/AndersenLab/IBiS-Bootcamp

2015 Interdisciplinary Biological Sciences 402: Eukaryotic Molecular Biology

(fall, quest lecture, 22 students)

Interdisciplinary Biological Sciences: Graduate Computational Biology Bootcamp

(fall, 22 students) - <u>www.GitHub.com/AndersenLab/IBiS-Bootcamp</u> Interdisciplinary Biological Sciences 423: *Ethics of peer review*

(spring, quest lecture, 41 students)

2014 Interdisciplinary Biological Sciences 402: Eukaryotic Molecular Biology

(fall, quest lecture, 16 students)

Interdisciplinary Biological Sciences: *Graduate Computational Biology Bootcamp* (fall, 16 students) - www.GitHub.com/AndersenLab/IBiS-Bootcamp - new course

Interdisciplinary Biological Sciences 423: Ethics of peer review

(spring, guest lecture, 42 students)

2013 Interdisciplinary Biological Sciences 402: Eukaryotic Molecular Biology

(fall, guest lecture, 24 students)

K-12 advising:

Caitlin Westerfield, Evanston Township High School (2015-2016 academic year) Matteo di Bernardo, Evanston Township High School (2015-2016 academic year) Lauren Mann, Oak Park and River Forest High School (2014-2015 academic year) Jacob Cruger, Latin School of Chicago (summers 2013, 2014) Gina Liu, Illinois Math and Science Academy (2013-2014 academic year)

Undergraduate advising:

- Grace Park (2016 , Class of 2019), Biological Sciences Major 2016 Posner Fellowship recipient
- Austin Chambers (2016 , Class of 2018), Computer Science Major
- Joshua Roberts (2015-2016, Class of 2016), Computer Science Major
- Mattlyn Cordova (2016 , Class of 2019), Biological Sciences Major 2016 Program in Biological Sciences Summer Grant recipient
- Selina Deiparine (2016 , Class of 2019), Biological Sciences Major 2016 Summer URG recipient
- Sarah Bier (2016 , Class of 2019), Biological Sciences Major 2016 Summer URG recipient
- Nicholas Irons (2015, Class of 2018), Biological Sciences Major 2015 Summer URG recipient
- Annika Zhang (2014-2015, Class of 2018), Biological Sciences Major 2015 Weinberg College Summer Grant recipient
- Tyler Shimko (summers 2012, 2013, 2014, 2015, University of Utah Class of 2015), Biology Major
 Barry Goldwater Scholarship, Myriad Academic Scholarship, Thomas Verender Hanks Scholarship
 National Science Foundation Graduate Research Fellowship Recipient
 Department of Energy Computational Science Graduate Fellowship Honorable Mention
- Mazeed Aro-Lambo (2014, Class of 2017), Biological Sciences Major 2014 NU Bioscientist Summer Grant recipient
- Stevie Hippleheuser (2014 , Class of 2017), Biological Sciences Major 2016 Program in Biological Sciences Summer Grant recipient, 2015 Summer URG recipient 2014 Weinberg College Summer Grant recipient
- Camille Calvin (2014, Class of 2017), Mechanical Engineering Major 2014 Posner fellowship recipient
- Hillary Tsang (2013 2016, Class of 2016), Biological Sciences Major
 - 2015 Weinberg Summer Grant recipient, 2014 Summer URG recipient, 2014 Academic URG recipient
- Lautaro Clienti (2013 2015, Class of 2017), Mechanical Engineering Major 2014 Academic URG recipient
- Kreena Patel (2013 2015, Class of 2015), Biological Sciences and Psychology Double Major 2014 Academic URG recipient, 2015 Emmanuel Margoliash Prize for Basic Research, Winfred Hill Award, James Alton James Scholar, Ellen Taus Scholarship, J.G. Nolan Scholarship
- Zifan Xiang (2014 2015, Class of 2015), Biomedical Engineering Major
- Stephen Chan (2013 2014, Class of 2014), Computer Science Major 2013 Summer URG recipient

Masters student advising:

Lucie Bastin-Heline (2014), Master's exchange student, Ecole Normale Superior, Paris, France Kristen Larrichia (advisor, Nyree Zerega – Program in Plant Biology and Conservation), 2014 - 2015 Nick Timkovich (advisor, Luis Amaral) 2015

Graduate student and post-doctoral advising:

Graduate PhD candidates:

Kathryn Evans (2016 -), Ph.D. student, Interdisciplinary Biological Sciences Program
Shannon Brady (2015 -), Ph.D. student, Interdisciplinary Biological Sciences Program
Funded by the Biotechnology NIH Training grant (2015-2017)
National Science Foundation Graduate Research Fellowship Program (Honorable Mention)
Recipient of travel award from Union Biometrica (2016)

Daniel Cook (2014 -), Ph.D. student, Driskill Graduate Program

Funded by a National Science Foundation Pre-doctoral Fellowship (2015-2018)

Stefan Zdraljvic (2014 -), Ph.D. student, Interdisciplinary Biological Sciences Program

Funded by the Cell and Molecular Basis of Disease NIH Training grant (2015-2017)

Recipient of travel award from Northwestern Center for Genetic Medicine (2016)

Additional graduate rotation students:

Evan Buechel (Spring, 2016), IBiS

Nic Daffern (Spring, 2016), IBiS

Bryan Eder (Winter, 2016), IBiS

Kathryn Evans (Fall, 2015), IBiS

Ryan Abdella (Winter, 2015), IBiS

Erin Baker (Fall, 2014), IBiS

Alex Karge (Spring, 2014), IBiS

Saiorse McSharry (Winter, 2014), IBiS

Amy Nilles (Fall, 2013), IBiS

Ian Wolff (Summer, 2013), IBiS

Ph.D. Thesis committee memberships:

Adam Hockenberry (advisors, Luis Amaral and Michael Jewitt) 2015 -

Rachel Bakker (advisor, Rich Carthew) 2015 -

Joseph Muldoon (advisors, Neda Bagheri and Josh Leonard) 2015 -

Sarah Stainbrook (advisor, Keith Tyo) 2015 -

Timothy Toby (advisor, Neil Kelleher) 2015 -

Rose Njoroge (advisor, Sarki Abdulkadir - Driskill Graduate Prog., Feinberg School of Medicine), 2014 -

Keila Torre-Santiago (advisor, Sadie Wignall) 2014 - 2016

Aaron Sue (advisor, Thomas O'Halloran), 2014 -

Arianne Rodriguez (advisor, Yun Wang), 2014 (Transferred to DGP)

Ritika Giri (advisor, Richard Carthew), 2013 -

Lilien Voong (advisor, Alec Wang), 2013 -

Post-doctoral:

Mostafa Zamanian (2014 -), Ph.D. from Iowa State University, advisor Dr. Timothy Day

Recipient of NIH/NIAID K22 Career Transition Award (2016)

Recipient of Northwestern Post-doctoral Travel Award (2016)

Recipient of Anthelmintics Travel Award (2015)

Funded by the Bill and Melinda Gates Foundation (2014)

Bryn Gaertner (2014), Ph.D. from University of Oregon, advisor Dr. Patrick Phillips

Departmental, college, and university service:

2016 Faculty search committee for evolutionary genetics

Departmental Strategic Planning committee

2015 Faculty search committee for genomics

IBiS Retreat committee, Co-chair

Qualifying examination committee (Rachel Bakker, Carthew lab)

Qualifying examination committee, Chair (Joseph Muldoon, Bagheri and Leonard labs)

Qualifying examination committee (Sarah Stainbrook, Tyo lab)

Qualifying examination committee (Timothy Toby, Kelleher lab)

2014 Departmental Program Review committee

IBiS Graduate Admissions committee

2014 IBiS Retreat committee, Co-chair

Qualifying examination committee (Aaron Sue, Morimoto lab)
Qualifying examination committee (Arianne Rodriguez, Wang lab)
Qualifying examination committee (Rose Njoroge, Abdulkadir lab)
Masters thesis examination committee (Kristen Larrichia, Zerega lab)

2013 IBiS Graduate Admissions committee

Qualifying examination committee (Lilien Voong, Wang lab) Qualifying examination committee (Ritika Giri, Carthew lab)

Community work:

2016 - 2017	American Youth Soccer Organization (AYSO) U8 Head Coach, TBD
2014 -	Gave lectures on <i>C. elegans</i> genetics to the Latin School of Chicago advanced biology class
2015 -	Hosted 80 5th grade students from Lincolnwood Elementary School for a day of science
2015 - 2016	Mentored Caitlin Westerfield from Evanston Township High School on pathway evolution
2015 - 2016	Mentored Ainsley Tran from Oak Park and River Forest High School on iron sensitivity
2015 - 2016	American Youth Soccer Organization (AYSO) U8 Head Coach, Golden Ninjas
2015 - 2016	Mentored Matteo di Bernardo from Evanston Township High School on anthelmintic sensitivity,
	Recipient of Columbia University Scientific Scholars Fellowship
2014	Mentored Lauren Mann from Oak Park and River Forest High School on iodine sensitivity
2014	Co-organized with Jacob Cruger nematode collections with the Punahou School, Hawaii
2013, 2014	Mentored Jacob Cruger from Latin School of Chicago
2009	Organized nematode collections with Vassalboro Community School, Maine