Erik C. Andersen

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DATE UPDATED: September 15, 2022

MAJOR PROFESSIONAL INTERESTS

Evolutionary genetics; quantitative genetics; molecular genetics; developmental genetics

EDUCATION

2008-2013 Post-doctoral fellowship
Princeton University
Advisor: Dr. Leonid Kruglyak

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

AWARDS, HONORS, AND FELLOWSHIPS

2022 - 2024 Fulbright Global Scholar (Chile, New Zealand, Taiwan)
2022 - Editorial Board Member of *Journal of Nematology*
2021 Distinguished Teaching Award, Weinberg College of Arts and Sciences
2020 Editorial Board Member of *Gene*
2019 - 2022 Human Frontiers Science Program Award Recipient
2018 - 2023 National Science Foundation CAREER Award Recipient
2017 - 2020 Editor Board Member of *BMC Genomics*
2015 - 2019 American Cancer Society Research Scholar
2015 - 2017 March of Dimes Basil O'Connor Research Scholar
2015 - Editorial Board Member of *Trends in Genetics*
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, training grant T32-CA009528
2009 - 2011 Ruth L. Kirschstein National Research Service Award Recipient
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

EMPLOYMENT

2022 - Professor of Molecular Biosciences, Northwestern University
2022 - Professor of Cell and Developmental Biology, Feinberg School of Medicine, Northwestern University
2020 - 2022 Associate Professor of Cell and Developmental Biology, Feinberg School of Medicine, Northwestern University
2019 - 2022 Associate Professor of Molecular Biosciences, Northwestern University
2013 - Preceptor for the Interdisciplinary Biological Sciences Graduate Program (IBiS)
Resident member of the Chemistry of Life Processes Institute (CLP)
Full Member of the Robert H. Lurie Comprehensive Cancer Center
Member of Northwestern Institute on Complex Systems (NICO)
2013 - 2019 Assistant Professor of Molecular Biosciences, Northwestern University
2008 - 2013 Post-doctoral fellow, Princeton University, Princeton, NJ, Advisor: Dr. Leonid Kruglyak
2000 - 2008 Graduate student, Biology Department at Massachusetts Institute of Technology (MIT), Cambridge, MA, Advisor: Dr. H. Robert Horvitz

RESEARCH SUPPORT

PRESENT

2022 - 2025 National Science Foundation, Capacity: Biological Collections (2224885)
Total: $1,353,068 ($845,667 direct, $507,401 indirect)
Enhancement of the Caenorhabditis Natural Diversity Resource
co-PI: Andersen, co-PI: Tanny

2022 - 2025 National Science Foundation, Research Experiences for Undergraduates (2150134)
No funding to REU leadership
REU Site: Quantitative Biology REU (QBREU) at Northwestern University
Lead PI: Braun (Northwestern), co-PI: Andersen

2022 - 2024 Les Turner ALS Center Pilot Grant
Total: $160,000 ($160,000 direct and indirect)
Creation of C. elegans ALS models incorporating natural variation
PI: Andersen

2022 - 2024 National Institutes of Health (R21 OD030067) - Office of the Director
Total: $150,147 ($105,782 direct, $44,365 indirect)
Genetic and genomic tools for C. briggsae research
Lead PI: Chamberlin (OSU), co-PI: Andersen

2020 - 2025 National Institutes of Health (R01 AI153088) - NIAID
Total: $1,799,626 ($1,142,050 direct, $657,576 indirect)
Discovery of novel benzimidazole resistance mechanisms
Lead PI: Andersen, co-PIs: Fraser (UCSF), Gilleard (U Calgary), Kaplan (U Georgia)

2019 - 2022 National Science Foundation, Collections in Support of Bio. Res. - Living Collections (1930382)
Total: $708,075 ($469,694 direct, $238,381 indirect)
Enhancement of the Caenorhabditis Natural Diversity Resource
co-PI: Andersen, co-PI: Tanny

2019 - 2023 Human Frontiers Science Program Research Grant (RGP0001/2019)
Total: $351,000 ($319,091 direct, $31,909 indirect)
The repeatability of the genetic mechanisms underlying behavioral evolution
Lead PI: Andersen, co-PIs: Brown (Imperial, MRC), Hodgins (Monash)

2018 - 2024 National Institutes of Health (R01 ES029930) - NIEHS
Total: $1,906,121 ($1,287,165 direct, $618,956 indirect)
Discovery of conserved molecular mechanisms underlying population-wide variation in toxin responses
Lead PI: Andersen, co-PIs: Baugh (Duke), Rockman (NYU)

2018 - 2023 National Science Foundation CAREER Award (1751035)
Total: $530,812 ($365,678 direct, $165,134 indirect)
Discovery of the molecular mechanisms underlying microevolution of phenotypic plasticity in a developmental trait
PI: Andersen

2018 - 2023 National Science Foundation (1764421) and Simons Foundation (597491)
Research Center for Mathematics of Complex Biological Systems
Total: $537,065 estimated ($434,145 direct, $102,920 indirect)
Understanding organismal growth and development through quantitative approaches
Lead PIs: Carthew and Kath, co-PIs Andersen, Mangan, and Wang

PAST

2018 - 2022 National Institutes of Health (U2C OD026506) - NIEHS
Genetics and quantum chemistry as tools for unknown metabolite identification
Lead PI: Edison (UGA), co-PIs Andersen, Fernandez (Georgia Tech),
McIntyre (U of Florida), Merz (Missouri State), Schroeder (Cornell)

2018 - 2022 National Institutes of Health (R01 GM127433) - NIGMS
100k spontaneous mutations: the foundation for an evolutionary systems biology of C. elegans
PIs: Baer (Univ. of Florida) and Katju (Texas A+M) with sub to Andersen

2017 - 2021 National Institutes of Health (R01 DK115690) - NIDDK
Large scale nutrigenetics and genomics in a tractable metazoan model
Multi-investigator Grant: Andersen, Walhout (UMass Medical School),
Schroeder (Cornell)

2021 Weinberg College of Arts and Sciences Baker Faculty Research Program Award
Genome-wide association studies of drug and toxin responses
PI: Andersen

2020 NUSeq Pilot Project Program (sponsored by Illumina)
Genome sequencing of Heterakis gallinarum
PI: Andersen

2015 - 2020 American Cancer Society Research Scholar Grant (127313-RSG-15-135-01-DDC)
Elucidating the genetic causes of variation in chemotherapy-based toxicity
PI: Andersen

2017 - 2020 National Institutes of Heath (R21 AG053638) - NIA
High-throughput multi-modal analysis of natural variation in C. elegans healthspan
Multi-investigator Grant: Fang-Yen (Univ. of Pennsylvania) and Andersen

2016 - 2019 National Institutes of Heath (R21 AI121836) - NIAID
Discovery and validation of avermectin resistance loci in free-living and parasitic nematodes
PI: Andersen with subcontract Kimber (Iowa State University)

2014 - 2019 Pew Charitable Trusts, Scholars Program in the Biomedical Sciences
Elucidating the genetics of anthelmintic resistance in nematode-borne neglected tropical diseases
PI: Andersen

2014 - 2019 National Institutes of Health (R01 GM107227) - NIGMS
Direct determination of the distribution of fitness effects of spontaneous mutations
PI: Dr. Charlie Baer (University of Florida) with subcontract to Andersen

2018 Google, Inc.
Google Cloud Platform Research credit award
Optimization of computational pipelines to support the C. elegans *Natural Diversity Resource*
PI: Andersen

2016 - 2017 Amazon Web Services
Optimization of computational pipelines to support the C. elegans *Natural Diversity Resource*
PI: Andersen

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
Multi-investigator Grant with Andersen and Burridge (Northwestern University)

2015 - 2017 March of Dimes Basil O'Connor Starter Research Grant
Identification of hookworm anthelmintic resistance genes to ameliorate maternal and infant anemia
PI: Andersen

2016 Weinberg College Research Innovation Grant, Northwestern University
The Caenorhabditis elegans *Natural Diversity Resource - a powerful tool to facilitate biomedical discovery*
PI: Andersen

2014 - 2016 Chicago Biomedical Consortium, Catalyst Grant
Uncovering "missing heritability" in an experimentally tractable model organism
Multi-investigator Grant with Andersen and Ruvinsky (University of Chicago)

2016 Data Scientist Initiative, Northwestern University
A novel statistical model to predict the removal of mobile genetic elements
Multi-investigator Grant with Andersen and Wang (Northwestern University)

2013 - 2014 American Cancer Society, Institutional Research Grant [93-037-18]
Elucidating the genetic causes of variation in chemotherapy-based toxicity
PI: Andersen

2013 - 2014 Chemistry of Life Processes, Chairman's Innovation Award
Using perturbations of heavy metal homeostasis to treat nematode-borne neglected tropical diseases
Multi-investigator Grant: Andersen and O'Halloran (Northwestern University)

PUBLICATIONS

h-index=34, i10-index=55, link to Google Scholar page (here)

Andersen lab graduate students denoted in *italics* and post-docs denoted in underline.

PREPRINTS:

79. Gibson S, Ness-Cohn E, and Andersen EC (2022)
Benzimidazoles cause lethality by inhibiting the function of *Caenorhabditis elegans* neuronal beta-tubulin
bioRxiv, Posted July 23, 2022: DOI: https://doi.org/10.1101/2022.07.21.500991

78. Zhang G, *Wang Y*, and Andersen EC (2022)
Natural variation in *C. elegans* short tandem repeats
bioRxiv, Posted June 26, 2022, DOI: https://doi.org/10.1101/2022.06.25.497600

77. Shaver AO, Garcia BM, Gouveia GJ, Morse AM, Liu Z, Asef CK, Borges RM, Leach FE, Andersen EC, Amster IJ, Fernadez FM, Edison AS, and McIntyre LM (2022)
An anchored experimental design and meta-analysis approach to address batch effects in large-scale metabolomics
bioRxiv, Posted Mar. 25, 2022, DOI: https://doi.org/10.1101/2022.03.25.485859

76. Lesack K, Mariene GM, Andersen EC, and Wasmuth JD (2022)
Accurate detection of structural variation is hard
bioRxiv, Posted Mar. 25, 2022, DOI: https://doi.org/10.1101/2022.03.11.483485

75. Fouad AD, Churgin MA, Hayden J, Xu J, Park JI, Liu A, Teng C, Sun H, Parrado M, Bowlin P, La Torre MD, Crombie TA, Sedore CA, Coleman-Hulbert AL, Johnson E, Phillips P, Andersen EC, and Fang-Yen C (2021)
High-throughput imaging of *Caenorhabditis elegans* aging using collective activity monitoring
bioRxiv, Posted Oct. 19, 2021, DOI: https://doi.org/10.1101/2021.10.18.464905

PEER-REVIEWED:

74. Widmayer SJ, Crombie TA, *Nyaanga JN*, *Evans KS*, and Andersen EC (2022)
C. elegans toxicant responses vary among genetically diverse individuals
Toxicology, 2022 Aug 20; 479:153292. DOI: https://doi.org/10.1016/j.tox.2022.153292

73. *Nyaanga J* and Andersen EC (2022)
Linkage mapping reveals loci that underlie differences in *C. elegans* growth
G3, 2022 Aug 12; jkac207. DOI: https://doi.org/10.1093/g3journal/jkac207

72. Wit J, Workentine ML, Redman E, Laing R, Stevens L, Cotton JA, Chaudry U, Ali Q, Andersen EC, Yeaman S, Wasmuth JD, and Gilleard JS (2022)
Genomic signatures of selection associated with benzimidazole drug treatments in *Haemonchus contortus* field populations
International Journal for Parasitology: Drugs and Drug Resistance, accepted July 21, 2022
bioRxiv, Posted Apr. 5, 2022, DOI: https://doi.org/10.1101/2022.04.05.487096

71. Webster AK, Chitrakar R, Powell M, Chen J, Fisher K, Tanny RE, Stevens L, *Evans KS*, Antoshechkin I, Andersen EC, and Baugh LR
Using population selection and sequencing to characterize natural variation of starvation resistance in *Caenorhabditis elegans*
eLife, 2022 Jun 21; 11:e80204. DOI: https://doi.org/10.7554/eLife.80204

70. Zhang G, Roberto NM, Lee D, Hahnel SR, and Andersen EC (2022)
The impact of species-wide gene expression variation on *Caenorhabditis elegans* complex traits
Nature Communications, 2022 Jun 16; 13(1):3462. DOI: https://doi.org/10.1038/s41467-022-31208-4

69. Pallotto LM, *Dilks CM*, Park YJ, Smit RB, Lu B, Gopalakrishnan C, Gilleard JS, Andersen EC, and Mains PE (2022)
Interactions of *Caenorhabditis elegans* β-tubulins with the microtubule inhibitor and anthelmintic drug albendazole
Genetics, 2022 Jul 30; 221(4):iyac093. DOI: https://doi.org/10.1093/genetics/iyac093

68. Fox BW, Ponomarova O, Lee YU, Zhang G, Giese GE, Walker M, Roberto NM, Na H, Reis-Rodriguez P, Curtis BJ, Kolodziej AR, Crombie TA, *Zdraljevic S*, Yilmaz LS, Andersen EC, Schroeder FC, and Walhout AJM (2022)
C. elegans as a model for inter-individual variation in metabolism
Nature, 2022 Jul; 607(7919):571-577. DOI: https://doi.org/10.1038/s41586-022-04951-3

67. Crombie TA, Chikuturudzi C, *Cook DE*, and Andersen EC (2022)
An automated approach to quantify chemotaxis index in *C. elegans*
microPublication Biology, 2022 May 26; 2022:10.17912/micropub.biology.000567.
DOI: https://doi.org/10.17912/micropub.biology.000567

66. Widmayer SJ, *Evans KS*, *Zdraljevic S*, and Andersen EC (2021)
Evaluating the power and limitations of genome-wide association mapping in *C. elegans*
G3, 2022 May 10; jkac114. DOI: 10.1093/g3journal/jkac114

65. *Nyaanga J*, Goss C, Zhang G, Ahmed HN, Andesen EJ, Miller IR, Rozenich JK, Swarthout IL, Vaughn JA, Mangan NM, Shirman S, and Andersen EC (2022)
Changes in body shape implicate cuticle stretch in *C. elegans* growth control
Cells and Development, 2022 Apr 19;170:203780. DOI: 10.1016/j.cdev.2022.203780

64. Stevens L, *Moya ND*, Tanny RE, Gibson SB, Tracey A, Na H, Han Y, Chitrakar R, Dekker J, Walhout AJM, Baugh LR, and Andersen EC (2021)
Chromosome-level reference genomes for two strains of *Caenorhabditis briggsae*: an improved platform for comparative genomics
Genome Biology and Evolution, 2022 Apr 10;14(4):evac042. DOI: 10.1093/gbe/evac042

63. Crombie TA, Tanny RE, Buchanan CM, Roberto NM, and Andersen EC (2022)
A highly scalable approach to perform ecological surveys of selfing *Caenorhabditis* nematodes
Journal of Visualized Experiments, 2022 Mar 1;(181). DOI: 10.3791/63486

62. Barlow I, Feriani L, Minga E, McDermott-Rouse A, O'Brien T, Liu Z, Hofbauer M, Stowers JR, Andersen EC, Ding SS, and Brown AEX (2022)
Megapixel camera arrays for high-resolution animal tracking in multiwell plates
Communications Biology, 2022 Mar 23;5(1):253. DOI: 10.1038/s42003-022-03206-1

61. Crombie TA, Battlay P, Tanny RE, *Evans KS*, Buchanan CM, *Cook DE*, *Dilks CM*, *Stinson LA*, *Zdraljevic S*, Zhang G, Roberto NM, Lee D, Ailion M, Hodgins KA, and Andersen EC (2022)
Local adaptation and spatiotemporal patterns of genetic diversity revealed by repeated sampling of *Caenorhabditis elegans* across the Hawaiian Islands
Molecular Ecology, 2022 Feb 15; DOI: 10.1111/mec.16400.

60. Andersen EC and Rockman MV (2022)
Natural genetic variation as a tool for discovery in *Caenorhabditis* nematodes
Genetics, 2022 Jan 4; 220(1):iyab156. DOI: 10.1093/genetics/iyab156.

59. Gilbert KJ, *Zdraljevic S*, *Cook DE*, Cutter AD, Andersen EC, and Baer CF (2021)
The distribution of mutational effects on fitness in *Caenorhabditis elegans* inferred from standing genetic variation
Genetics, 2022 Jan 4; 220(1):iyab166. DOI: 10.1093/genetics/iyab166.

58. *Dilks CM*, Koury EJ, Buchanan CM, and Andersen EC (2021)
Newly identified parasitic nematode beta-tubulin alleles confer resistance to benzimidazoles
International Journal for Parasitology: Drugs and Drug Resistance, 2021 Dec; 17:168-175. DOI: 10.1016/j.ijpddr.2021.09.006.

57. Di Bernardo M, Crombie TA, *Cook DE*, and Andersen EC (2021)
easyFulcrum: An R package to process and analyze ecological sampling data generated using the Fulcrum mobile application
PLoS ONE, 2021 Oct 6; 16(10):e0254293. DOI: 10.1371/journal.pone.0254293.

56. *Nyaanga J*, Crombie TA, Widmayer SJ, and Andersen EC (2021)
easyXpress: An R package to analyze and visualize high-throughput *C. elegans* microscopy data generated using CellProfiler
PLoS ONE, 2021 Aug 12; 16(8):e0252000. DOI: 10.1371/journal.pone.0252000.

55. Rajaei M, Saxena AS, Johnson LM, Snyder MC, Crombie TA, Tanny RE, Andersen EC, Joyner-Matos J, and Baer CF (2021)
Mutability of mononucleotide repeats, not oxidative stress, explains the discrepancy between laboratory-accumulated mutations and the natural allele-frequency spectrum in *C. elegans*
Genome Research, 2021 Aug 17. DOI: 10.1101/gr.275372.121.

54. *Evans KS*, van Wijk MH, Andersen EC, and Sterken MG (2021)
From QTL to gene: *C. elegans* facilitates discoveries of the genetic mechanisms underlying natural variation
Trends in Genetics, 2021 Jul 3; S0168-9525(21)00164-3.

53. Gibson SB, Harper CS, Lackner LL, and Andersen EC (2021)
The *Caenorhabditis elegans* and *Haemonchus contortus* beta-tubulin genes cannot substitute for loss of the *Saccharomyces cerevisiae* beta-tubulin gene
microPublication, 2021 Jun 20; 2021. DOI:10.17912/micropub.biology.000411.

52. Gouveia GJ, Shaver AO, Garcia BM, Morse AM, Rodriguez B, Park G, Andersen EC, Edison AS, McIntyre LM (2021)
Long-term metabolomics reference material
ACS Analytical Chemistry, 2021 Jul 6; 93(26):9193-9199.

51. Zhang G, Mostad JD, and Andersen EC (2021)
Natural variation in fertility is correlated with species-wide levels of divergence in *Caenorhabditis elegans*
G3, May 13, 2021; jkab168. DOI: 10.1093/g3journal/jkab168

50. Wit J, Hahnel SR, Rodriguez BC, and Andersen EC (2021)
Natural variation in *Caenorhabditis elegans* responses to the anthelmintic emodepside
International Journal for Parasitology: Drugs and Drug Resistance, 2021 Apr 17; 16:1-8.

49. Lee D, *Zdraljevic S*, Stevens L, *Wang Y*, Tanny RE, Crombie TA, *Cook DE*, Webster AK, Chirakar R, Baugh LR, Sterken M, Braendle C, Felix M-A, Rockman MV, and Andersen EC (2020)
Balancing selection maintains ancient genetic diversity in *C. elegans*
Nature Ecology and Evolution, 2021 Apr 5; DOI: 10.1038/s41559-021-01435-x.

48. Hartman JH, Widmayer S, Bergemann C, King DE, Morton KS, Romersi RF, Jameson LE, Leung MCK, Andersen EC, Taubert S, and Meyer JN (2021)
Xenobiotic metabolism and transport in *Caenorhabditis elegans*
Journal of Toxicology and Environmental Health, Part B: Critical Reviews, 2021 Feb 17; 24(2):51-94.

47. *Evans KS*, Wit J, Stevens L, Hahnel SR, Rodriguez B, Park G, Zamanian M, *Brady SC*, Chao E, Introcaso K, Tanny RE, and Andersen EC (2021)
Two novel loci underlie natural differences in *Caenorhabditis elegans* macrocyclic lactone responses
PLoS Pathogens, 2021 Mar 15; 17(3):e1009297.

46. Noble LM, Yuen J, Stevens L, *Moya N*, Persaud R, Moscatelli M, Jackson J, Braendle C, Andersen EC, Seidel HS, and Rockman MV (2021)
Selfing is the safest sex for *Caenorhabditis tropicalis*
eLife, 2021; 10:e62587.

45. Wit J, *Dilks CM*, and Andersen EC (2020)
Complementary Approaches to Understand Anthelmintic Resistance Using Free-Living and Parasitic Nematodes
Trends in Parasitology, Dec 12: S1471-4922(20) 30323-30328.

44. *Evans KS* and Andersen EC (2020)
The cadmium-responsive gene, *cdr-6*, does not influence *Caenorhabditis elegans* responses to exogenous zinc
MicroPublication Biology Sep. 14; 2020:10.17912/micropub.biology.000305.

43. Hahnel SR, *Dilks CM*, Heising I, Andersen EC, and Kulke D (2020)
Caenorhabditis elegans in anthelmintic research - Old model, new perspectives
International Journal for Parasitology: Drugs and Drug Resistance, 2020 Dec 05; 14: 237-248.

42. *Evans KS*, *Zdraljevic S*, Stevens L, Collins K, Tanny RE, and Andersen EC (2020)
Natural variation in the sequestosome-related gene, *sqst-5*, underlies zinc homeostasis in *Caenorhabditis elegans*
PLoS Genetics, Nov 11; 16(11):e1008986.

41. *Dilks CM*, Hahnel SR, Sheng Q, Long L, McGrath PT, and Andersen EC (2020)
Quantitative benzimidazole resistance and fitness effects of parasitic nematode beta-tubulin alleles
International Journal for Parasitology: Drugs and Drug Resistance, 2020 Aug 20; 14:28-36.

40. Shaver AO, Gouveia GJ, Kirby PS, Andersen EC, and Edison AS (2020)
Culture and assay of large-scale mixed-stage *Caenorhabditis elegans* populations
Journal of Visualized Experiments, 2020 Aug 26; e61453.

39. Na H, *Zdraljevic S*, Tanny RE, Walhout AJM, and Andersen EC (2020)
Natural variation in a glucuronosyltransferase modulates propionate sensitivity in a *C. elegans* propionic acidemia model
PLoS Genetics, Aug 28; 16(8):e1008984.

38. Archer H, Deiparine S, and Andersen EC (2020)
The nematode *Caenorhabditis elegans* nematodes and the terrestrial isopod *Porcellio scaber* likely interact opportunistically
PLoS ONE, 2020 Jun 26; 15(6):e0235000.

37. *Evans KS* and Andersen EC (2020)
The gene *scb-1* underlies variation in *Caenorhabditis elegans* chemotherapeutic responses
G3, 2020 May 8; g3.401310.2020.

36. Zhao Y, Long L, Wan J, Biliya S, *Brady SC*, Lee D, Ojemakinde A, Andersen EC, Vannberg FO, Lu H, and McGrath PT (2020)
A spontaneous complex structural variant in *rcan-1* increases exploratory behavior and laboratory fitness of *Caenorhabditis elegans*
PLoS Genetics, 2020 Feb 24; 16(2):e1008606.

35. Bayat M, Tanny RE, *Wang Y*, Herden C, Daniel J, Andersen EC, Liebau E, Waschk DEJ (2020)
Effects of telomerase overexpression in the model organism *Caenorhabditis elegans*
Gene, 2020 Mar 30; 732:144367.

34. Crombie T, *Zdraljevic S*, *Cook DE*, Tanny RE, *Brady SC*, *Wang Y*, *Evans KS*, Hahnel S, Lee D, Rodriguez BC, Zhang G, van der Zwaag J, Kiontke KC, and Andersen EC (2019)
Deep sampling of Hawaiian *Caenorhabditis elegans* reveals high genetic diversity and admixture with global populations
eLife, 2019 Dec 3; 8. pii: e50465.

33. *Brady SC* and Andersen EC (2019)
An escape-room inspired game for genetics review
Journal of Biological Education, Published online 14 Dec 2019 DOI: 10.1080/00219266.2019.1703784

32. Daul AL, Andersen EC, and Rougvie AE (2019)
The Caenorhabditis Genetics Center (CGC) and the *Caenorhabditis elegans* Natural Diversity Resource
The Biological Resources of Model Organisms, CRC Press, Taylor and Francis Group

31. Webster A, Hung A, Moore B, Guzman R, Jordan J, Kaplan R, Hibshman J, Tanny RE, *Cook DE*, Andersen EC, and Baugh LR (2019)
Population selection and sequencing of *C. elegans* wild isolates identifies a region on chromosome III affecting starvation resistance
G3, Oct. 7; 9(10):3477-3488.

30. Lee D, *Zdraljevic S*, *Cook DE*, Frezal L, Hsu JC, Sterken MG, Riksen JAG, *Wang J*, Kammenga JE, Braendle C, Felix MA, Schroeder FC, and Andersen EC (2019)
Selection and gene flow shape niche-associated copy-number variation of pheromone receptor genes
Nature Ecology and Evolution, Oct; 3(10):1455-1463.

29. Bernstein MR, *Zdraljevic S*, Andersen EC, and Rockman MV (2019)
Tightly linked antagonistic-effect loci underlie polygenic demographic variation in *C. elegans*
Evolution Letters, Sep 11; 3(5):462-473.

28. Gimond C, Vielle A, Silva Soares N, *Zdraljevic S*, McGrath PT, Andersen EC, and Braendle C (2019)
Natural variation and genetic determinants of *Caenorhabditis elegans* sperm size
Genetics, Oct; 213(2):615-632.

27. *Brady SC*, *Zdraljevic S*, Bisaga KW, Tanny RE, *Cook DE*, Lee D, *Wang Y*, Andersen EC (2019)
A novel gene underlies bleomycin-response variation in *Caenorhabditis elegans*
Genetics, Aug; 212(4):1453-1468.

26. Kim C, Kim J, Kim S, *Cook DE*, *Evans KS*, Andersen EC, and Lee J (2019)
Long-read sequencing reveals intra-species tolerance of substantial structural variations and new subtelomere formation in *C. elegans*
Genome Research, June; 29(6): 1023-1035.

25. *Zdraljevic S*, Fox BW, Strand C, Panda O, Tenjo-Castano FJ, *Brady SC*, Crombie TA, Doench JG, Schroeder FC, and Andersen EC (2019)
Natural variation in arsenic toxicity is explained by differences in branched chain amino acid catabolism
eLife, Apr 8;8: e40260.

24. Hahnel SR, *Zdraljevic S*, Rodriguez BC, Zhao Y, McGrath PT, and Andersen EC (2018)
Extreme allelic heterogeneity at a *Caenorhabditis elegans* beta-tubulin locus explains natural resistance to benzimidazoles
PLoS Pathogens, Oct 29; 14(10):e1007226.

23. *Evans KS*, *Brady SC*, Bloom JS, Tanny RE, *Cook DE*, Giuliani SE, Hippleheuser SW, Zamanian M, and Andersen EC. (2018)
Shared genomic intervals underlie natural variation in diverse toxin responses
Genetics, Dec; 210(4): 1509-1525.

22. Zamanian M, *Cook DE*, *Zdraljevic S*, *Brady SC*, Lee D, Lee J, and Andersen EC (2018)
Discovery of genomic intervals that underlie nematode responses to benzimidazoles
PLoS Neglected Tropical Diseases, Mar 5; 12(3):e0006368.

21. *Zdraljevic S* and Andersen EC (2017)
Natural diversity facilitates the discovery of conserved chemotherapeutic response mechanisms
Current Opinions in Genetics and Development, Dec;47:41-47.

20. *Zdraljevic S*, Strand C, Seidel HS, *Cook DE*, Doench JG, and Andersen EC (2017)
Natural variation in a single amino acid substitution underlies physiological responses to topoisomerase II poisons
PLoS Genetics, Jul 12; 13(7):e1006891.

19. Lee D, Yang H, Kim J, *Brady SC*, *Zdraljevic S*, Zamanian M, Kim H, Paik Y, Kruglyak L, Andersen EC, and Lee J (2017)
The genetic basis of natural variation in a phoretic behavior
Nature Communications, Aug 17; 8(1):273.

18. Laricchia KM, *Zdraljevic S*, *Cook DE*, and Andersen EC (2017)
The causes and consequences of natural variation in the distribution and abundance of transposable elements across the *Caenorhabditis elegans* species.
Molecular Biology and Evolution, Sept 1; 34(9)2187-2202.

17. Garcia-Gonzalez AP, Ritter AD, Shrestha S, Andersen EC, Yilmaz LS, Walhout AJM (2017)
Bacterial metabolism affects the *C. elegans* response to cancer chemotherapeutics.
Cell, Apr 20; 169(3)431-441.

16. *Cook DE* and Andersen EC (2017)
VCF-kit: Assorted utilities for the variant call format
Bioinformatics, May 15; 33(10):1581-1582.

15. Mashock MJ, Zanon T, Kappell AD, Petrella LN, Andersen EC, Hristova KR (2016)
Copper oxide nanoparticles impact several toxicological endpoints and cause neurodegeneration in *Caenorhabditis elegans*
PLoS ONE, Dec 2; 11(12):e0167613.

14. *Evans KS*, Zhao Y, *Brady SC*, Long L, McGrath PT, Andersen EC (2016)
Correlations of genotype with climate parameters suggest *Caenorhabditis elegans* niche adaptations
G3, Jan 5;7(1):289-298.

13. *Cook DE*, *Zdraljevic S*, Roberts JP, Andersen EC (2016)
CeNDR, the *Caenorhabditis elegans* Natural Diversity Resource.
Nucleic Acids Research, Jan 4; 45(D1):D650-D657.

12. *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, Andersen EC (2016)
The genetic basis of natural variation in *C. elegans* telomere length
Genetics, Sept; 204(1):371-83.

11. 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.

10. 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, Sep; 283(17):3204-21.

9. Farhadifar R, Ponciano JM, Andersen EC, Needleman DJ, Baer CF. (2016)
Mutation Is a Sufficient and Robust Predictor of Genetic Variation for Mitotic Spindle Traits in *Caenorhabditis elegans*
Genetics, Aug; 203(4):1859-1870.

8. Sterken MG, Snoek LB, Kammenga JE, Andersen EC. (2015)
The laboratory domestication of *C. elegans*
Trends in Genetics, Mar; 31(5) 224-231.

7. 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, Waterston RH. (2015)
Remarkably divergent regions punctuate the genome assembly of the *Caenorhabditis elegans* Hawaiian strain CB4856
Genetics, May 19; 200(3) 975-989.

6. 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.

5. Farhadifar R, Baer CF, Valfort AC, Andersen EC, Muller-Reichert T, Delattre M, Needleman DJ. (2015)
Scaling, Selection, and Evolutionary Dynamics of the Mitotic Spindle
Current Biology, Mar 16; 25(6) 732-740.

4. Balla K, Andersen EC, Kruglyak L, Troemel E. (2015)
A wild *C. elegans* strain has enhanced epithelial immunity to a natural microsporidian parasite
PLoS Pathogens, Feb 13; 11(2)e1004583.

3. 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

2. 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.

1. Andersen EC, Bloom JS, Gerke JP, Kruglyak L. (2014)
A variant in the neuropeptide receptor *npr-1* is a major determinant of *Caenorhabditis elegans* growth and physiology
PLoS Genetics, Feb; 10(2):e1004156.

Publications from research prior to Northwestern University:

Felix MA, Jovelin R, Ferrari C, Han S, Cho YR, Andersen EC, Cutter AD, Braendle C. (2013)
Species richness, distribution and genetic diversity of *Caenorhabditis* nematodes in a remote tropical rainforest
BMC Evolutionary Biology, Jan 12;13:10.

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.

Andersen EC*, Gerke JP*, Shapiro JA*, Crissman JR, Ghosh R, Bloom JS, Felix MA, Kruglyak L. (2012)
Chromosome-scale selective sweeps shape *Caenorhabditis elegans* genomic diversity
Nature Genetics, 44(3): 285-290. *equal contribution

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

Raj A, Rifkin SA, Andersen EC, van Oudenaarden A. (2010)
Variability in gene expression underlies incomplete penetrance
Nature, 463(7283): 913-918.

Bessler JB, Andersen EC, Villeneuve AB. (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.

Reddy KC*, Andersen EC*, Kruglyak L, and Kim DH. (2009)
A polymorphism in *npr-1* is a behavioral determinant of pathogen susceptibility in *C. elegans*
Science, 323(5912): 382-384. *equal contribution

Andersen EC, Saffer AM, and Horvitz HR. (2008)
Multiple levels of redundant processes inhibit *Caenorhabditis elegans* vulval cell fates
Genetics, 179(4): 2001-2012.

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.

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.

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.

Furlong EE, Andersen EC, Null B, White KP, and Scott MP. (2001)
Patterns of gene expression during *Drosophila* mesoderm development
Science, 293(5535): 1629-1633.

PROFESSIONAL SEMINARS

Departmental seminars and invited conference presentations (not including trainees):

2022 Univ. of California - Riverside, Institute for Integrative Genome Biology
International Congress of Toxicology, Maastricht, Netherlands
Human Frontiers Research Symposium, Paris, France
The *C. elegans* Metabolism, Aging, Pathogenesis, Stress and Small RNAs

2022 Genetics and Molecular Biology seminar series, University of North Carolina - Chapel Hill
Dept. of Biology, Oklahoma University
Wellcome Evolutionary Systems Biology
2021 The Ascarid Research and Training Initiative, Lyon, France (Keynote)
Bridging the Divide: International Worm Meeting (Keynote)
66th Annual Meeting of the American Association of Veterinary Parasitologists (Keynote)
Max Planck Institute for Evolutionary Biology, Plön, Germay
Institut de Biologie Valrose, Nice, France
2020 American Society of Tropical Medicine and Hygiene, symposium on genetic crosses
Dept. of Molecular Medicine, Univ. of Massachusetts Medical School, Worcester, MA
Oakton Community College, Des Plaines, IL
Chengdu Research Base of Giant Panda Breeding, Chengdu, People's Republic of China
2019 Netherlands Institute for Ecology (NIOO-KNAW), Wageningen, Netherlands
Dept. of Genetics, Wageningen Univ. and Research, Wageningen, Netherlands
Dept. of Nematology, Wageningen Univ. and Research, Wageningen, Netherlands
Dept. of Genome Sciences, Univ. of Washington, Seattle, WA
Institute of Molecular Biology, Academia Sinica, Taiwan
Dept. of Genetics, Univ. of Georgia, Athens, GA
Dept. of Infectious Diseases, Univ. of Georgia, Athens, GA
Dept. of Biology, Georgia Institute of Technology, Atlanta, GA
Ingram Cancer Center, Vanderbilt University, Nashville, TN
2018 Max Planck Institute for Developmental Biology, Tübingen, Germany
Dept. of Evolutionary Ecology and Genetics, Christian-Albrechts-Universitat, Kiel, Germany
Berlin Seminar for Resistance Research, Freie Universitat Berlin, Berlin, Germany
Robert H Lurie Comprehensive Cancer Center, Northwestern University, Chicago, IL
Dept. of Genetics, Washington University School of Medicine, St. Louis, MO
Dept. of Genetics, University of Pennsylvania, Philadelphia, PA
Dept. of Pathobiology, University of Pennsylvania, Philadelphia, PA
Dept. of Microbiology, Seoul National University, Seoul, Korea
Dept. of Biology, University of Oregon, Eugene, OR
Dept. of Biological Sciences, University of Southern California, Los Angeles, CA
Dept. of Cell Biology and Anatomy, Rosalind Franklin University, Chicago, IL
New York Univ. Center for Genomics and Sys. Bio. Parasite Workshop, Abu Dhabi, UAE
Department of Biology, Univ. of California - San Diego, San Diego, CA
Department of Biology, Duke University, Durham, NC
Donnelly Centre for Cellular And Biomolecular Research, University of Toronto, Toronto, ON
Department of Molecular Biology and Genetics, Cornell University, Ithaca, NY
Medical Research Council, London Institute of Medical Sciences, London, UK
Department of Biology, Carnegie Mellon University, Pittsburgh, PA
Host-Parasite Interactions, University of Calgary, Banff, Canada
Florida Area Worm Meeting (Keynote), Florida Institute of Technology, Melbourne, FL
Department of Biology, Skirball Institute, New York University Medical School, New York, NY
Department of Biology, University of Minnesota, Minneapolis, MN
2017 Department of Biology, Indiana University, Bloomington, IN
New York University Center for Genomics and Systems Biology Symposium in Abu Dhabi, UAE
2016 Midwest Quantitative Biology at Purdue University, West Lafayette, IN
Molecular and Cellular Biology of Helminth Parasites X, Hydra, Greece
Computational Research Day, Northwestern University, Evanston, IL
Evolutionary Biology of *Caenorhabditis* and other nematodes (Keynote), 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

2016 Anthelmintics: Discovery to Resistance II, San Diego, CA
Program in Systems Biology, University of Massachusetts Medical School, Worcester, MA
2015 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

Seminars before starting at Northwestern:
2013 Quantitative genetics workshop, 19th International *C. elegans* meeting, UCLA, Los Angeles, CA
Molecular Bioscience Department, Northwestern University, Evanston, IL
Program in Systems Biology, University of Massachusetts Medical School, Worcester, MA
2012 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
Biology Department, University of Florida, Gainesville, FL
2011 Evolution workshop, 18th International *C. elegans* meeting, UCLA, Los Angeles, CA
Laboratory of Toxicology, NIEHS, Research Triangle Park, NC
2010 Institute for Evolutionary Biology Department, University of Edinburgh, Edinburgh, UK
2008 Featured talk at *C. elegans* Aging, Stress, and Pathogenesis meeting, Madison, WI
2000 Undergraduate research symposium, Stanford University, Stanford, CA

PEER REVIEW AND RELATED ACTIVITIES

Editorial Board:
2022 - *Journal of Nematology*
2020 - *Genes*
2015 - *Trends in Genetics*

Associate Editor:
2017 - 2019 *BMC Genomics (Multicellular invertebrate genomics)*

Guest Associate Editor:
PLoS Genetics, *eLife*, *PLoS Pathogens*

Reviewing activity: Grants and fellowships
2022 NIH F30/F31/F32 fellowship review panel ZRG F05-Q
Ad hoc BBSRC grant reviewer
Katholieke Universiteit Leuven grant reviewer
Ad hoc reviewer National Science Foundation (IOS)
Ad hoc reviewer NIH NIDA Avenir Award

2022 Scientific Advisory Board for P01AI127338 (PI Michael Ferdig, Notre Dame Univ.)
2021 ERC Consolidator Grant reviewer (COI, declined)
NIH F30/F31/F32 fellowship review panel ZRG F05-Q
Canada Foundation for Innovation reviewer
NSF reviewer
Scientific Advisory Board for P01AI127338 (PI Michael Ferdig, Notre Dame Univ.)
2020 NIH Special Emphasis panel ZRG IFCN-C (02)
NIH Special Emphasis panel ZRG ETTN-N (02)
Scientific Advisory Board for P01AI127338 (PI Michael Ferdig, Notre Dame Univ.)
2019 *Ad hoc* reviewer for Wellcome Trust Early Career Grant
Panel reviewer on NASA, Flight and Ground Space Biology
Ad hoc reviewer for Agence Nationale de la Recherche
Ad hoc reviewer for Univ. of Wisconsin - Milwaukee Catalyst grant
Panel reviewer on NIH NIAID R13
Ad hoc reviewer National Science Foundation (CAREER)
Ad hoc reviewer for Swiss 3R Competence Centre
Ad hoc reviewer for Austrian Science Foundation
Scientific Advisory Board for P01AI127338 (PI Michael Ferdig, Notre Dame Univ.)
2018 *Ad hoc* reviewer for Alzheimer's Society
Ad hoc reviewer National Science Foundation (IOS)
Ad hoc reviewer National Science Foundation (CAREER)
Scientific Advisory Board for P01AI127338 (PI Michael Ferdig, Notre Dame Univ.)
Ad hoc reviewer for Bill and Melinda Gates Foundation
2016 ERC COST grant reviewer
2015 *Ad hoc* reviewer for National Toxicity Program, project assessment
2014 *Ad hoc* reviewer for Human Frontiers Science Program
Ad hoc reviewer for National Science Foundation (IOS)

PROFESSIONAL AFFILIATIONS AND SERVICE

Membership in Professional Societies:
Genetics Society of America
Society of Molecular Biology and Evolution (lifetime)
Society for Evolution (lifetime)
Society for Integrative and Comparative Biology
World Association for the Advancement of Veterinary Parasitology
American Association of Veterinary Parasitologists
Society of Nematologists

Mentorship and Diversity training:
2022 Univ. of Wisconsin - Madison, Center for the Improvement of Mentored Experiences in Research (CIMER), in-person
Arizona State Univ., Culturally Aware Mentoring, virtual
2021 Univ. of Southern California, Strategies for Equity-based Holistic Review in Graduate Admissions
Northwestern Univ., Diversity, equity, and inclusion in hiring decisions
2020 NIH OITE training on Health and Wellness of Trainees

Professional service:
2022 External thesis committee member for Leonor Gianechini (Moorhead lab, Univ. of Georgia)

2022 External thesis committee member for Marta Muniz (Samson-Himmelstjerna lab, Freie Univ. Berlin)
External thesis committee member for Youn Jae Kang (Ding lab, Max Planck Institute of Animal Behavior)
External thesis committee member for Amanda Shaver (Edison lab, Univ. of Georgia)
Worm Board *ex officio* member Nematode Genomes
Organizing committee Anthelmintics V: Resistance and vaccines
Scientific Advisory Board Member for P01AI127338 (PI Dr. Michael Ferdig, Notre Dame Univ.)

2021 Worm Board *ex officio* member Nematode Genomes
Co-organizer of the Chicago Area Worm Meeting (ChAWM, www.chawm.org)
Scientific Advisory Board Member for P01AI127338 (PI Dr. Michael Ferdig, Notre Dame Univ.)

2020 Worm Board *ex officio* member Nematode Genomes
Co-organizer of the Chicago Area Worm Meeting (ChAWM, www.chawm.org)
Scientific Advisory Board Member for P01AI127338 (PI Dr. Michael Ferdig, Notre Dame Univ.)

2019 External thesis committee examiner for Yiru Wang (Kammenga lab, Wageningen Univ. and Research)
External thesis committee member for Amanda Shaver (Edison lab, Univ. of Georgia)
External thesis committee examiner for Aurian Garcia-Gonzalez (Walhout lab, UMMS)
Co-organizer of the Chicago Area Worm Meeting (ChAWM, www.chawm.org)
Scientific Advisory Board Member for P01AI127338 (PI Dr. Michael Ferdig, Notre Dame Univ.)

2018 Organizing committee for *C. elegans* dev., cell bio., and gene exp. meeting (Barcelona, Spain)
Chair of the Natural Variation session, *C. elegans* dev., cell bio., and gene exp. meeting
Co-organizer of the Chicago Area Worm Meeting (ChAWM, www.chawm.org)
Scientific Advisory Board Member for P01AI127338 (PI Dr. Michael Ferdig, Notre Dame Univ.)
Organizing committee for Parasitic Nematodes meeting, NYU Abu Dhabi
External thesis committee member for Victoria Vu (Fraser lab, University of Toronto)
Poster judge, Northwestern Undergraduate Research Symposium

2017 Organizing committee for the 21st International *C. elegans* meeting
Chair of the Evolution and Ecology parallel session, 21st International *C. elegans* meeting

2015 Organizing committee for the 20th International *C. elegans* meeting
Poster judge, 20th International *C. elegans* meeting - Evolution and Genomics section
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

***C. elegans* community service and open-science software:**

2016 - Creator and advisor board member of the *C. elegans* Natural Diversity Resource (CeNDR, link)
This resource organizes and disseminates wild *C. elegans* strains, whole-genome sequence data, and enables genome-wide association mappings through a cloud-based service. Since 2016, over 4500 strains have been distributed to the community and over 5000 mappings have been performed.

TEACHING AND ADVISING

Undergraduate teaching:

2022 **New course: Biological Sciences 203: *Genetics and Evolution* (winter, 379 students)**
Biological Sciences 398: *Independent Research* (Andrea Phung)

2021 **Biological Sciences 393: *Genetic Analysis* (spring, 31 students)**
Biological Sciences 399: *Independent Research* (Karan Gowda, Kailyn Parham, Katie Introcaso)

2020 **Biological Sciences 215: *Genetics and Molecular Biology* (spring, 492 students)**
Biological Sciences 399: *Independent Research* (Anna Derrick, Emily Jahn, Jake Mostad, Kailyn Parham)

2019 **Biological Sciences 393: *Biomedical Genetics* (spring, 19 students)**
Biological Sciences 398: *Tutorial in Biology* (Anna Derrick, Emily Jahn, Kailyn Parham)
Biological Sciences 399: *Independent Research* (Karol Bisaga, Grace Park, Jake Mostad)

2018 **Biological Sciences 393: *Genetic Analysis* (winter, 28 students)**
Biological Sciences 398: *Tutorial in Biology* (Karol Bisaga)
Biological Sciences 399: *Independent Research* (Karol Bisaga, Kimberly Collins, Selina Deiparine, Grace Park)

2017 **Biological Sciences 393: *Genetic Analysis* (spring, 22 students)**
Biological Sciences 398: *Tutorial in Biology* (Kimberly Collins)
Biological Sciences 399: *Independent Research* (Selina Deiparine, Samuel Hamilton, Grace Park)

2016 **Biological Sciences 393: *Genetic Analysis* (spring, 17 students)**
Biological Sciences 398: *Tutorial in Biology*
(Sarah Bier, Mattlyn Cordova, Selina Deiparine, Samuel Hamilton, Grace Park)

2015 *Guest Lecture:* University of Wisconsin-Madison Biology 675 - *Evolution seminar*
(fall, 8 students)
New course: Biological Sciences 393: *Genetic Analysis* (spring, 10 students)
Biological Sciences 398: *Tutorial in Biology* (Lautaro Cilenti)
Biological Sciences 399: *Independent Research* (Kreena Patel, Hillary Tsang)

2014 Biological Sciences 398: *Tutorial in Biology* (Mazeed Aro-Lambo, Kreena Patel, Hillary Tsang)

Graduate teaching:

2022 Driskill Graduate Program 430: Genetic Analysis - Leveraging Big Data and Model Organisms
(spring, one guest lecture, estimated 15 students)

2021 **New course:** Interdisciplinary Biological Sciences: *Introduction to R for biologists*
(fall, Five students)
Driskill Graduate Program 430: Genetic Analysis - Leveraging Big Data and Model Organisms
(spring, one guest lecture, 16 students)

2020 Interdisciplinary Biological Sciences 423: *Ethics of collaboration*
(fall, one guest lecture, 45 students)

2019 Interdisciplinary Biological Sciences 421: *Rigor and Reproducibility*
(summer, one guest lecture, 17 students)

2018 Interdisciplinary Biological Sciences 421: *Rigor and Reproducibility*
(summer, one guest lecture, 25 students)
Interdisciplinary Biological Sciences/Chemistry 416: *Practical Training in Chemical Biology Methods and Experimental Design*
(spring, five lectures, 10 students)

2017 Interdisciplinary Biological Sciences 421: *Rigor and Reproducibility*
(summer, one guest lecture, 15 students)
Interdisciplinary Biological Sciences/Chemistry 416: *Practical Training in Chemical Biology Methods and Experimental Design*
(spring, five lectures, 8 students)
Interdisciplinary Biological Sciences 421: *Rigor and Reproducibility*
(spring, one guest lecture, 5 students)

2016 Interdisciplinary Biological Sciences: *Graduate Computational Biology Bootcamp*
(fall, 3 days, eight hours per day, 19 students) - www.GitHub.com/AndersenLab/IBiS-Bootcamp

2015 Interdisciplinary Biological Sciences 402: *Eukaryotic Molecular Biology*
(fall, one guest lecture, 22 students)
Interdisciplinary Biological Sciences: *Graduate Computational Biology Bootcamp*
(fall, 3 days, eight hours per day, 22 students) - www.GitHub.com/AndersenLab/IBiS-Bootcamp
Interdisciplinary Biological Sciences 423: *Ethics of peer review*
(spring, one guest lecture, 41 students)

2014 Interdisciplinary Biological Sciences 402: *Eukaryotic Molecular Biology*
(fall, one guest lecture, 16 students)
New course: Interdisciplinary Biological Sciences: *Graduate Computational Biology Bootcamp*
(fall, 3 days, eight hours per day, 16 students) - www.GitHub.com/AndersenLab/IBiS-Bootcamp
Interdisciplinary Biological Sciences 423: *Ethics of peer review*
(spring, one guest lecture, 42 students)

2013 Interdisciplinary Biological Sciences 402: *Eukaryotic Molecular Biology*
(fall, one guest lecture, 24 students)

K-12 advising:
Anwyn Zhou, New Trier High School (2022)
Richelle Lee, Adlai E. Stevensen High School (2022)
Preeti Rao, Adlai E. Stevensen High School (2022)
Ned Koh, Lake Forest Academy (2021-2022)
Yahya Junejo, Hinsdale Central High School (2020)
Shanthi Hegde, Lambert High School (2020 - 2021)
Aarnav Patel, Barrington High School (2020)
Justine Rozenich, Saint Ignatius College Preparatory (2020-2022)
Hannah Ahmed, Normal Community High School (2019-2020)
Ally Bardas, New Trier High School (2019-2021)
Regeneron Science Talent Search Finalist 2021
Sarosh Nagar, Glenbrook North High School (2018-2019 academic year)
Britney Sun, Glenbrook North High School (summer 2018)
Ethan Schonfeld, Glenbrook North High School (summer 2018)
Lillian Tushman, Oak Park and River Forest High School (2016-2017 academic year)
Caitlin Westerfield, Evanston Township High School (2015-2016 academic year)
Matteo di Bernardo, Evanston Township High School (2015-2016 academic year)
Ainsley Tran, Oak Park and River Forest 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:
Fiona Shao (2022 - , Class of 2024), Biological Sciences Major
Gracie Paredas (2022 - , Class of 2025), Biological Sciences Major
Michael Chen (2022, Class of 2024), Biological Sciences Major, University of Southern California
Crystal Lovato (2022, Class of 2023), Biological Sciences Major, Idaho State University
2022 SROP student
Andrew Yang (2022, Class of 2025), Math Major, Brown University
2022 Quantitative Biology REU student
Sharik Khan (2022 - , Class of 2024), Biological Sciences Major
2022 Summer URG recipient
Skyler Stone (2022 - , Class of 2025), Biological Sciences Major
2022 Posner Fellow
Andrea Phung (2021 - , Class of 2025), Biological Sciences Major
2022 AYURG recipient, 2022 Summer URG recipient

Cassia Yeo (2021 - , Class of 2025), Biological Sciences Major
2022 Summer URG recipient
Chloe Sokol (2021 - , Class of 2024), Data Sciences Major
Nicole Banks (2021 - 2022, Class of 2022), Biological Sciences Major
Joey Gallindo (2021, Class of 2024), Engineering Major
2021 Summer URG recipient
Jordan Vaughn (2020 - 2021, Class of 2023), Biological Sciences Major
2021 WCAS Baker Family Summer Grant recipient
Karan Gowda (2020 - 2021, Class of 2022), Biological Sciences Major
2020 Center for Quantitative Biology Summer Grant recipient, 2021 Academic Year URG recipient
Iris Swarthout (2020 - 2021, Class of 2023), Biological Sciences Major
2020 Summer Internship Grant Program recipient, 2021 Summer URG recipient
Raghav Gupta (2020, Class of 2022), Biological Sciences Major
Isabella Miller (2020 - , Class of 2023), Biological Sciences and Hispanic studies double major, Bowdoin Coll.
2022 Summer research grant recipient
Emily Jahn (2019 - 2020, Class of 2020), Biological Sciences Major
2019 Weinberg College Summer Grant recipient
Kailyn Parham (2019 - 2021, Class of 2021), Biological Sciences Major
2019 Summer URG recipient, 2020 Academic Year URG Recipient, 2021 Acad. Year URG Recipient
Anna Derrick (2019 - 2020, Class of 2021), Biological Sciences Major
2019 Weinberg College Summer Grant recipient
Jake Mostad (2018 - 2020, Class of 2020), Biological Sciences Major
2019 Summer URG recipient
Katie Introcaso (2018 - 2022, Class of 2022), Biological Sciences Major
2020 Summer URG recipient, *2021 WCAS Baker Family Summer Grant recipient*
Ellen Chao (2018 - 2021, Class of 2021), Biological Sciences Major
2018 Summer URG recipient, 2019 Chemistry of Life Processes Lambert Fellow
Karol Bisaga (2017 - 2019, Class of 2020), Biological Sciences Major
2017 NU Bioscientist Summer Grant recipient
Tim Sheng (2018 - 2019, Class of 2019), Biological Sciences Major
2018 Summer URG recipient
Grace Park (2016 - 2019, Class of 2019), Biological Sciences Major
2016 Posner Fellowship recipient, 2017 Program in Biological Sciences Summer Grant recipient, Natural Sciences and Engineering 2nd place poster prize recipient
Zyneb Adewusi (2018, Class of 2018), Biological Sciences Major, Moraine Valley Community College
2018 Summer Research Opportunities Program (SROP) recipient 2019 Northwestern Undergraduate
Yihong Hu (2018 - 2019, Class of 2021), Biological Sciences Major
2018 Program in Biological Sciences Summer Grant recipient
Chido Chikuturudzi (2017-2018, Class of 2018), Biological Sciences Major, Northeastern Illinois Univ.
Peter Finnegan (2017 - 2018, Class of 2020), Biological Sciences Major
2017 Program in Biological Sciences Summer Grant recipient
Kimberly Collins (2016 - 2018, Class of 2020), Biological Sciences Major
2017 NU Bioscientist Summer Grant recipient
Selina Deiparine (2016 - 2018, Class of 2018), Biological Sciences Major
2016 Summer URG recipient, 2016 Academic URG recipient
Rohit Rastogi (2016 - 2017, Class of 2019), Computer Science and Statistics Majors
Sarah Bier (2016 - 2017, Class of 2019), Biological Sciences Major
2016 Summer URG recipient
Mattlyn Cordova (2016 - 2017, Class of 2019), Gender Studies Major
2016 Program in Biological Sciences Summer Grant recipient
Joshua Roberts (2015-2016, Class of 2016), Computer Science Major

Nicholas Irons (2015, Class of 2018), Physics 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 recipient
Myriad Academic Scholarship recipient
Thomas Verender Hanks Scholarship recipient
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
2015 Emmanuel Margoliash Prize for Basic Research recipient
Winfred Hill Award recipient
James Alton James Scholar
Ellen Taus Scholarship recipient
J.G. Nolan Scholarship recipient
2014 Academic URG recipient
Zifan Xiang (2014 - 2015, Class of 2015), Biomedical Engineering Major
Stephen Chan (2013 - 2014, Class of 2014), Computer Science Major
2013 Summer URG recipient

Graduate student and post-doctoral advising:

Masters student advising:
Caroline Bond (Quantitative and Systems Biology Masters), 2021-2022
Anita Huang (Biotechnology Program), 2018 - 2020
Ryan (Heechul) Chung (Quantitative and Systems Biology Masters), 2018 - 2019
Suma Aldakeel (advisor, Cindy Voisine - Northeastern Illinois Univ.), 2016 - 2017
Kristen Larrichia (advisor, Nyree Zerega – Program in Plant Biology and Conservation), 2014 - 2015
Lucie Bastin-Heline (Master's exchange student, Ecole Normale Superior, Paris, France), 2014

Graduate PhD candidates *(Current position)*:
Ryan McKeown (2022 -), Ph.D. student, Interdisciplinary Biological Sciences Program
Raveena Gupta (2021 -), Joint Ph.D. student, Chemistry, jointly advised with Neil Kelleher
Funded by the Chemistry of Life Processes NIH Training grant (2021-2022)
Nic Moya (2020 -), Ph.D. student, Interdisciplinary Biological Sciences Program
Funded by the NIH Biotechnology Training grant full member (2021-2022)

Joy Nyaanga (2019 - 2022), Ph.D. student jointly advised with Niall Mangan, Interdisciplinary Bio. Sci. Program
Funded by NSF-Simons Center for Quantitative Biology (2019)
(Lead bioinformaticist, Lurie Children's Hospital)

Loraina Stinson (2019 - 2021), Ph.D. student - left with Masters, Interdisciplinary Biological Sciences Program
Funded by the Cell and Molecular Basis of Disease NIH Training grant (2019-2021)

Clayton Dilks (2018 - 2021), Ph.D. student, Interdisciplinary Biological Sciences Program
Funded by the NIH Biotechnology Training grant cluster (2019)
Funded by the NIH Biotechnology Training grant full member (2020)
Recipient of travel award from WAAVP (2019)
Recipient of Burroughs-Wellcome Travel Award (2019)
(Senior scientist, Evozyne)

Ye Wang (2017 - 2019), Visiting Ph.D. student, Sichuan Agricultural University, China
Funded by China Scholarship Council (2017-2019)
(Program Director for Panda Genomes, the Chengdu Panda Base)

Kathryn Evans (2016 - 2020), Ph.D. student, Interdisciplinary Biological Sciences Program
Funded by the NSF-Simons Center for Quantitative Biology (2020)
Funded by the Cell and Molecular Basis of Disease NIH Training grant (2017-2019)
Recipient of travel awards from IBiS and the Northwestern Graduate School (2017)
Recipient of Biotechnology NIH Training grant cluster member, declined (2017)
(Bioinformaticist, Precision Biosciences, Inc.)

Shannon Brady (2015 - 2019), Ph.D. student, Interdisciplinary Biological Sciences Program
Recipient of the Dr. John N. Nicholson Fellowship (2018-2019)
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)
Recipient of travel awards from IBiS and the Northwestern Graduate School (2017)
Poster first prize winner Northwestern Computational Research Day (2017)
Poster prize winner 21st International C. elegans meeting
Best TA award IBiS Graduate Program (2017)
(Consultant, Boston Consulting Group)

Daniel Cook (2014 - 2018), Ph.D. student, Driskill Graduate Program
Current position: Senior Programmer at Google, Mountain View, CA
Northwestern Graduate School Outstanding Thesis Award (2018)
Funded by a National Science Foundation Pre-doctoral Fellowship (2015-2018)
Northwestern Presidential Fellowship Finalist (2017)
Recipient of travel awards from IBiS and the Northwestern Graduate School (2016)
(Genomics team lead, Google)

Stefan Zdraljevic (2014 - 2019), Ph.D. student, Interdisciplinary Biological Sciences Program
Recipient of the Widom Award for Research Excellence (2019)
Northwestern Graduate School Outstanding Thesis Award (2019)
Recipient of the IBiS Rappaport Award for Research Excellence (2018)
Funded by the Cell and Molecular Basis of Disease NIH Training grant (2015-2017)
Recipient of travel awards from Northwestern Center for Genetic Medicine (2016, 2017)
Recipient of travel awards from IBiS and the Northwestern Graduate School (2015, 2017)
Chemistry of Life Processes Drug Discovery Scholar (2017)
(Post-doctoral fellow at UCLA and HHMI, Kruglyak lab)

Additional rotation graduate students:
Corinne Croslyn (Spring, 2022), Ryan McKeown (Spring, 2022), Brooke Angel (Winter, 2021), Jack Sumner (Winter, 2021), Nic Moya (Winter, 2020), Joy Nyaanga (Spring, 2019), Loraina Stinson (Winter, 2019), Emily Czajkowski (Fall, 2018), Julie Liang (Spring, 2018), Elan Ness-Cohn (DGP, Spring, 2018) Kyle Siegel (Spring, 2018), Clayton Dilks (Winter, 2018), Garth Fisher (Fall, 2017), Nicholas Sepulveda (Spring, 2017), Michael Schamber (Winter, 2017), Evan Buechel (Spring, 2016), Nic Daffern (Spring, 2016), Bryan Eder (Winter, 2016), Ryan Abdella (Winter, 2015), Erin Baker (Fall, 2014), Alex Karge (Spring, 2014), Saiorse McSharry (Winter, 2014), Amy Nilles (Fall, 2013), Ian Wolff (Summer, 2013)

Post-doctoral researchers *(Current position)*:
Amanda Shaver (2022 -), Ph.D. from Univ. of Georgia, advisor Dr. Art Edison
José Luis Tellez Arreola (2022), Ph.D. from Universidad Autonomous de Mexico, advisor Ataulfo Torres
JB Collins (2021 -), Ph.D. from Univ. of Georgia, advisor Dr. Ray Kaplan
Janneke Wit (2019 - 2021), Ph.D. from Aarhus Univ., advisor Dr. Volker Loeschcke
Sam Widmayer (2019 - 2022), Ph.D. from North Carolina State Univ., advisor Dr. David Aylor
(Bioinformaticist, Jackson Labs)
Gaotian Zhang (2018 -), Ph.D. from Ecole Normale Superieure, Paris, advisor Dr. Marie-Anne Felix
Timothy Crombie (2017 -), Ph.D. from University of Florida, advisor Dr. David Julian
Lewis Stevens (2019 - 2020), Ph.D. from Univ. of Edinburgh, advisor Dr. Mark Blaxter
(Bioinformaticist, Wellcome Trust Sanger Institute, Hinxton, England)
Steffen Hahnel (2017 - 2018), Ph.D. from Justus-Liebig University, advisor Dr. Christoph Grevelding
Recipient of DFG German Science Fellowship (2018-2020)
Recipient of Northwestern Post-doctoral Travel Award (2018)
Recipient of Burroughs-Wellcome Travel Award (2018)
(Scientist, Boehringer Ingelheim Health, Germany)
Daehan Lee (2017 - 2020), Ph.D. from Seoul National University, advisor Dr. Junho Lee
(Assistant Professor of Developmental Biology, Kyung Hee University, South Korea)
Mostafa Zamanian (2014 - 2016), 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)
Funded by the Bill and Melinda Gates Foundation (2014)
(Associate Professor of Pathobiological Sciences, University of Wisconsin - Madison)
Bryn Gaertner (2014), Ph.D. from University of Oregon, advisor Dr. Patrick Phillips
(Associate Scientific Director at Ashfield, part of UDG Healthcare PLC)

Graduate thesis committee memberships:
Corinne Croslyn (advisor, Shelby Blythe) 2022 -
Feihong Xu (advisor, Luis Amaral) (chair) 2021 -
Elias Guan (advisor, Chris Petersen) (chair) 2021 -
Reese Richardson (advisor, Luis Amaral) (chair) 2021 -
Idalis Ramirez (advisor, Rick Morimoto) 2021
Taojunfeng Su (advisor, Neil Kelleher) (chair) 2021 -
Emily Czajkowski (advisor, Sadie Wignall) 2020 -
Elan Ness-Cohn (advisor, Rosemary Braun – DGP, Feinberg School of Medicine) (chair) 2019 - 2021
Gabriel Cavin (advisor, Sadie Wignall) 2019 - 2022
Hannah Horton advisor, Sadie Wignall) 2019 -
Alex McFarland (advisor, Erica Hartman) (chair) 2018 - 2021
Matt Robey (advisor, Neil Kelleher) 2016 - 2020
Rachel Bakker (advisor, Rich Carthew) 2015 - 2020
Joseph Muldoon (advisors, Neda Bagheri and Josh Leonard) (chair) 2015 - 2020
Aaron Sue (advisor, Thomas O'Halloran) 2014 - 2022
Ritika Giri (advisor, Richard Carthew) 2013 - 2020

Sumach Aldakeel (advisor, Cindy Voisine - Northeastern Illinois Univ.) 2016 - 2017
Adam Hockenberry (advisors, Luis Amaral and Michael Jewett) 2015 - 2017
Sarah Stainbrook (advisor, Keith Tyo) 2015 - 2019
Timothy Toby (advisor, Neil Kelleher) 2015 - 2018
Rose Njoroge (advisor, Sarki Abdulkadir – DGP, Feinberg School of Medicine), 2014 - 2018
Keila Torre-Santiago (advisor, Sadie Wignall) 2014 - 2017
Arianne Rodriguez (advisor, Yun Wang) 2014 (Transferred to DGP)
Lilien Voong (advisor, Alec Wang) 2013 - 2017

DEPARTMENT, COLLEGE, AND UNIVERSITY SERVICE

Departmental Service:

2021 Faculty search committee
2019 Faculty search committee
2017 Departmental Strategic Planning committee
2016 Faculty search committee
Departmental Strategic Planning committee
2015 Faculty search committee
2014 Departmental Program Review committee

Weinberg College of Arts and Sciences Service:

2022 WCAS Teaching Award committee
2019 Program in Biological Sciences curriculum committee
2016 Faculty search committee for the Neurobiology Department
2014 NUIN Post-doc Association, *Interviews and Start-up packages*

University-level Service:

2022 Undergraduate Research Grant review committee
Steering committee for NUSeq Facility in Northwestern Medicine
Ad hoc Limited submissions grant review panel
2021 Undergraduate Research Grant review committee
NSF-Simons Center for Quantitative Biology Pilot grant review panel
Limited Submissions Grant review committee
IBiS Graduate Admissions committee, chair
Steering committee for NUSeq Facility in Northwestern Medicine
IBiS Graduate Student Advisor
Ad hoc reviewer for Data Science Initiative grants and fellowships
2020 Limited submissions grant review panel
IBiS Graduate Admissions committee, chair
Steering committee for NUSeq Facility in Northwestern Medicine
IBiS Graduate Student Advisor
2019 Limited submissions grant review panel
NSF-Simons Center for Quantitative Biology Pilot grant review panel
IBiS Graduate Admissions committee, chair
Steering committee for NUSeq Facility in Northwestern Medicine
Masters Program in Quantitative and Systems Biology, Curriculum committee
IBiS curriculum committee
2018 IBiS Graduate Admissions committee
Steering committee for NUSeq Facility in Northwestern Medicine
Masters Program in Quantitative and Systems Biology, Curriculum committee
Poster judge, Northwestern Undergraduate Research Symposium

2018	*Ad hoc* reviewer for Chemistry of Life Processes undergraduate grants and fellowships
	Ad hoc reviewer for Data Science Initiative grants and fellowships
	NSF-Simons Center for Quantitative Biology Pilot grant review panel
2017	Discussion organizer, Northwestern Computational Research Day
	Steering committee for NUSeq Facility in Northwestern Medicine
	Ad hoc reviewer for Chemistry of Life Processes undergraduate grants and fellowships
	Ad hoc reviewer for Data Science Initiative grants and fellowships
2016	IBiS Computational Bootcamp for incoming graduate students
	Lurie Cancer Center American Cancer Society IRG review panel
	Steering committee for NUSeq Facility in Northwestern Medicine
	Ad hoc reviewer for Chemistry of Life Processes undergraduate grants and fellowships
	Ad hoc reviewer for Data Science Initiative grants and fellowships
2015	IBiS Graduate Admissions committee
	IBiS Retreat committee, Co-chair
	IBiS Computational Bootcamp for incoming graduate students
2014	Creation of IBiS Computational Bootcamp for incoming graduate students
	IBiS Retreat committee, Co-chair
	Poster judge, Northwestern Undergraduate Research Symposium
	IBiS Graduate Admissions committee
2013	Poster judge, Northwestern Undergraduate Research Symposium

COMMUNITY WORK

2022	Mentored Richelle Lee from Adlai E. Stevenson High School
2022	Mentored Anwyn Zhao from New Trier High School
2021	Mentored Ally Bardas from New Trier High School on anthelmintic sensitivity
	Recipient of Regeneron Top 300 Science Talent Search
2020	STEM presenter at ConnectCon presented by Wizards.exe
2020 -	Assistant Scoutmaster, Troop 2
2020 -	Scouting Merit Badge Counselor: Chemistry, Citizenship in Society, Digital Technology, Environmental Science, Insect Study, Mammal Study, Medicine, Programming, Reptile and Amphibian Study, Swimming
2015 - 2019	Hosted 80 5th grade students from Lincolnwood Elementary School for a day of science
2016 - 2017	Mentored Lillian Tushman from Oak Park and River Forest High School on glucose responses
	Recipient of 3rd place All-Illinois Science Research Competition
2016 - 2019	Assistant Den Leader, Cub Scout Pack 922
2016 - 2017	American Youth Soccer Organization (AYSO) U8 Head Coach, *The Storm*
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 Columbia University Scientific Scholars Fellowship, Recipient Fulbright Fellowship
2014 - 2018	Lecturer on *C. elegans* genetics to the Latin School of Chicago advanced biology class
2014	Co-organized (with Jacob Cruger) nematode collections with the Punahou School, Hawaii
2009	Organized nematode collections with Vassalboro Community School, Maine