CURRICULUM VITAE (4/2026)
PATRICK C. PHILLIPS

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EDUCATION:

1986	B.A.	Reed College, Portland, Oregon; Biology
1988	M.S.	University of Chicago, Chicago, Illinois; Evolutionary Biology
1991	Ph.D.	University of Chicago, Chicago, Illinois; Evolutionary Biology
1991-92	Postdoc	University of Wisconsin, Madison; Laboratory of Genetics

ACADEMIC POSITIONS:

2018–	Philip H. Knight Chair in Liberal Arts and Sciences, University of Oregon
2006–	*Professor*, Department of Biology, University of Oregon
2000-2006	*Associate Professor*, Department of Biology, University of Oregon
2000–	*Member*, Institute for Ecology and Evolution, University of Oregon
2012-2017	*Member*, NIH Center for Excellence in Systems Biology, META: Microbial Ecology and Theory in Animals, University of Oregon
2014-2015	*Visiting Professor*, Institute de Biologie de l'École Normale Supérieure, Paris, France
2007	*Visiting Scientist*, Instituto Gulbenkian de Ciência, Oieras, Portugal
1998-2000	*Associate Professor*, Department of Biology, University of Texas at Arlington
1997-2000	*University Honors Faculty*, University of Texas at Arlington
1992-1998	*Assistant Professor,* Department of Biology, University of Texas at Arlington

ADMINISTRATIVE POSITIONS:

2022-2023	*Interim President*, University of Oregon
2019-2022	*Provost and Senior Vice President*, University of Oregon
2018-2019	*Special Advisor to the President*, University of Oregon
2016-2018	*Acting Executive Director, Phil and Penny Knight Campus for Accelerating Scientific Impact*, University of Oregon
2011-2014	*Associate Vice President for Research*, University of Oregon
2010-2011	*Department Head*, Department of Biology
2009-2010	*Director*, Center for Ecology and Evolutionary Biology

UNIVERSITY LEADERSHIP:

Context

The University of Oregon, an R1 university with an annual budget of $1.2 billion and an

endowment of $3 billion, is the flagship public university in the state. It is one of the two members of the American Association of Universities (AAU) in the Pacific Northwest. The university offers more than 300 undergraduate programs and more than 80 graduate degree programs. Undergraduate student enrollment exceeds 19,000, with a graduate student population of 3,600. It has roughly 2,000 faculty and 2,600 staff.

As acting president, I was responsible for building the overall strategic vision and direction of the university, as well as overseeing all aspects of university operations, including diversity, equity and inclusion, the office of the provost, finance and administration, communications, advancement, enrollment management, housing, university health services, and athletics. As UO provost and chief academic officer, I oversaw all academic operations of the university, comprising a budget of roughly $470 million. The deans of 12 schools and colleges reported directly to me, as did the graduate school, the library, the museums, global education, academic affairs, student success, the office of research, and information services.

As associate vice president for research, all university core facilities, including animal care and compliance, reported to me, as did the research institutes and centers. I also helped to direct strategic research investments and seed funding operations, as well as overall finances and charge-back budgeting for core facilities. I have also led strategic planning operations at a levels of the institution, and authored the universities strategic plan as provost. I have also been fortunate to help create and lead two of the most ambitious philanthropically-enabled academic initiatives in the country, which in turn serve as models for broader transdisciplinary initiatives that seek to knit together areas of strength and impact at the university: the Knight Campus for Accelerating Scientific Impact and the Balmer Institute for Children's Behavior Health.

Knight Campus for Accelerating Scientific Impact

Supported by $1 billion in gifts from Phil and Penny Knight—among the largest gifts ever given to a university—the Knight Campus is aimed at expanding the UO's research and educational strengths in bioengineering and applied science, with a specific focus on facilitating the translation of these research activities into economic impact through the creation of new companies and creating a novel educational environment that holds entrepreneurship as a core value. I led the creation of this new initiative as Acting Executive Director for three years and actively shepherded ongoing developments as provost and interim president.

- Supervised the planning and construction for a new, award-winning $225 million, 160,000 sq ft research building, including a clean room and new core facilities for advanced additive and subtractive manufacturing, imaging, and cell sorting.
- Liaised with the state legislature in securing $70 million in state bonding authority for the new building.
- Directed the coalescence (and expansion) of existing materials science and bioinformatics applied graduate internship programs at the UO into the Knight

Campus, each of which involve engagement and student placement directly with industry partners.
- Developed new research collaborations with Oregon Health Sciences University, which, among other things, led to the establishment of a new Center for Biomedical Data Science.
- Fostered the development of new undergraduate and graduate degree programs in bioengineering, the first engineering degrees at the UO.

Balmer Institute for Children's Behavioral Health

Building upon relationships established during my tenure in the research office, I brought together faculty drawn from across psychology, special education, counseling, and prevention science to create an innovative approach for addressing the mounting crisis in children's mental and behavioral health by establishing new bachelor's level training for the behavioral health workforce and by greatly expanding our research efforts in this space. This work is supported by a $420 million gift from Connie and Steve Ballmer, with whom I worked directly to shape and fund the project. The program necessitates engagement and co-creation among state agencies, school districts and local community groups, and led to the purchase of a new campus in Portland to facilitate training and engagement with historically underserved populations.

- Directed coordination with the governor's office and other state stakeholders to eliminate potential barriers to success for the program.
- Initiated cluster hire of new institute-related faculty.
- Helped to shepherd new degree program through shared governance and state approval processes.
- Led the recruitment, hiring and appointment of the permanent executive director.
- Led the purchase and strategic planning related to a new campus in Portland to support the Balmer Institute and other Portland-based UO graduate programs.

Inclusive excellence

- Have provided 24 years of engagement and support for our Summer Program for Undergraduate Research (directing it for two years), which aims to enhance broad participation in the sciences through on-campus research experiences.
- Created SCORE, which provides initial cohort training of diverse undergraduate students in research and professional development and then places the students into UO research labs.
- Created the Undergraduate Research Opportunity Program (UROP) within the research office and hired its first director.
- As provost, worked with faculty-driven groups to establish new degrees/minors in LatinX Studies, Black Studies, and Indigenous Studies and to support cluster hiring in Indigenous, Race and Ethnic Studies and a campus-wide Indigenous Studies hiring initiative.
- Created a faculty-led taskforce on becoming a Hispanic Serving Institution.

- Helped each school, college, and administrative unit finalize and evaluate their Diversity Action Plans.
- As interim president, created the Home Flight Scholars Program, which provides free tuition and fees for all American Indian/Alaska Native Oregon residents who are members of the 574 federally recognized tribes.

Entrepreneurship and Innovation

- Serve as a founder and scientific advisor for a spinout company from my lab (Evergreen Biosciences) based on patent pending genomic transformation technology developed in my laboratory.
- As provost, established an Innovation and Entrepreneurship Initiative that led to the hiring of new staff, the restructuring of university operations related to economic development, and the awarding of a successful Federal Economic Development Administration grant.
- As interim president, partnered with the University of Oregon Foundation to create Launch Oregon, a new venture fund focused on supporting the translation of UO research into new startup companies.
- Built UO's first rentable laboratory spin-out spaces as part of the Knight Campus building.
- Led the purchase of a new campus in Portland, OR to allow greater opportunities for professional training for students, closer contacts with the business community, and increased societal impact of faculty research activities.
- Participated in a number of state and local economic development programs and planning activities. Built strong relationships with local, state and federal representatives.
- Supervised a new data science initiative, leading to a new integrative degree program in data science and a faculty-led comprehensive strategic planning process that has resulted in the creation of a new School of Computer and Data Science within the College of Arts and Sciences.
- Directed the development of a transdisciplinary initiative in the environment and worked with the director to engage more than hundred faculty and staff in planning discussions.
- Initiated a faculty-led strategic planning process in sports and wellness that involves business, journalism, communications, marketing, design, sports science, and regenerative medicine. This effort also led the creation of a new international network of leading universities operating in the sport and wellness area (GSUN).

Research Administration

- Supervised activities of research core facilities and research institutes, including diverse areas such as genomic, materials characterization and manufacturing, advanced computing facilities, and the Oregon Humanities Center.
- Oversaw the activities of our animal care programs, including fiscal and compliance

oversight, the purchase and implementation of new compliance and animal inventory software, and supervising any reportable events to the National Institutes of Health.
- Restructured the budget allocation process for university research centers and institutes.
- Oversaw seed funding and bridge funding competitions within the research office.
- Directed the matching funds program for the research office.
- Supervised the allocation of startup funds for new faculty hires.
- Organized faculty and proposal support for a successful $10 million NIH Center of Excellence in Systems Biology.
- Served on research office senior leadership team overseeing compliance, innovation, and financial oversight.

Fiscal Oversight
- Restructured the financial charge-back models and budgets for the core facilities.
- Restructured and reenergized the Office of the Provost and recruited and retained a new talented group of academic leaders. Established new leadership and teambuilding meetings for both vice provosts and for academic deans.
- Hired new deans of the College of Arts and Sciences and the College of Design, as well as Vice Provosts for Academic Affairs, University Libraries, and Graduate Studies
- Balanced the budgets of the schools and colleges, many of which had substantial debts and budgetary overruns before I began my work as provost.
- Led the covid crisis response as a member of the senior policy group, including establishing remote-education policies, on campus health approaches, and creation of a new covid-testing facility with statewide impact.
- Addressed financial and employment issues to help stave off a fiscal crisis during the pandemic, resulting in no pay cuts, layoffs or other employment actions of any faculty or staff within my portfolio, except for a few staff in global education (no study abroad programs during this period).
- Directed space planning and facilities investments in our new $60 million campus in Portland.

HONORS AND FELLOWSHIPS:

2017	Fellow, American Association for the Advancement of Science
2015	Professeur Invité, Laboratoires d'Excellence (Labex) MemoLife program, École Normale Supérieure, Paris, France
2008-2012	Senior Scholar in Aging Award, Ellison Medical Foundation
2007-2012	Fund for Faculty Excellence Award, University of Oregon
2006-2007	John Simon Guggenheim Fellowship
2003-2006	W. Taylor Fithian Faculty Fellowship, Biology Department, Univ. Oregon

2000 University Research Award for Outstanding Research Achievement, UTA
1999-2000 Professor of the Year, Phi Sigma (Graduate Student Honor Society), UTA
1991-1992 NIH NRSA Postdoctoral Fellowship, University of Wisconsin, Madison
1989-1991 NIH Genetics Pre-doctoral Trainee, University of Chicago
1986-1989 National Science Foundation Pre-doctoral Fellowship, University of Chicago
1986-1989 Searle Fellow, University of Chicago
1986 Phi Beta Kappa, Reed College

SERVICE TO FUNDING AGENCIES:

National Institutes of Health

Topics in Basic Cancer Biology (ZRG BTC-T) Study Section, co-chair (2025)
Bioengineering and Tissue Engineering for Neuroscience (BTEN) Study Section, mail reviewer (2025)
Stressors and Aging R61 Study Section, chair (2025)
Genetics of Health and Disease (GHD) Study Section, ad hoc member (2025)
Cellular Mechanisms of Aging and Development (CMAD) Study Section, ad hoc member (2024)
Nathan Shock Centers of Excellence in Basic Biology of Aging & Nathan Shock Centers Coordinating (P30/U24) Study Section, member (2024)
Networking/Infrastructure for Non-Human Primate Species in Aging and Life Spans (R61) Special Emphasis Panel, member (2023)
Genetic Variation and Evolution (GVE) Study Section, member (2016–2018), chair (2018-2020)
NIGMS Maximizing Investigator's Research Award (MIRA) Study Section, ad hoc member (2015)
Transformative R01, Genes, Genetics & Genomics, reviewer (2014)
Intramural Program Review, Systems Biology Center, National Heart Lung and Blood Institute, individual investigator reviewer (2014)
Genetic Variation and Evolution (GVE) Study Section, ad hoc member (2009, 2010, 2011, 2013)
NRSA Postdoctoral Fellowship Panel, Genes, Genetics & Genomics, ad hoc member (2005, 2006, 2008)
Special Review Panel, Genes, Genetics & Genomics, member (2006)
Special Emphasis Panel, National Institute on Alcohol Abuse and Alcoholism, member (2000)

National Science Foundation

Population and Evolutionary Processes Panel, member (2003, 2007, 2013)
Special Panel on "Frontiers in Evolutionary Biology," member (2005)

EDITORIAL AND SCIENTIFIC SOCIETY SERVICE:

2010-2016 *Associate Editor*, Genes, Genomes, and Genetics (G3)

1999-2012 *Associate Editor*, Genetical/Genetics Research
2006-2010 *Associate Editor*, Genetics
2002-2005 *Associate Editor*, Evolution
2012–2014 *Audit Committee*, Genetics Society of America
2008-2009 *Member*, Scientific Advisory Board, National Evolutionary Synthesis Center (NESCent)
2006-2008 *Council Member*, Society for the Study of Evolution
1999-2003 *Member*, Internet Resources Advisory Committee, Society for the Study of Evolution
1997-2000 *Member*, Nominations Committee, Society for the Study of Evolution

Reviewer: *Aging Cell, American Naturalist, BMC Ecology, BMC Evolution, BMC Genomics, Copeia, Current Biology, eLife, Evolution, Genetica, Genetics, Genetical Research, Journal of Evolutionary Biology, Journal of Theoretical Biology, Journal of Herpetology, Heredity, Herpetologica, Nature, Nature Genetics, Nature Reviews Genetics, National Science Foundation, Nucleic Acids Research, Proceedings of the National Academy of Science, PLoS Biology, PLoS Computational Biology, PLoS Genetics, PLoS ONE, Science*

MEDIA AND OUTREACH:

1999-2005 *Editor*, Evonet.org, a website for education and research in evolutionary biology
2002-2004 *Primary Advisor*, Rediscovering Biology TV series, Oregon Public Broadcasting, Annenberg/CPB (www.learner.org)
2000-2008 *Member*, Education Committee, Society for the Study of Evolution
1995 *Consultant and commentator*, DNA Testing, KXAS TV NBC, Dallas

UNIVERSITY SERVICE:

University of Oregon (university-wide)

2017 *Chair*, Executive Director search committee, Phil and Penny Knight Campus for Accelerating Scientific Impact
2015– *Faculty advisor*, Students of Color Opportunities for Research Enhancement (SCORE) undergraduate research program
2015–2017 *Member*, Executive Committee, University of Oregon NIH Genetics Training Grant
2015-2016 *Member*, VP Research & Innovation Search Committee
2012-2014 *Member (ad hoc)*, University Research Advisory Board
2008-2013 *Member and Chair*, University Science Council
2001-2013 *Member*, Executive Committee, University of Oregon NIH Genetics Training Grant
2000-2012 *Co-Director*, NSF IGERT Training Program in Evolution, Development and Genomics

2008-2012 *Member*, High Throughput Genomics Coordinating Group
2010-2011 *Member*, Dean's Department Heads Advisory Group
2009-2011 *Member*, Steering Committee for the Program in Statistics, Informatics, and Applied Math
2010-2011 *Member*, VP Research Search Committee
2004-2005 *Member*, Dean's Advisory Committee on Promotion and Tenure, College of Science
2004-2005 *Member*, University Educational Technology Committee
2000-2001 *Member*, Dean's Advisory Committee for the Biology Department Chair Search
2000-2002 *Member*, Genomics/Proteomics Facility Advisory Committee, College of Arts and Science
2000-2002 *Member*, Bioinformatics Group Steering Committee, College of Arts and Science

University of Oregon (Departmental)

2025 *Member*, Department of Biology Executive Committee
2024 *Member*, Instructional Technology Committee
2018 *Member*, Undergraduate Research Committee
2016, 2017 *Chair*, Genomics and Bioinformatics Search Committee
2015 *Chair*, Evolutionary Biology Search Committee
2013, 2015 *Member*, Graduate Admissions Committee, Biology Department
2009-2010 *Member*, Biology Department Personnel Committee
2008-2009 *Member*, Evolutionary Biology Search Committee
2007-2008 *Member*, Evolutionary Biology Search Committee
2005-2006 *Chair*, Evolutionary Biology Search Committee
2004-2005 *Member*, Ecology Search Committee
2003-2004 *Chair*, Ecology and Evolution Search Committee
2001-2002 *Chair*, Ecology and Evolution Search Committee
2000-2001 *Member*, Oregon Institute of Marine Biology Director Search Committee
2008-2009 *Member*, Graduate Affairs Committee, Biology Department
2000-2005 *Member*, Undergraduate Curriculum Committee, Biology Department
2000-2006 *Member*, Graduate Admissions Committee, Biology Department
2002 *Chair*, Ad hoc Committee on Graduate Affairs, Biology Department
2002-2005 *Chair*, Seminar Committee, Ecology and Evolution
2000-2002 *Chair*, Computer Resources Committee, Ecology and Evolution

University of Texas at Arlington

1999-2000 Chair's Advisory Committee, Biology Department
1998-2000 Promotion and Tenure Committee, Biology Department
1994-2000 Secretary, Graduate Studies Committee, Biology Department
1999-2000 Undergraduate Curriculum Committee, Biology Department

2000 University Faculty Developmental Leave Committee
1995-2000 University Safety Committee
1998-2000 Secretary, College of Science Instructional Technology Committee
1996-1998 Science Honors Course Development Committee
1993-1996 Student Grievance Review Committee, Biology Department
1992-1995 Goals and Standards Subcommittee of the Graduate Studies Committee
1993-1995 Seminar Committee, Biology Department
1997-1998 Eukaryotic Genetics Search Committee
1993-1994 Cell and Molecular Biology Search Committee
1993-1994 UTA Minority Student Mentor Project

Graduate and Undergraduate Service

1988-1991 *Computer Consultant*, Department of Ecology & Evolution and Committee on Evolutionary Biology, University of Chicago
1990-1991 *Graduate Student* Representative, Committee on Evolutionary Biology, University of Chicago
1985-1986 *Student Member*, Technological Resources Committee, Reed College
1984-1986 *Assistant Systems Administrator*, Academic Computing, Reed College

RESEARCH INTERESTS:

Aging biology; genetics of longevity and stress response; neuronal health and dementia; genomics; molecular quantitative genetics; theoretical population and quantitative genetics; behavioral genetics; gene interaction systems and genetic networks; high throughput, high precision phenotyping.

ACTIVE FUNDING:

With 30 years of continuous federal funding, I retain a very active lab of roughly 15 members and $2 million/year in total funding ($3 million/year including philanthropy), which has historically been among the top five awardees for grants from the NIH at the UO. Unless otherwise noted, Phillips is the PI on each grant listed and listed costs are those provided to the Phillips Lab.

2019-2030 MIRA: Systems genomics of complex traits. $1,512,500 direct costs, $2,253,625 total costs. National Institutes of Health R35GM131838.
2024-2029 Natural variation underlying extraordinary lifespan. $1,050,000 direct costs, $1,564,500 total costs. National Institutes of Health R01AG088629.
2024-2026 Genome engineering for a novel post-reproductive genetic screen for increased longevity. $275,000 direct costs, $407,000 total costs. National Institutes of Health R21AG086869.
2022-2027 Caenorhabditis Intervention Testing Program at the University of Oregon. $2,005,000 direct costs, $2,957,375 total costs. National Science of Health U01AG045829.

2022-2027 Caenorhabditis Intervention Testing Program Data Center. $975,000 direct costs, $1,438,125 total costs. National Institutes of Health U24AG056052.

2025-2030 Characterizing individual responsiveness to exercise to enable engineering of mitohormetic probiotics (Karen Guillemin, PI; Phillips, co-I). Phillips portion: $60,000 direct costs, $89,400 total costs. National Institutes of Health R61AT013374.

PRIOR FUNDING:

2017-2023 Systems variation underlying the genetics of aging. $808,000 UO direct costs, $2,500,000 total costs. With Hang Lu (Georgia Tech, co-PI). National Institutes of Health R01AG056436.

2019-2022 Novel genetic screen for increased late-life neuronal health. $275,000 direct costs, $405,625 total costs. National Institutes of Health R21AG066051.

2017-2022 Caenorhabditis Intervention Testing Program at the University of Oregon. $1,865,000 direct costs, $2,750,000 total costs. National Science of Health U01AG045829. Renewal submitted 10/21.

2018-2022 Caenorhabditis Intervention Testing Program Data Center. $269,825 direct costs, $397,972 total costs. National Institutes of Health U24AG056052. Renewal submitted 10/21.

2021-2022 CITP Data Center supplement. $92,770 total costs. National Institutes of Health U24AG056052.

2018-2020 CITP Data Center supplement. $171,894 direct costs, $253,544 total costs. National Institutes of Health U01AG045829.

2015-2020 Deterministic and stochastic effects of diet on demography. $1,125,000 direct costs, $1,631,250 total costs. National Institutes of Health R01AG049396.

2018-2019 Alzheimer's Disease supplement: systems variation underlying the genetics of aging. $173,419 direct costs, $244,918 total costs. National Institutes of Health R01AG056436.

2015-2019 Systems genetics of natural variation in stress response pathways. $841,620 direct costs, $1,144,382 total costs. National Institutes of Health R01GM102511.

2012-2017 META: Microbial Ecology and Theory of Animals. $8,000,000 direct costs to the Center, $11,000,000 total costs. Karen Guillemin, PI. National Institutes of Health (Center of Excellence in Systems Biology).

2013-2017 Genetic variation underlying the response to longevity interventions. $1,047,655 direct costs, $1,487,425 total costs. National Science of Health U01AG045829.

2012-2015 An experimental model for stochastic biodemography. $275,000 direct costs, $362,957 total costs. National Institutes of Health R21AG043988.

2011-2015 Functional and population genomics of small RNA regulation. $674,187 UO direct costs, $1,525,263 total costs. With Asher Cutter (University of

Toronto, co-PI). National Institutes of Health R01GM096008.

2011-2015 Mating systems and the origins of genetic conflict. $545,751 direct costs, $775,000 total costs. National Science Foundation DEB-1120417.

2008-2012 Natural variation in genomic targets of aging pathways. $600,000 direct costs, $830,000 total costs. Ellison Medical Research Foundation.

2009-2011 Natural ecology of stress and aging in *C. elegans*, part of the Biodemography of Aging Program Project. $140,774 direct costs, $208,346 total costs. National Institutes of Health PO1 AG022500, subcontract from UC Davis (James Carey, PO1 PI).

2007-2010 Partial selfing and the genetic basis of mating system variation. $456,000 direct costs, $660,000 total costs. National Science Foundation DEB-0641066.

2007-2010 Partial selfing and the genetic basis of mating system variation, REU supplements (support for five students). $12,000, $6,000, $12,000 total costs. National Science Foundation DEB-0737592.

2007-2010 The Microevolution of craniofacial development in threespine stickleback. $450,000 total costs. With William Crekso (lead PI) and John Postlethwait and Charles Kimmel (co-PIs). National Science Foundation, IBN-0642264.

2005-2010 Integrated training in the evolution of development. $3,000,000 direct costs. With John Postlethwait (PI), Karen Guillemin (co-PI), and Rudolf Raff (Indiana University, co-PI). National Science Foundation, Integrated Graduate Education and Research Training Program DGE-0504627.

2007-2010 Natural variation in aging: building upon the nematode model system. $82,000 direct costs, $119,000 total costs. National Institutes of Health R03AG029377.

2006-2009 OPUS: The evolution of genetic architecture. $95,708 direct costs, $142,126 total costs. National Science Foundation DEB-0614588.

2003-2007 Collaborative Research: Experimental tests of the adaptive significance of ectotherm thermoregulation. $246,488 direct costs, $367,267 total costs. Half of a collaborative grant with Raymond Huey (University of Washington) as the PI on the other award. National Science Foundation IBN-0416205.

2003-2007 Genetic basis of morphological evolution in sticklebacks. $712,000 total costs. With John Postlethwait (lead PI) and Charles Kimmel (co-PI). National Science Foundation, IBN-0236239.

2003-2006 Mutation, mating systems, and the rate of adaptation. $311,580 direct costs, $450,000 total costs. National Science Foundation, DEB-0236180.

2004-2006 Mutation, mating systems, and the rate of adaptation, REU supplements (support for three students, two minority). $11,633 total costs; $12,000 total costs. National Science Foundation, DEB-0425301.

2004 Genetic basis of morphological evolution in sticklebacks, Research Opportunity Award supplement for Dr. Robert Kaplan (Reed College, sabbatical visit in Phillips lab). $30,000 total costs. National Science

Foundation, IBN-0236239.

2001 Evolution of genetic covariance structure. $33,333 direct costs, $50,000 total costs. National Science Foundation, DEB-0088083.

2000-2003 A web site providing research and educational information in biology. $130,493 direct costs, $191,814 total costs. National Science Foundation, DEB-9987394.

1999-2003 The evolution of virulence of equine infectious anemia virus: an experimental approach. $734,202 direct costs, $1,013,832 total costs. With Susan Payne (lead PI) and Paul Chippindale (co-PI). National Institutes of Health.

1998-2003 Quantitative trait loci for chemosensation. $545,653 direct costs, $775,532 total costs. National Institutes of Health GM54185.

1996-1999 Resampling methods for quantitative genetic analysis. $106,606 direct costs, $155,599 total costs. National Science Foundation, DBI-9722921.

1996 Faculty Development Leave. UTA.

1995 Mapping genes affecting complex traits. $6,310. Research Enhancement Program, UT Arlington.

1993 Real-time computing system for biological imaging and analysis. $245,350 from Harris Corp.

1991-1992 An analysis of the shifting-balance theory of evolution. National Institutes of Health National Research Service Award, GM14612.

DISSERTATIONS AND THESES:

"Plasticity and maternal effects in amphibian early development." B.A. Thesis in Biology, Reed College (May, 1986). Advisor: Robert H. Kaplan.

"A genetic and functional analysis of larval development in the wood frog, *Rana sylvatica.*" Ph.D. Dissertation in Evolutionary Biology, University of Chicago (August, 1991). Advisor: Stevan J. Arnold.

PUBLICATIONS (* = senior author, italics = student or postdoc):

142. *Al-Saadi, R.S.,* and P.C. Phillips*. 2026. Pro-longevity compounds extend *Caenorhabditis elegans* male lifespan and reproductive healthspan. *Geroscience* https://doi.org/10.1007/s11357-026-02144-8.

141. *Stevenson, Z.C.*, Laufer, E., Estevez, A.O., Robinson, K. and P.C. Phillips*. 2025. Precise lineage tracking using molecular barcodes demonstrates fitness trade-offs for ivermectin resistance in nematodes. *G3: Genes, Genomes, Genetics* 15: p.jkaf081.

140. *Webster, A.K.*, Willis, J.H., Johnson, E., Sarkies, P. and P.C. Phillips*. 2025. Gene expression variation across genetically identical individuals predicts reproductive traits. eLife, https://doi.org/10.7554/eLife.106525.3.

139. Driscoll, M., Sedore, C.A., Onken, B., Coleman-Hulbert, A.L., Johnson, E., Phillips, P.C. and G. Lithgow. 2025. NIA Caenorhabditis Intervention Testing Program: identification of robust and reproducible pharmacological interventions that promote longevity across experimentally accessible, genetically diverse populations. GeroScience 47: 2791–2816.

138. Banse, S.A., C.A. Sedore, A.L. Coleman-Hulbert, E. Johnson, B. Onken, D. Hall, E. Segerdell, E.G. Jones, Y. Song, H. Osman, J. Xue, E. Battistoni, S. Guo, A.C. Foulger, M. Achanta, M. Sheikh, T. Fitzgibbon, J.H. Willis, G.C. Woodruff, M. Driscoll, G.J. Lithgow, and P.C. Phillips*. 2025. Computer prediction and genetic analysis identifies retinoic acid modulation as a driver of conserved longevity pathways in genetically-diverse *Caenorhabditis* nematodes. eLife 13:RP104375.

137. *Webster, A.K.*, and P.C. Phillips*. 2025. Epigenetics and individual variation: from concepts to causality across timescales. Nature Reviews Genetics 26: 406–423.

136. Teterina, A.A., J.H. Willis, C.F. Baer, and P.C. Phillips*. 2025. Pervasive conservation of intron number and other genetic elements revealed by a chromosome-level genome assembly of the hyper-polymorphic nematode *Caenorhabditis brenneri*. Genome Biology and Evolution 17: evaf037.

135. Banse, S.A., Coleman-Hulbert, A.L., Sedore, C.A., Johnson, E., Lithgow, G.J., Driscoll, M. and P.C. Phillips*. 2025. Caenorhabditis Intervention Testing Program: all-trans retinoic acid-related compounds tamibarotene and bakuchiol do not extend lifespan in Caenorhabditis nematodes. *Micropublication Biology* 2025:10-17912.

134. *Kasimatis, K.R.*, J.H. Willis, C.A. Sedore, and P.C. Phillips*. 2024. Transcriptomic sexual conflict at two evolutionary timescales revealed by experimental evolution in *Caenorhabditis elegans*. Genome Biology and Evolution 16: eave256.

133. *Woodruff, G.C.,* J.H. Willis, and P.C. Phillips. 2024. Widespread changes in gene expression accompany body size evolution in nematodes. G3: Genes, Genomes, and Genetics 14: jkae110.

132. Banse, S.A., C.M. Jarret, K.J. Robinson, B.W. Blue, E.L. Shaw, and P.C. Phillips*. 2024. The Egg-Counter: A novel microfluidic platform for characterization of *Caenorhabditis elegans* egg laying. Lab on a Chip 24:2975-2986.

131. Banse, S.A., E.G. Jackson, E.G. , C.A. Sedore, C.A., B. Onken, D. Hall, A. Coleman-Hulbert, P. Huynh , T. Garrett, E. Johnson, G. Harinath, D. Inman, S. Guo, M. Morshead, J. Xue, R. Falkowski, E. Chen, C. Herrera, A.J. Kirsch, V.I. Perez, M. Guo, G.J. Lithgow, M. Driscoll, and P.C. Phillips*. 2024. The coupling between healthspan and lifespan in *Caenorhabditis* depends on complex interactions between compound intervention and genetic background. Aging 16:5829-5855.

130. *Woodruff, G.C.,* J.H. Willis, and P.C. Phillips. 2024. Patterns of genomic diversity in a

fig-associated close relative of *Caenorhabditis elegans*. Genome Biology and Evolution 16: evae020.

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15. Whitlock, M.C., and P. C. Phillips. 1999. Genetic drift. Encyclopedia of Life Sciences. Nature Publishing Group, London. www.els.net

14. Phillips, P.C. 1999. From complex traits to complex alleles. Trends in Genetics 15:6-8.

13. Phillips, P.C., and N.A. Johnson. 1998. The population genetics of synthetic lethals. Genetics 150:449-458.

12. Phillips, P.C. 1998. The language of gene interaction. Genetics 149:1167-1171.

11. Phillips, P.C. 1998. Genetic constraints at the metamorphic boundary: Morphological development in the wood frog, *Rana sylvatica*. Journal of Evolutionary Biology 11:453-463.

10. Phillips, P.C. 1998. Designing experiments to maximize the power of detecting correlations. Evolution 52:251-255.

9. Phillips, P.C. 1997. The rise and fall of new mutations. Trends in Ecology and Evolution 12:466-468.

8. Phillips, P.C. 1996. Waiting for a compensatory mutation: phase zero of the shifting-

balance process. Genetical Research, Cambridge 67:271-283.

7. Phillips, P.C. 1996. Maintenance of polygenic variation via a migration-selection balance under uniform selection. Evolution 50:1334-1339.
6. Whitlock, M.C., P.C. Phillips, F.B.G Moore, and S. Tonsor. 1995. Epistasis and multiple fitness peaks. Annual Review of Ecology and Systematics 26:601-29.
5. Whitlock, M.C., P.C. Phillips, and M.J. Wade. 1993. Gene interaction affects the additive genetic variance in subdivided populations with migration and extinction. Evolution 47:1758-1769.
4. Phillips, P.C. 1993. Peak-shifts and polymorphism during phase three of Wright's shifting-balance process. Evolution 47:1733-1743.
3. Phillips, P.C., and M.J. Wade. 1990. *Rana sylvatica* (wood frog). Reproductive mortality. Herpetological Review 21:59.
2. Phillips, P.C., and S.J. Arnold. 1989. Visualizing multivariate selection. Evolution 43: 1209-1222.
1. Phillips, P.C., and R.H. Kaplan. 1987. A microscope-computer interface for the measurement of size and shape. Herpetologica 43: 384-385.

PATENTS:

Stevenson, Z.C., S.A. Banse, and P.C. Phillips. 2025. Genetic data compression and methods of use. US 12,371,712.

UNREFEREED NOTES AND ABSTRACTS:

Phillips, P.C. 1995. Plate ecology. Worm Breeder's Gazette 13(5):13.

Phillips, P.C. 1990. Quantitative-genetic analysis of morphological development in the wood frog, *Rana sylvatica*. Amer. Zool. 30:87A. (Abstract)

TECHNICAL REPORTS:

Evolutionary Biology Workshop. 2005. Frontiers in Evolutionary Biology. Prepared for the National Science Foundation. 10 pp.

COMPUTER SOFTWARE (see http://www.uoregon.edu/~pphil/software.html):

Phillips, P.C. 1994-1998. CPC: the Flury hierarchy of covariance matrix comparisons.

Phillips, P.C. 1991-1998. H2jack: jackknife estimates of quantitative genetic parameters.

Phillips, P.C. 1993-2004. H2boot: bootstrap estimates of quantitative genetic parameters.

Phillips, P.C. 1995-1998. CPCrand: randomization test of covariance matrix comparisons for quantitative genetic data.

Phillips, P.C. 1987. Scope: a computer-microscope interface.

TEACHING ACTIVITIES:

Evolution, Oregon (Winter 2026, Spring 2002, 2016), UTA (Spring, 1995; Fall, 1996, 1997, 1998)
Evolutionary Quantitative Genetics (Spring 2019)
Biological Modeling, Oregon (Winter 2016)
Quantitative Methods in Ecology and Evolutionary Biology, Oregon (Winter 2004, 2006, 2008, Fall 2009)
Molecular Evolution, Oregon (Winter 2009)
Experimental Design, Oregon (Spring, 2001, 2005), UTA (Fall, 1992-94, Spring 1996, 1998, 2000)
Foundations of Biology (Evolution and Biodiversity), Oregon (Spring 2003, 2004, 2005, 2006)
Population Genetics, Oregon (Winter 2002), UTA (Spring, 1993, 1997, 1999; Fall, 1995)
Genetics, UTA (Spring, 1998)
Foundations of Science, UTA (Spring, 1997, 1999; Fall, 1997)
Molecular Genetics, UTA (Fall, 1996)
Seminars:
Evolution of Genetic Architecture, Oregon (2005–2010)
Evolution of Development, Oregon (Winter, Spring, Fall, 2001–2011), UTA (Spring, 1999)
Evolution of Genetic Covariance Structure, Oregon (Fall, 2002; Winter 2003)
Experimental Evolution, Oregon (Fall, 2002)
Philosophy of Biology, UTA (Spring, 2000)
Molecular Genetic Analysis, UTA (Spring, 1996)
Genetics of Adaptation, UTA (Fall, 1995)
Advanced Evolution, UTA (Spring, 1994)
Comparative Method, UTA (Fall, 1994)
Topics in Evolutionary Biology, UTA (Spring, 1994)
Statistical Issues in Biology, UTA (Fall, 1993)
Teaching Assistant, University of Chicago:
Introductory Ecology (Spring, 1987, 1988)
Functional Design of Organisms (Winter, 1988, 1989)
Advanced Topics in Evolutionary Genetics (Fall, 1989)
Teaching Assistant, Reed College:
Population Biology (Spring, 1984–86)

WORKSHOP PARTICIPATION:

4/2025 Course-Based Undergraduate Research Experiences (CUREs) Using In Silico Resources to Expand Aging Biology Education, National Institutes of Aging,

	Virtual (co-chair)
3/2025	Qlife Workshop on Polygenic Adaptation, Paris, France
8/2023	Synthetic Biology and Aging, National Institutes of Aging, Washington, DC.
6/2018-19	Evolutionary Quantitative Genetics, Friday Harbor Labs, University of Washington
6/2016	Evolutionary Quantitative Genetics, NIMBioS, University of Tennessee
5/2013	Biodemography, Stanford University
8/2013	Biology of Aging, Woods Hole
8/2013	Evolutionary Quantitative Genetics, National Evolutionary Synthesis Center, Durham, NC

STUDENT AND POSTDOC TRAINING:

Current Graduate Students:

2024–	Aubrey Mayer. Ph.D. candidate. Influence of sexual reproduction on adaptive evolution.

Previously Supervised Graduate Students:

1997	Andrew D. Stewart, M.S. Currently an associate professor at Canisius College.
1997	Behzad Gerami, M.S. Currently a stem cell biologist at Thymmune Therapeutics.
1999	Aliece Watts, M.S. Currently Quality Manager at Integrated Forensic Laboratories and Lecturer, University of Texas at Arlington.
2000	Asha Patel, M.S.
2000	Kirsten Lundin, M.S. Currently Dean of Instruction for Juan Seguin High School in Arlington, TX.
2001	Juliet Morphew, M.S. Currently enterprise client manager, Siemens Smart Infrastructure, Dallas, TX.
2002	Suzanne Estes, Ph.D. Currently an associate professor, Department of Biology, Portland State University.
2002	Julie Thompson, Ph.D. (co-advised with Emilia Martins, Indiana University). Currently an associate professor with the American Public University System.
2003	Scott Kolpak, M.S. 2003 (co-advised with Michael Lynch, Indiana University). Currently a geneticist for the US Forest Service.
2004	Jan Aagaard, Ph.D. Currently a postdoctoral fellow, Department of Genome Sciences, University of Washington.
2004	Colin Peden, M.S. Musician and audio intern at KALW, San Francisco.
2006	David Baltrus, Ph.D. (co-advised with Karen Guillemin). Currently an associate professor, School of Plant Sciences, University of Arizona.
2007	Erika Hersch, Ph.D. (co-advised with Bitty Roy). Currently an associate

professor, Department of Biological Sciences, Michigan Tech University.

2009 Richard Jovelin, Ph.D. Currently a bioinformatician at the Ontario Institute for Cancer Research.

2009 Levi Morran, Ph.D. Currently an associate professor, Department of Biology, Emory University.

2012 Bryn Gaetner, Ph.D. Associate Medical Writer, Prescott Medical Communications Group.

2013 Heather Archer, M.S.

2014 Kristin Sikkink, Ph.D. (co-advised with Bill Cresko), Currently a postdoctoral fellow, University of Minnesota.

2018 Christine O'Connor, Ph.D. Currently a postdoctoral fellow, University of Minnesota.

2019 Heather Archer, Ph.D. Currently an independent researcher.

2019 Katja Kasimatis, Ph.D. Currently a postdoctoral fellow, University of Toronto.

2020 P. Alex de Verteuil, Ph.D., Currently a project manager and team lead at Abcam.

2024 Zach Stevensen, Ph.D., Currently a postdoctoral fellow, University of Washington.

2025 Rose Al-Saadi. Ph.D. Currently a postdoctoral fellow, University of Oregon

Dissertation Advisory Committees (UO non-supervised students):

Current Ecology & Evolution: Ananya Kapoor, Gabriel Chavez

Past Ecology & Evolution: Ahrash Bissell (Chair, 2001), Erich Flemming (2006), Derrick Mathias (Chair, 2006), Craig Everroad (Chair, 2007), Laurel Pfeiffer-Meister (Chair, 2008), Kevin Emerson (2009), Sean Carroll (Chair, 2009), Kimbery Lum (granted MS, 2010), Elizabeth Perry (2012), Alida Gerritsen (Chair, 2014), David Anderson (Chair, 2014), Paul Cziko (2014), Kristin Alligood (2016), Thom Nelson (2017), Allison Fuiten (Chair, 2018), Murillo Rodrigues (2023)

Past Neuroscience: Michael Spezio (2002), Christian Frokjaer-Jensen (left program 2004), Yvonne Bradford (2006), Todd Thiele (2007), Katherine McCormack (Chair, 2013), Samantha Steiner (2016), Abe Katzen (Chair, 2016), Stacy Levichev-Connolly (Chair, 2021)

Past Molecular Biology: Greg Ellis (2002), Michael Miller (2012), Jessica Preston (2015), Anneliese Morrison (2021)

Past Marine Biology: Michael Berger (2004), Erin Cooper (2009, Chair)

Past Chemistry: Diana Liu (2005), Alesia KcKeown (2014), Luke Wheeler (2017)

Past Computer Science: Bryan Kolaczkowski (2006)

Current Postdocs:

2018– Anastasia Teterina. Genomic analysis of the genotype-phenotype map.

Previously Supervised Postdocs:

1999-2000 Marjorie Gurganus. Currently a patent attorney, Mei & Mark, LLP, North Carolina.

2002-2003 Henrique Teotónio. Currently an associate professor, Institut de Biologie de l'École Normale Supérieure, Paris, France.

2002-2004 Julie Thompson. Currently an associate professor with the American Public University System.

2001-2005 Steven Proulx. NIH NRSA postdoctoral fellowship. Current an associate professor, Department of Ecology, Evolution and Marine Biology, UC Santa Barbara.

2001-2005 Katrina McGuigian (co-mentored with John Postlethwait). Currently an associate professor at University of Queensland, Australia.

2004-2012 Jennifer Anderson. NIH NRSA postdoctoral fellowship. Currently a research scientist at Uppsala University.

2007-2012 Rose Reynolds. NIH NRSA postdoctoral fellowship. Currently a data science research associate, Children's Mercy Research Institute.

2009-2013 John Willis. Currently a research associate at the University of Oregon.

2010-2014 Janna Fierst. NSF Bioinformatics postdoctoral fellow. Currently an associate professor at Florida International University.

2012-2015 Nadine Timmermeyer. Experimental evolution of polygamy in *C. remanei*.

2013-2016 Stephen Banse. Currently CEO of Evergreen Biotechnology, Eugene, OR.

2016–2017 Tyler Hether. Bioinformatics researcher at Adaptive Biotechnology.

2015–2020 Gavin Woodruff. NIH NRSA postdoctoral fellow. Currently an assistant professor at University of Oklahoma.

2021-2024 Amy Webster. NIH NRSA Postdoctoral Fellowship. Currently an assistant professor at Florida State University.

Supervised Undergraduate Research:

Over 80 total

UO Clark Honors College students: Jennifer Comstock (2008), Emily Ebel (2011), Hannah Jarman-Miller (2012), Max Ryan (2012), Mekhala Dissanayake (2014), Hanna Moore (2015), Benjamin Blue (2015), Eric Hammerschmith (2017), Tela Caul (2017), Sally Claridge (2017), Juliana Rantisi (2018), Hanna Minns (2019), Alex Smith (2019)

UO Biology Honors Theses: Beverly Ajie (2001), Brian Cappy (2007), Jennifer Comstock (2008), Stephen McNamara (2008), Tyrell Love (2008), Lauren Noll (2011), Byron Etta (2013), Anna Crist (2013), Ruben Lancaster (2019), Hanna Lewack (2023), Ananya Chowdhury (2025), Ella Fliesler (2026)

UO Human Physiology Honors Theses: Sara Mete (2013), Angela Uys (2014).

UO Biochemistry Honors Theses: Benjamin Story (2013), Mekhala Dissanayake (2014).

UTA honor students: Christopher Gates (1998), Shea Holt (2000), Malahat Kizilbash (1997), John Morse (1999)

UO Summer Program for Undergraduate Research underrepresented students: 22
UTA Alliance for Minority Participation summer research students: 5

Sabbatical Visitors:

2003-2004 Dr. Robert Kaplan, Reed College
2004 Dr. Fred Janzen, Iowa State University

Other Mentorship:

2014–2021 Dr. Susan Harbison, Systems Biology Center, National Heart Lung and Blood Institute, NIH; junior investigator mentor

MENTORED UNDERGRADUATE AND GRADUATE AWARDS:

2016-2018 Christine O'Connor. Dissertation Improvement Grant: Interaction of gene flow, selection and genomic architecture on the genetics of adaptation. $18,850 total costs.

2015 Precious (Alex) de Verteuil. Diversity supplement. $116,289 total costs. National Institutes of Health (NIA).

2014 Christine O'Connor. National Science Foundation Graduate Fellowship (University of Oregon).

2011 Emily Ebel. National Science Foundation Graduate Fellowship (Stanford University).

2010 Michelle Parmenter. National Science Foundation Graduate Fellowship (University of Wisconsin, Madison).

2009-2011 Bryn Gaertner. Dissertation Improvement Grant: Determining the functional genetic basis of natural variation in thermosensory behavior. $14,993 direct costs. National Science Foundation IOS-0909816.

2007-2009 Levi Morran. Dissertation Improvement Grant: Outcrossing in a self-Fertilizing species, adding the *Caenorhabditis elegans* tool-kit to the outcrossing-selfing paradigm. $6,994 direct costs. National Science Foundation, DEB-0710386.

2007-2009 Richard Jovelin. Dissertation Improvement Grant: Evolution of neuronal regulatory genes in Caenorhabditis. $11,927 direct costs. National Science Foundation, DEB-0710378.

2005-2007 David Baltrus. Dissertation Improvement Grant: Direct tests of the adaptive benefits of gene exchange in evolving bacterial populations. $12,000 direct costs. With Karen Guillemin (co-PI). National Science Foundation, DEB-0508919.

2001-2003 Jan Aagaard. Dissertation Improvement Grant: The evolution of floral developmental genes in Mimulus. $9,221 direct costs. National Science Foundation, DEB-0105176.

2001 Beverly Ajie. National Science Foundation Graduate Fellowship (UC Davis).

MEETING ORGANIZATION:

2020 *Organizing committee*, 22nd International *C. elegans* Conference, UCLA.

2018 *Conference co-organizer*, Evolutionary biology, ecology and genomics of *C. elegans* and other nematodes. Wellcome Genome Campus, Hinxton, England.

2015 *Symposium Organizer*, "Linkage and the Limits to Adaptation in Experimental Sexual Populations," Mathematical Models in Ecology and Evolution (MMEE) annual meeting, Paris, France.

2013 *Session Chair*, "Evolutionary Genetics," Gordon Conference on Quantitative Genetics and Genomics

2009 *Symposium Organizer*, "Evolution of Molecular Function," Annual Meeting of the Society for the Study of Evolution, Moscow, Idaho

2009 *Organizer*, Darwin 200th Birthday Lecture Series, Winter/Spring, University of Oregon

2007 *Conference Chair*, Gordon Conference on Quantitative Genetics and Genomics

2006 *Co-organizer* (Henrique Teotónio, lead organizer), EMBO workshop on the study of the evolutionary biology of C. elegans and closely related species, Instituto Gulbenkian de Ciência, Portugal

2006 *Organizer*, Evo-WIBO II, Meeting of Pacific NW evolutionary biologists, Fort Warden, Washington

2005 *Conference Vice-Chair*, Gordon Conference on Quantitative Genetics and Genomics

2004 *Founding Co-organizer* (Michael Whitlock, lead organizer), Evo-WIBO, Meeting of Pacific NW evolutionary biologists, Fort Warden, Washington

2004 *Symposium Organizer*, "Evolution of Gene Regulation," UO/IU IGERT Symposium, University of Oregon

2003 *Session Chair*, "Evolutionary Genetics," Gordon Conference on Quantitative Genetics and Genomics

2001 *Symposium Organizer* (with Margaret Saks), "Evolution of Genetic Networks," UO/IU IGERT Symposium, University of Oregon

2001 *Session Chair*, "Selection in Natural and Experimental Populations," Gordon Conference on Quantitative Genetics and Genomics

1997 *Session Chair*, "Beyond QTL: Epistasis in Segregating Populations," Gordon Conference on Quantitative Genetics and Biotechnology

1993 *Symposium Organizer*, "Wright's Shifting-Balance Theory, Sixty Years Later," Society for the Study of Evolution annual meeting, Snowbird, Utah

INVITED SYMPOSIA PRESENTATIONS:

2025 Epigenetics and individuality. Epigenetics: From molecular to behavior meeting. Ettore Majorana Foundation, Erice, Sicily.

2019 Next generation experimental evolution: expanding the evolutionary toolkit in pursuit of the molecular basis of phenotypic evolution. SMBE Satellite Meeting: Towards an integrated concept of adaptation: uniting molecular population genetics and quantitative genetics, Vienna, Austria.

2018 Keynote Lecture. Ecology, Evolution, and Genomics of *C. elegans* and Other Nematodes. Wellcome Genome Campus, Hinxton, Cambridge, UK.

2018 Reproducibility and robustness in the pursuit of life-extending compounds: The *Caenorhabditis* Intervention Testing Program. Gerontological Society of America annual meeting, Boston.

2018 Whole organism genetic systems at single-cell resolution. Evolutionary Systems Biology, Welcome Genome Campus. Hinxton, England.

2017 Experimental evolution and the evolution of genetic architecture. Kavli Institute for Theoretical Physics workshop on Eco-Evolutionary Dynamics in the Nature and the Lab. University of California Santa Barbara.

2016 Systems genomics of adaptation. The Ecology of Genome Evolution. Evolutionary Biology Centre, Uppsala University.

2016 Using experimental evolution to under the complex genetics of stress resistance and aging. British Society for Research on Ageing (BSRA) Annual Meeting. Durham, England.

2016 The influence of genetic background and experimental reproducibility in identifying longevity-enhancing compounds: The *Caenorhabditis* Intervention Testing Program (CITP). Scottish Ecological Aging Research Group (SEARG). Durham, England.

2016 Integrating fitness measures for next generation quantitative genetics. Paris Fitness Workshop. École Normale Supérieure, Paris, France.

2016 Population and evolutionary genetics in the genomics era. 5th International Conference on Quantitative Genetics. Madison, WI.

2016 Systems genomics of adaptation: pleiotropy and experimental evolution of stress resistance in the nematode *Caenorhabditis remanei*. Evolutionary Systems Biology: From Model Organisms to Human Disease, Welcome Trust Meeting. Hinxton, England.

2015 Genomic analysis of the pleiotropic networks underlying the experimental evolution of increased stress resistance in the nematode *Caenorhabditis remanei*. SMBE Satellite Meeting on Investigating Biological Adaptation with NGS. Hameau de l'étoile, France.

2015 Transgenerational hormesis: Testing the adaptive plasticity hypothesis using experimental evolution to heat stress in *C. remanei*. Annual VerMidi (French *C. elegans*) Meeting, Paris, France.

2014 Environmental influences on individual variation in the stochastic demography of the nematode *C. elegans*. Keynote speaker, Evolutionary Demography Society annual meeting, Stanford, CA.

2014 Sex, Stress & Death: Experimental evolution and the genetics of complex traits in Caenorhabditis. Keynote Address, Evolutionary Biology of Caenorhabditis and Other Nematodes, Sanger Center, Hixton, England.

2014 Using experimental evolution to study the molecular quantitative genomics of stress resistance and longevity in the nematode *Caenorhabditis remanei.* Keystone Symposia on Aging—Pushing the Limits of Cellular Quality Control, Steamboat Springs, CO.

2013 Individuality: systematic and stochastic factors underlying biodemographic variation. Stanford Biodemography Workshop, Stanford, CA.

2013 Introduction and concepts. Evolutionary Genetics session, Gordon Conference on Quantitative Genetics and Genomics, Galveston, TX.

2012 Mutation, sex, and genomic evolution. National Association of Biology Teachers. Dallas, TX.

2012 Identifying the genetic basis of natural variation in stress and aging: genesis of a new nematode model system. Ellison Medical Foundation Biology of Aging Colloquium, Woods Hole, MA.

2012 Gene interactions underlying the evolution of complex traits. 4th International Conference on Quantitative Genetics. Edinburgh, Scotland.

2009 Evolution, development and genomics during the last (and next) decade. UO-IU IGERT Program in Evolution, Development and Genomics, Bloomington, IN.

2009 Evolutionary metaphors and molecular reality. Evolution of Molecular Function Symposium, Society for the Study of Evolution annual meeting. Moscow, ID.

2008 Perception and environmental context: The ecological genomics of the response to temperature, chemicals, and food within the nematode *C. elegans* and its relatives. 6th Annual Ecological Genomics Symposium, Kansas State University, Manhattan, KS.

2006 The study of evolutionary biology with Caenorhabditis. Opening talk, EMBO Workshop on the study of evolution biology with *Caenorhabditis elegans* and related species, Instituto Gulbenkian de Ciência, Lisbon, Portugal.

2006 Closing remarks. Origin of Novelty Symposium. UO-IU IGERT Program in Evolution, Development and Genomics, Bloomington, IN.

2004 Introduction and overview. Evolution of Gene Regulation Symposium. UO-IU IGERT Program in Evolution, Development and Genomics, Eugene, OR.

2003 Introduction to “Evolutionary Genetics.” Gordon Conference on Quantitative Genetics and Genomics, Ventura, CA.

2001 How should we test hypotheses about the genetics of adaptation? Georgia Genetics Symposium III: Genetics of Adaptation. University of Georgia, Athens, GA.

2001 Molecular quantitative genetics of chemotaxis in *Caenorhabditis elegans*. Georgia Genetics Symposium III: Genetics of Adaptation. University of Georgia, Athens, GA.

2001 Introduction and overview. Evolution of Genetic Networks Symposium. University of Oregon, Eugene, OR.

2001 Evolutionary genomics in natural populations: from QTL to gene function and back again. Evolutionary and Ecological Functional Genomics Symposium, Society for the Study of Evolution annual meeting, Knoxville, TN.

2001 Introduction to "Selection in Natural and Experimental Populations." Discussion leader, Gordon Conference on Quantitative Genetics and Genomics, Ventura, CA.

1999 Complex traits in a simple organism: behavioral variation for chemotaxis in the nematode *Caenorhabditis elegans*. Gordon Conference on Quantitative Genetics and Biotechnology, Ventura, CA.

1997 The language of gene interaction. Gordon Conference on Quantitative Genetics and Biotechnology, Ventura, CA.

1993 Kickstarting the shifting-balance process: Phase zero. Shifting Balance Theory Symposium, Society for the Study of Evolution annual meeting, Snowbird, UT.

OTHER PRESENTATIONS:

2025 Life extension via genetic/drug interventions occurs by delaying the onset of aging, not by slowing the rate of aging. 53rd AGE Meeting, Ancorage AK. (poster)

2025 Library based transgenesis and gene targeting using TARDIS. 25th International Worm Meeting, UC Davis. (workshop presentation co-authored and presented by Megan Moerdyk-Schauwecker)

2025 Moving *Caenorhabditis* into the pangenomic era. 25th International Worm Meeting, UC Davis. (workshop presentation co-authored and presented by Anastasia Teterina)

2025 Natural variation in the aldehyde oxidase, *gad*-3, confers oxidative stress resistance between *C. elegans* strains. 25th International Worm Meeting, UC Davis. (poster co-authored and presented by John Willis)

2025 3-bromopyruvate, gold sodium thiomalate, and sulforaphane increase lifespan across diverse *Caenorhabditis* genetic backgrounds and reset the transcriptional aging clock toward a "youthful" state. 25th International Worm Meeting, UC Davis. (poster co-authored and presented by Christine Sedore)

2025 NIA *Caenorhabditis* Intervention Testing Program: Identification of robust and reproducible pharmacological interventions that promote longevity

across experimentally accessible, genetically diverse populations. 25th International Worm Meeting, UC Davis. (poster co-authored and presented by Monica Driscoll).

2025 TARDIS: Enabling large-scale genetic library screening in an animal model. Cascadia Advanced Genomic Technologies, University of British Columbia, Canada. (poster co-authored and presented by Zachary Stevenson)

2025 Creating a novel whole-animal synthetic biology platform using C. elegans. Poster Presentation. Cascadia Advanced Genomic Technologies, University of British Columbia, Canada. (poster co-authored and presented by Haley Speed)

2024 Life extension via genetic/drug interventions occurs by delaying the onset of aging, not by slowing the rate of aging. Gerontological Society of America Annual Meeting. Seattle, WA. (poster)

2024 Genetic and chemical interventions in male *C. elegans* dramatically increase reproductive health and longevity in a sex-specific manner. American Aging Association Annual Meeting, Madison, WI. (poster co-authored and presented by Rose Al-Saadi)

2024 Is a new population genomics needed for hyper-polymorphic species? The nematode *Caenorhabditis brenneri* as a case study. Evolutionary Biology of *C. elegans* and other nematodes. Vienna, Austria.

2024 Post-insemination sexual selection in males indirectly masculinizes the female transcriptome. Evolutionary Biology of *C. elegans* and other nematodes. Vienna, Austria. June, 2024. (talk coauthored and presented by Katja Kasimatis)

2024 Epigenetic context predicts gene expression variation and reproductive traits across genetically identical individuals. The Allied Genetics Conference, Washington, DC. (talk coauthored and presented by Amy Webster).

2024 Tissue-Specific DAF-2 Degradation extends the lifespan and healthspan of *C. elegans* males. The Allied Genetics Conference, Washington, DC. (poster coauthored and presented by Rose Al-Saadi)

2024 Quantification of environmentally-dependent selection via barcoded animal lineage tracking. The Allied Genetics Conference, Washington, DC. (poster coauthored and presented by Zachary Stevenson).

2024 Navigating the genomic diversity landscape of the hyper-polymorphic nematode *Caenorhabditis brenneri*: insights and challenges. The Allied Genetics Conference, Washington, DC. (poster coauthored and presented by Anastasia Teterina).

2024 The broccoli derivative sulforaphane increases lifespan across diverse genetic backgrounds and resets the transcriptional aging clock toward a “youthful” state. American Aging Association Annual Meeting, Madison, Wisconsin. (poster co-authored and presented by Christine Sedore).

2023 High-throughput library transgenesis in *Caenorhabditis elegans* via Transgenic Arrays Resulting in Integrated Sequences (TARDIS). 24th International *C. elegans* Meeting, Glasgow, Scotland. (talk coauthored and presented by Zachary Stevenson)

2023 Inter-individual variation in gene expression underlies reproductive traits in isogenic worms. 24th International *C. elegans* Meeting, Glasgow, Scotland. (talk coauthored and presented by Amy Webster)

2023 Quantitative high throughput measurement. 24th International *C. elegans* Meeting, Glasgow, Scotland. (poster coauthored and presented by Zachary Stevenson)

2023 The impact of population size on the genome structure and evolution in *Caenorhabditis* nematodes. 24th International *C. elegans* Meeting, Glasgow, Scotland. (poster coauthored and presented by Anastasia Teterina)

2023 Pro-longevity compounds extend the lifespan and healthspan of *C. elegans* males. 24th International *C. elegans* Meeting, Glasgow, Scotland. (poster coauthored and presented by Rose Al-Saadi)

2023 Tissue-Specific daf-2/IGFR Impacts on health span in *Caenorhabditis elegans* males. EVO-WIBO, Port Townsend, WA. (poster coauthored and presented by Hannah Lewack)

2023 Genome structure shapes the divergence landscape of the hyperpolymorphic nematode *Caenorhabditis brenneri*. EVO-WIBO, Fort Worden State Park, Port Townsend, WA (poster coauthored and presented by Anastasia Teterina)

2023 Pro-longevity compounds extend the lifespan and healthspan of *C. elegans* males. American Aging Association Annual Meeting, Madison, WI. (poster co-authored and presented virtually by Rose Al-Saadi)

2023 High-Throughput Library Transgenesis in Caenorhabditis elegans via Transgenic Arrays Resulting in Diversity of Integrated Sequences (TARDIS). Genomics in Action, University of Oregon, Eugene, OR (Poster coauthored and presented by Zach Stevenson)

2022 Heritable epigenetic variation facilitates maintenance of genetic variation. Population, Evolutionary, and Quantitative Genetics Meeting of the Genetics Society of America. Asilomar, Pacific Grove, CA. (talk coauthored and presented by Amy Webster).

2022 Evolutionary dynamics in simulated gene regulatory networks. Population, Evolutionary, and Quantitative Genetics Meeting of the Genetics Society of America. Asilomar, Pacific Grove, CA. (virtual talk coauthored and presented by Anastasia Teterina)

2022 Robust longevity effects of novel compounds tested by the *Caenorhabditis* Intervention Testing Program. Gerontological Society of America. Indianapolis, Indiana. (poster co-authored and presented by Monica Driscoll)

2022 Anti-aging compounds Metformin and Thioflavin T can act on genetically diverse, proteostasis-compromised strains. Gerontological Society of America. Indianapolis, Indiana. (poster co-authored and presented by Monica Driscoll)

2022 Genomic patterns of divergence of Caenorhabditis brenneri. Evolution Biology of Caenorhabditis and Other Nematodes, McMaster University, Hamilton, Ontario, Canada (virtual poster coauthored and presented by Anastasia Teterina)

2022 Quantitative High-Throughput Measurement of Selection in an Animal System via Novel Library Transgenesis. Evolutionary Biology of Caenorhabditis and Other Nematodes, McMaster University, Hamilton. (Talk coauthored and presented by Zach Stevenson)

2022 Quantitative High-Throughput Measurement of Selection in an Animal System via Novel Library Transgenesis. EVO-WIBO, Fort Worden State Park. (Talk coauthored and presented by Zach Stevenson)

2021 Post-insemination selection dominates pre-Insemination selection in driving rapid evolution of male competitive ability. Society for Molecular Biology and Evolution. Virtual Meeting. (talk coauthored and presented by Katja Kasimatis).

2021 Genome organization of Caenorhabditis brenneri. 23rd International C. elegans Conference Virtual Meeting. (poster coauthored and presented by Anastasia Teterina)

2021 Rapid Self-Selecting and Clone-Free Integration of Transgenes into Engineered CRISPR Safe Harbor Locations in Caenorhabditis elegans. 23rd International C. elegans Conference Virtual Meeting. (poster coauthored and presented by Zach Stevenson)

2021 Using a deep learning approach to distinguish evolutionary forces that shape genetic diversity patterns in *Caenorhabditis* nematodes. ProbGen Virtual meeting. (poster coauthored and presented by Anastasia Teterina)

2020 Rapid Self-Selecting and Clone-Free Integration of Transgenes into Engineered CRISPR Safe Harbor Locations in *C. elegans.* Evolution, Ecology and Genomics of *C. elegans* and its relatives. Allied Genetics Conference Virtual Meeting. (poster coauthored and presented by Megan Moerdyk-Schauwecker)

2020 Partitioning Reproductive Success: Experimental Evolution of Male Fertility. The Allied Genetics Conference Virtual Meeting. (poster coauthored and presented by Katja Kasimatis).

2020 How functional diversity and the role of a gene affect its evolutionary trajectory: large-scale population simulations of gene regulatory networks. The Allied Genetics Conference Virtual Meeting. (poster coauthored and presented by Anastasia Teterina)

2020 Genetic diversity landscapes in Caenorhabditis nematodes: empirical results and simulations. Evolutionary Biology of Caenorhabditis and Related Nematodes Virtual Meeting (talk coauthored and presented by Anastasia Teterina)

2019 Rapid Self-Selecting and Clone-Free Integration of Transgenes into Engineered CRISPR Safe Harbor Locations in Caenorhabditis elegans. Genome Engineering: CRISPR Frontiers, Cold Spring Harbor Laboratory, NY. (poster coauthored and presented by Zach Stevenson)

2019 Mode of reproduction drives the distribution of polymorphism across the genome: theory and empirical tests in *Caenorhabditis* nematodes. 22nd International *C. elegans* meeting. Los Angeles, CA. (poster coauthored and presented by Anastasia Teternia).

2019 NDGA and Green Tea Extract reproducibly and robustly increase longevity, as evaluated using an updated *Caenorhabditis* Intervention Testing Program (CITP) workflow. 22nd International *C. elegans* Meeting, Los Angeles, CA. (poster coauthored and presented by Christine Sedore).

2019 Early-life exposure to the lifespan-extending compound ThioflavinT results in severe developmental delay in *C. elegans*. 22nd International *C. elegans* Meeting, Los Angeles, CA. (poster coauthored and presented by Alex De Verteuil).

2019 Patterns of genomic diversity and dispersal among island populations of a fig-wasp associated relative of *C. elegans*. Society for the Study of Evolution Annual Meeting. Providence, Rhode Island. (poster co-authored and presented by Gavin Woodruff).

2019 Limits to detecting genomic divergence between the sexes: Theory and empirical tests. Society for the Study of Evolution Annual Meeting. Providence, Rhode Island. (talk coauthored and presented by Katja Kasimatis).

2019 Can natural variation be used to reveal the genetic architecture of regulatory networks? A new comprehensive simulation approach. Society for the Molecular Biology and Evolution Annual Meeting. Manchester, UK (talk coauthored and presented by Anastasia Teterina)

2018 Clarifying the population genetics and empirical predictions for sex-specific genomic differentiation under antagonistic selection. 2nd Joint Congress on Evolutionary Biology. Montpellier, France. (talk coauthored and presented by Katja Kasimatis).

2018 Population genomics of selfing versus outcrossing: interaction of recombination and effective population size in *Caenorhabditis*. Ecology, Evolution, and Genomics of *Caenorhabditis* and Other Nematodes. Wellcome Genome Campus, Hinxton, Cambridge, UK. (talk coauthored and presented by Anastasia Teterina).

2018 Novel proteomic analysis and molecular evolution of *Caenorhabditis* subcellular sperm proteins. Evolutionary Biology of Caenorhabditis and

Other Nematodes. Hinxton, Cambridge, UK. (poster coauthored and presented by Katja Kasimatis).

2018 Life versus health: Tradeoffs of lifespan extension in *Caenorhabditis*. Evolutionary Biology of Washington, Idaho, British Columbia and Oregon (EvoWIBO), Fort Warden, Washington. (poster co-authored and presented by Christine Sedore)

2018 Mode of reproduction drives the distribution of polymorphism across the genome: theory and empirical tests in *Caenorhabditis* nematodes. Probabilistic Modeling in Genomics. Cold Spring Harbor Laboratory, New York. (talk coauthored and presented by Anastasia Teterina)

2017 Single-cell transcriptome profiling in *C. elegans daf-2* mutants identifies tissue-specific expression of *daf-16* target genes. 21st International *C. elegans* meeting, Los Angeles, CA. (talk coauthored and presented by Jessica Preston)

2017 The natural history of a fig-associated *Caenorhabditis*. 21st International *C. elegans* meeting, Los Angeles, CA. (poster coauthored and presented by Gavin Woodruff)

2017 High throughput assessment of natural variation in the resistance to starvation stress in *C. elegans* using microfluidics. 21st International *C. elegans* meeting, Los Angeles, CA. (poster coauthored and presented by Heather Archer)

2017 Fine scale electrophysiological analysis of pharyngeal aging and a transition-state model of activity. 21st International *C. elegans* meeting, Los Angeles, CA. (poster coauthored and presented by Stephen Banse)

2017 The Crucible: A microfluidic platform for stress assays. 21st International *C. elegans* meeting, Los Angeles, CA. (poster coauthored and presented by Stephen Banse)

2017 Automation of the Caenorhabditis Intervention Testing Program. 21st International *C. elegans* meeting, Los Angeles, CA. (poster coauthored and presented by Anna Coleman-Hulbert)

2017 Genomic analysis of chronic heat stress resistance in the nematode *Caenorhabditis remanei*. 21st International *C. elegans* meeting, Los Angeles, CA. (poster coauthored and presented by Sally Claridge)

2017 Molecular evolution of the Caenorhabditis sperm proteome. Society for the Study of Evolution Annual meeting, Portland, OR. (talk coauthored and presented by Katja Kasimatis)

2016 Establishing *C. latens* as a comparative genomic model system for further identification and characterization of microRNAs, their developmental dynamics and mRNA targets. Evolutionary Biology of *Caenorhabditis* and other nematodes. Cold Spring Harbor, New York. (talk coauthored and presented by John Willis).

2016 Microfluidic Isolation and Evolutionary Analysis of the Nematode Sperm

Proteome. Evolutionary Biology of Caenorhabditis and Other Nematodes. Cold Spring Harbor Laboratory, New York. (poster coauthored and presented by Katja Kasimatis).

2016 Evolutionary analysis of the *Caenorhabditis* nematode sperm proteome through microfluidic isolation. Society for the Study of Evolution Joint Meetings. Austin, Texas. (poster coauthored and presented by Katja Kasimatis).

2015 Genetic basis of evolved heat shock response in the nematode *Caenorhabditis remanei*. Gordon Conference on Quantitative Genetics and Genomics, Barga, Italy. (poster coauthored and presented by Christine O'Connor).

2015 The genetics of individuality: High throughput phenomics in *C. elegans* and its relatives. Gordon Conference on Quantitative Genetics and Genomics, Barga, Italy. (poster)

2014 Natural variation for longevity and demography within and between species of *Caenorhabditis* nematodes. Evolutionary Demography Society annual meeting. Stanford, CA. (poster)

2014 From shopping cart to baby carriage: The influence of having dietary choices on reproduction in the nematode *C. elegans*. Evolutionary Demography Society annual meeting. Stanford, CA. (poster coauthored and presented by Stephen Banse).

2014 Microfluidic measures of pharyngeal health: Increasing throughput and resolution. Aging, Metabolism, Pathogenesis, Stress, and Small RNAs in *C. elegans* Meeting. Madison, WI. (talk coauthored and presented by Stephen Banse).

2014 The *C. elegans* Intervention Testing Program: plans to establish a potent pipeline for interventions that promote healthy aging. Aging, Metabolism, Pathogenesis, Stress, and Small RNAs in *C. elegans* Meeting. Madison, WI.

2014 Experimental evolution reveals independent genetic pathways for stress response and longevity in *Caenorhabditis remanei*. Aging, Metabolism, Pathogenesis, Stress, and Small RNAs in *C. elegans* Meeting. Madison, WI. (poster coauthored and presented by Rose Reynolds).

2014 Rewriting the back label: a history of axenic media and the progress towards a holidic medium. Aging, Metabolism, Pathogenesis, Stress, and Small RNAs in *C. elegans* Meeting. Madison, WI. (poster coauthored and presented by Ben Blue).

2014 Evolution of independent genetic pathways for pathogen resistance within the nematode *Caenorhabditis remanei*. Aging, Metabolism, Pathogenesis, Stress, and Small RNAs in *C. elegans* Meeting. Madison, WI. (poster coauthored and presented by Heather Archer).

2014 Breaking G: Variable pleiotropy and environmentally induced changes in the

correlated response to selection. Annual Meeting of the Society for the Study of Evolution, Raleigh, NC. (talk coauthored and presented by Kristin Sikkink).

2014 Influence of mating system on genome evolution in *Caenorhabditis*. Annual Meeting of the Society for the Study of Evolution, Raleigh, NC. (talk coauthored and presented by Janna Fierst).

2013 The worm not taken: quantifying individual variation in stochastic demography. First meeting of the Evolutionary Demography Society, Odense, Denmark.

2013 x within G: Pleiotropic networks underlying the response to selection for heat and oxidative stress resistance in the nematode *Caenorhabditis remanei*. Society for the Study of Evolution annual meeting, Snowbird, UT.

2013 Assimilate this! Experimental evolution of phenotypic plasticity under heat stress in the nematode *Caenorhabditis remanei*. Society for the Study of Evolution annual meeting, Snowbird, UT. (talk coauthored and presented by Kristin Sikkink).

2013 Independent genetic pathways for stress response and longevity revealed by experimental evolution in the nematode *Caenorhabditis remanei*. 19th International *C. elegans* meeting, Los Angeles, CA. (poster)

2011 Natural variation in longevity and a recent selective sweep in the insulin-like signaling pathway in nematodes. Society for the Study of Evolution annual meeting, Norman, OK.

2011 Worm population cages: using soil microcosms to elucidate longevity patterns in aging mutants in *Caenorhabditis elegans*. Society for the Study of Evolution annual meeting, Norman, OK. (talk coauthored and presented by Michelle Parmenter).

2011 Experimental evolution of stress response and correlated effects on longevity in *Caenorhabditis remanei*. Society for the Study of Evolution annual meeting, Norman, OK. (poster coauthored and presented by Rose Reynolds).

2011 The League of Extraordinary Worms: complex epistasis underlying pleiotropy in neurodevelopment, behavior, and life history traits. Society for the Study of Evolution annual meeting, Norman, OK. (talk coauthored and presented by Bryn Gaertner).

2011 Identifying natural genetic variation in stress and aging pathways in *Caenorhabditis remanei* populations. 18th International C. elegans meeting, Los Angeles, CA. (poster coauthored and presented by John Willis).

2010 Epistasis and the functional genetic basis of natural variation in behavior. Society for the Study of Evolution annual meeting, Portland, OR. (talk coauthored and presented by Bryn Gaertner).

2010 How to be a successful male: identification of QTL associated with male frequency and outcrossing frequency in *C. elegans*. Biology of the *C. elegans* Male, Madison, WI. (talked coauthored and presented by Jennifer

Anderson).

2010 *Caenorhabditis remanei*: Building a platform for investigations of natural genetic variation in aging & stress resistance. Aging, Metabolism, Stress, Pathogenesis, and Small RNAs, Madison, WI. (poster coauthored and presented by Rose Reynolds).

2010 Creating a sexy model: genetic and genomic resources in *C. remanei*. Evolutionary Biology of Caenorhabditis and other nematodes, Hixton, UK.

2009 Why Sex with a companion is better: mutation load and rapid adaptation favor outcrossing over self-fertilization. Society for the Study of Evolution annual meeting, Moscow, ID. (talk coauthored and presented by Levi Morran).

2009 Compensatory evolution response at phenotypic and nucleotide levels in natural mutant lines of *C. elegans*. Society for the Study of Evolution annual meeting, Moscow, ID. (talk coauthored and presented by Suzanne Estes).

2009 Fitness, temperature, and experimental evolution: identifying loci underlying fitness in *C. elegans*. Society for the Study of Evolution annual meeting, Moscow, ID. (talk coauthored and presented by Jennifer Anderson).

2009 Genetic architecture of thermal preference in *C. elegans*. Society for the Study of Evolution annual meeting, Moscow, ID. (talk coauthored and presented by Bryn Gaertner).

2009 *C. elegans* males perform best under pressure. Sex and Recombination: In Theory and Practice meeting. Iowa City, IA. (talk coauthored and presented by Jennifer Anderson).

2009 Why sex with a companion is better: mutation load and rapid adaptation favor outcrossing over self-fertilization. Sex and Recombination: In Theory and Practice meeting. Iowa City, IA. (talk coauthored and presented by Levi Morran).

2008 Evolving toxic New York males: Natural and experimental evolution of sexual conflict within *Caenorhabditis*. C. elegans Development and Evolution meeting, Madison, WI, and Society for the Study of Evolution annual meeting, Minneapolis, MN.

2008 Sex for the stressed: facultative outcrossing in the predominantly slefing nematode *C. elegans*. Society for the Study of Evolution annual meeting, Minneapolis, MN. (talk coauthored and presented by Levi Morran).

2008 Sex in unexpected places: natural variation in male frequency and its role in adaptation to a novel environment in *C. elegans*. Society for the Study of Evolution annual meeting, Minneapolis, MN. (talk coauthored and presented by Jennifer Anderson).

2008 *Caenorhabditis remanei* as the perfect “aging” organism: genetic variation in lifespan, oxidative stress response, and the insulin signaling pathway. Society

for the Study of Evolution annual meeting, Minneapolis, MN. (poster coauthored and presented by Rose Reynolds).

2008 Physiology and genetics of natural variation in thermal preference in *C. elegans*. Society for the Study of Evolution annual meeting, Minneapolis, MN. (poster coauthored and presented by Bryn Gaertner).

2006 When New York males kill: sperm competition and sexual conflict in the nematode *Caenorhabditis remanei*. Society for the Study of Evolution annual meeting, Stony Brook, NY.

2004 Ecological context of morphological development, performance, and fitness: thermal environment, maternal effects and plasticity in the frog, *Bombina orientalis*. Ecological Society of America annual meeting, Portland, OR. (talk coauthored and presented by Robert Kaplan).

2004 Spontaneous mutational correlations in *Caenorhabditis elegans*. Society for the Study of Evolution annual meeting, Fort Collins, CO. (talk coauthored and presented by Suzanne Estes).

2004 Sex, death, and strangers: mating fecundity and lifespan in the nematode *Caenorhabditis remanei*. Society for the Study of Evolution annual meeting, Fort Collins, CO. (talk coauthored and presented by Colin Peden).

2004 Evolution of a duplicated floral regulatory pathway in the Lamiales. Society for the Study of Evolution annual meeting, Fort Collins, CO. (talk coauthored and presented by Jan Aagaard).

2003 Genetic variation, inbreeding and mating systems in nematodes (Caenorhabditis sp.). Society for the Study of Evolution annual meeting, Chico, CA. (talk coauthored by Beverly Ajie).

2003 Evidence that selection stabilizes the G-matrix. Society for the Study of Evolution annual meeting, Chico, CA. (talk coauthored by Steve Arnold).

2003 The genetic basis of convergent evolution: armor loss in Alaskan populations of stickleback. Society for the Study of Evolution annual meeting, Chico, CA. (talk coauthored and presented by William Cresko).

2003 Effect of population size on fitness correlates in *Caenorhabditis elegans*: implications for the distribution of mutational effects. Society for the Study of Evolution annual meeting, Chico, CA. (talk coauthored and presented by Suzanne Estes).

2003 Limits on the evolution of genetic canalization in genetic networks. Society for the Study of Evolution annual meeting, Chico, CA. (talk coauthored and presented by Stephen Proulx).

2002 Molecular evolution and quantitative variation in the chemosensory signal transduction pathway in Caenorhabditid nematodes. Society for the Study of Evolution annual meeting. Champaign-Urbana, IL. (talk coauthored by Richard Jovelin and Beverly Ajie).

2002 The power (or lack thereof) of regression approaches to detecting selection

in natural populations. Society for the Study of Evolution annual meeting. Champaign-Urbana, IL. (talk coauthored and presented by Erika Hersch).

2002 Divergence for thermal performance and thermal preference among natural isolates of the nematode *C. elegans*. Society for the Study of Evolution annual meeting. Champaign-Urbana, IL. (talk coauthored and presented by Colin Peden).

2002 Mutation accumulation and mutational covariances among behavior, morphology and fitness in *C. elegans*. Society for the Study of Evolution annual meeting. Champaign-Urbana, IL. (talk coauthored by Beverly Ajie, Suzanne Estes, and Michael Lynch, presented by Beverly Ajie).

2000 QTL congenics: mapping chromosome region-specific effects on chemotaxis in *Caenorhabditis elegans*. Society for the Study of Evolution annual meeting. Bloomington, IN. (poster co-authored and presented by Kirsten Lundin).

2000 Evonet.org: A website for education and research in evolutionary biology. Society for the Study of Evolution annual meeting. Bloomington, IN. (poster)

1999 Things that make G go hmm: selection, drift and genetic covariance structure. Society for the Study of Evolution annual meeting. Madison, WI.

1999 Candidate locus approaches to dissecting genetic architecture: QTL for chemotaxis in *C. elegans*. Society for the Study of Evolution annual meeting. Madison, WI. (poster co-authored and presented by Margorie Gurganus).

1999 Influence of temperature on reproductive rate in *C. elegans*: r vs. Ro. Society for the Study of Evolution annual meeting. Madison, WI. (poster co-authored by Barbara Armstrong, Christina Cooke, and Raymond Huey).

1999 Assessing natural variation at a single locus affecting chemotaxis in *C. elegans* using complementation testing. Society for the Study of Evolution annual meeting. Madison, WI. (poster co-authored and presented by Juliet Morphew).

1999 Quantitative trait loci for chemotaxis in *C. elegans*: repulsion mutants. Twelfth International C. elegans Meeting, Madison, WI. (poster co-authored and presented by Margorie Gurganus).

1999 Ethanol tolerance in *C. elegans*. Twelfth International C. elegans Meeting, Madison, WI. (poster co-authored and presented by Kirsten Lundin).

1998 Phylogenetic analysis of chemosensory behavior of rhabditid nematodes: a starting point for comparative QTL analysis. Society for the Study of Evolution annual meeting, Vancouver, BC. (co-authored and presented by Juliet Morphew).

1998 Synthetic lethals: two-locus mutation selection balance. Society for the Study of Evolution annual meeting, Vancouver, BC. (co-authored by Norman Johnson).

1997 Sex and the single worm: An examination of the utility of outcrossing in the

partially selfing nematode, *Caenorhabditis elegans*. Society for the Study of Evolution annual meeting, Boulder, CO. (co-authored and presented by Andrew Stewart).

1997 Software for the analysis of covariance matrices and quantitative genetic data using resampling methods. Society for the Study of Evolution annual meeting, Boulder, CO. (poster).

1997 Mutation accumulation for chemosensory behavior in the nematode, *Caenorhabditis elegans*. Society for the Study of Evolution annual meeting, Boulder, CO. (poster co-authored by Juliet Morphew).

1997 Mapping quantitative trait loci for chemotaxis: correspondence between QTL and *odr* candidate loci. Eleventh International C. elegans Meeting, Madison, WI. (poster coauthored by Behzad Gerami and Juliet Morphew)

1997 Mutation accumulation for chemosensory behavior. Eleventh International C. elegans Meeting, Madison, WI. (poster co-authored by Juliet Morphew).

1997 Reproductive competition in the nematode, *Caenorhabditis elegans*: recognition of self and non-self. Eleventh International C. elegans Meeting, Madison, WI. (talk co-authored by Donald Selby and Stephanie Jacobs).

1997 Mapping genes affecting chemotaxis in the nematode *Caenorhabditis elegans*: a QTL approach. Texas Genetics Society Annual Meeting, Dallas, TX. (co-authored and presented by Behzad Gerami).

1996 Mapping genes affecting chemotaxis in the nematode *Caenorhabditis elegans*: a QTL approach. Conference on Response and Adaptation to the Environment sponsored by the U.S. Army Research Office, Raleigh, NC. (poster with Behzad Gerami and Juliet Morphew).

1996 A QTL model system: chemotaxis in the nematode, *Caenorhabditis elegans*. Society for the Study of Evolution annual meeting, St. Louis, MO.

1995 Distinguishing chaos from noise in nematode population dynamics. Society for the Study of Evolution annual meeting, Montreal, Quebec. (poster).

1995 Comparing methods for the analysis of selection and performance: sprint speed in larval wood frogs (*Rana sylvatica*). Society for the Study of Evolution annual meeting, Montreal, Quebec.

1995 Distinguishing chaos from noise in nematode population dynamics. Tenth International *C. elegans* meeting, Madison, WI. (poster).

1995 Hierarchical comparisons of genetic covariance matrices. Gordon Conference on Quantitative Genetics and Biotechnology, Ventura, CA. (poster).

1994 Computing net selection gradients on a phylogeny for the garter snake, Thamnophis elegans: how important is divergence in genetic variance-covariance matrices? (coauthored and presented by Stevan Arnold). Society for the Study of Evolution annual meeting, Athens, GA.

1994 A hierarchical comparison of genetic variance-covariance matrices: coastal-

inland divergence in the garter snake, *Thamnophis elegans*. Society for the Study of Evolution annual meeting, Athens, GA.

1992 Peak-shifts and polymorphism during Wright's shifting-balance process. Society for the Study of Evolution annual meeting, Berkeley, CA.

1990 Quantitative-genetic analysis of morphological development in the wood frog, Rana sylvatica. American Society of Zoologists annual meeting, San Antonio, TX.

1987 Using canonical analysis to visualize multivariate selection surfaces. Second International Conference on Quantitative Genetics, Raleigh NC. (poster).

INVITED SEMINARS:

2026 Indiana University
2025 Oregon State University (Biochemistry)
2024 Oregon State University (Biology)
2019 University of Veterinary Medicine, Vienna
2019 University of Pennsylvania
2019 Vanderbilt University
2018 Florida State University
2018 University of Maryland
2018 Pasteur Institute, Paris
2018 University of Alabama Birmingham
2017 Duke University
2017 USC
2017 University of Arizona
2017 Texas A&M University
2017 University of Florida
2015 University of Utah
2015 Université de Lille1
2015 École Normale Supérieure, Paris
2014 Buck Institute for Research on Aging
2014 University of Idaho
2014 Indiana University
2013 Oregon State University
2012 University of Texas at Arlington
2011 North Carolina State University
2011 Washington University, St. Louis
2011 Washington State University, Vancouver
2011 UC San Diego
2011 Center for Genomic Regulation, Spain
2010 Kellogg Biological Station
2010 Michigan State University

2010	Sun River Nature Center
2010	Central Oregon Community College
2009	University of Toronto
2009	University of Southern California
2008	Reed College
2008	Portland State University
2006	University of Maryland
2006	Instituto Gulbenkian de Ciencia, Portugal
2006	University of Illinois
2005	University of California, Davis
2004	University of British Columbia
2001	Oregon Institute of Marine Biology
2001	Washington State University
2000	Oregon State University
2000	University of Oregon
1999	University of Texas (Austin)
1998	University of Washington
1998	University of British Columbia
1997	University of Oregon
1997	Reed College
1997	University of Houston
1995	University of Miami
1994	Texas Christian University
1991	University of Texas at Arlington