Andrius Jonas Dagilis, PhD

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Current

Postdoctoral Fellow in the Matute Lab,

Position

Department of Biology, University of North Carolina at Chapel Hill

RESEARCH

Mathematical Modeling of Speciation, Hybridization and Introgression

INTERESTS

Evolution of Structural Variation, Sex Chromosomes, Sexually Antagonistic Selection

EDUCATION 2019 PhD in Ecology, Evolution and Behavior

University of Texas at UT Austin, Supervising Professor: Mark Kirkpatrick

2013 B.S. in Biology with Honors

Trinity University (San Antonio, TX)

PEER REVIEWED **Publications**

2022 A. Dagilis, J. Coughlan, A. Serrato-Capuchina, H. Elias, D. Peede, L. Isbell, D. Castillo, B. Cooper, D. Matute. Population structure and introgression among recently differentiated Drosophila melanogaster populations, Molecular Biology and Evolution, in Press

- A. Dagilis, D. Peede, J. Coughlan, G. Jofre, E. D'Agostino, H. Mavengere, A. Tate, D. Matute. A need for standardized reporting of introgression: Insights from studies across eukaryotes, Evolution Letters, in Press.
- **A. Dagilis** What inversion lengths can tell us about their evolution, Molecular Ecology, 31(13) 3513-3515. (News and Views)
- A. Dagilis, J. Sardell, M. Josephson, Y. Su, C. Peichel, M. Kirkpatrick. Searching for signatures of sexually antagonistic selection on stickleback sex chromosomes, Philosophical Transactions of the Royal Society B, 377(1856) 20210205.
- **2020** A. Dagilis, D. Matute. *Incompatibility between emerging species*, Science, 368 (6492),710-711. (News and Views)
- 2019 A. Dagilis, M. Kirkptarick, D. Bolnick Epistasis and the evolution of hybrid fitness, PLoS Genetics, 15(5) e1008125.
- 2018 J. M. Sardell, C. Cheng, A. Dagilis, A. Ishikawa, J. Kitano, C.L. Peichel, M. Kirkpatrick. Sex differences in recombination in sticklebacks, G3: Genes|Genomes|Genetics, g3-200166.
 - E. Kuzmin, B. VanderSluis, [...], A. Dagilis, [...], C. Boone. Systematic analysis of complex trigenic interactions, Science, 360(6386).
- **2016** A. Dagilis, M. Kirkpatrick. *Prezygotic isolation, mating preferences, and the evolution of* chromosomal inversions, Evolution, 70(7) 1465-72.
- **2012** K. Livingstone, P. Olofsson, G. Cochran, A. Dagilis, K. MacPherson, K. Seitz. A stochastic model for the development of Bateson-Dobzhansky-Muller incompatibilities that incorporates protein interaction networks, Mathematical Biosciences, 238(1) 49-53.

2022 The fitness of an introgressing haplotype, PEQG SELECT **2021** 15 Years of introgression studies: quantifying gene flow across Eukaryotes, Evolution **TALKS** Introgression across the tree of life, Virtual AmNat meeting at Asilomar **2020** *Speciation rate variation due to loss of co-adapted genes*, The Allied Genetics Conference **2018** An empirically grounded model of speciation, Joint Congress on Evolutionary Biology **2017** *The spectrum of epistasis and hybrid fitness*, SMBE **2016** Prezygotic isolation, mating preferences and the evolution of chromosomal inversions, **Evolution 2012** A stochastic model of Dobzhansky Muller incompatibilities, Evolution **OTHER 2021** invited seminar for Speciation & Introgression Discussion Group: The fitness of hybrids and genes over the course of speciation, UC Berkeley TALKS & guest lecture for Behavioral Biology course: **GUEST** Sexual Selection, University of Georgia Marine Institute invited seminar for Molly Schumer lab meeting: Lectures The Common Causes of Speciation and Introgression, Stanford University **2020** invited seminar for Lunch Bunch seminar series: Sexually antagonistic selection in stickleback, UNC Chapel Hill **2019** invited seminar for EDGE seminar series: The evolution of hybrid fitness, University of Georgia public lecture at Long-View Micro School: Ligers and tigons and pizzly bears, oh my, Austin, TX **2018** invited seminar for UNC Lunch Bunch: Evolution of hybrid fitness, UNC Chapel Hill guest lecture for Honors Biology: Speciation, UT at Austin **2017** public lecture for Science Under the Starst: Ligers and tigons and pizzly bears, oh my, Austin, TX Honors **2021-** Tri Institutional Molecular Mycology and Pathogenesis Training Program (\$66,000/year) & **2018** SSE Hamilton Award Nominee **2016** Integrative Biology TA Award (\$700) **Awards 2013** Integrative Biology Recruitment Fellowship (\$33,550) **2012** Mach Fellowship (\$3,000) **2012** Jacob Uhrich Scholarship (\$1,500) **2009–2012** International Student Scholarship (\$35,000 per year) **2020-** Safe Spaces Committee in the UNC Biology Department OUTREACH & 2014-2019 Science Under the Stars Organizing Committee SERVICE **2015-2019** Biology Graduate Symposium Organizing Committee 2013- Organizer for various workshops and reading groups **2009-2013** Trinity University Biology Club (council member) Reviewer for articles in: Evolution, American Naturalist, PLoS Genetics, PNAS, Molecular Ecology, Molecular Biology and Evolution, Nature Ecology & Evolution, PeerJ, PCIEvolBio, Heredity, eLife **OTHER 2021** SSE Public Policy Workshop, Virtual **2021** Faculty Mentor Training for Biomedical Researchers, UNC Chapel Hill Training

2020 Responsible Conduct of Research Training, UNC Chapel Hill

2018 Diversity and Inclusivity Training, UT Austin, TX