

DELBERT ANDRÉ GREEN II

dgreenii@umich.edu

University of Michigan, Ann Arbor - Department of Ecology and Evolutionary Biology
1105 N. University Ave. - BSB Rm. 4014 - Ann Arbor, MI 48109 - (734) 647-5483

APPOINTMENTS

- 2020- **Assistant Professor.** University of Michigan, Department of Ecology and Evolutionary Biology.
- 2018-2019 **President's Postdoctoral Fellow.** University of Michigan, Department of Ecology and Evolutionary Biology. Mentor: Patricia Wittkopp
- 2015-2017 **NSF Postdoctoral Research Fellow in Biology.** University of Chicago, Department of Ecology and Evolution. Advisor: Marcus Kronforst
- 2014-2015 **NSF/ASEE Small Business Postdoctoral Research Fellow.** InnoGenomics Technologies (New Orleans, LA). Advisor: Sudhir Sinha

EDUCATION

- 2014 **Ph.D.** Harvard University (Biology; Department of Molecular & Cellular Biology)
Advisor: Cassandra Extavour; Dissertation: "Developmental and genetic mechanisms of ovariole number evolution in *Drosophila*"
- 2010 **M.A.** Harvard University (Biology; Department of Molecular & Cellular Biology)
- 2008 **B.S.** Massachusetts Institute of Technology (Biology)

FELLOWSHIPS, AWARDS & HONORS

- 2017 University of Michigan President's Postdoctoral Fellowship
- 2017 University of Michigan LSA Collegiate Postdoctoral Fellowship (*declined*)
- 2015 NSF Postdoctoral Research Fellowship in Biology, Category 1 (Broadening Participation)
- 2014 NSF/ASEE Small Business Postdoctoral Research Diversity Fellowship
- 2013 Ford Foundation Dissertation Fellowship
- 2010 NSF Graduate Research Fellowship (Life Sciences: Developmental Biology)
- 2008 Graduate Prize Fellowship, Harvard Graduate School of Arts and Sciences
- 2008 John L. Asinari Prize, Original Research¹ (MIT)
- 2007 Amgen-UROP Scholar (MIT)
- 2004 National Merit Scholar; National Achievement Scholar; Ron Brown Scholar
- 2003 Research Science Institute Scholar

RESEARCH GRANTS

- 2019 **National Geographic Explorers Grant: "Conservation Technologies"**. "M3 Monarch Migration Study". Lead PI: DAG II; Co-PIs: David Blaauw (UM), Hun-Seok Kim (UM), Inhee Lee (U Pittsburgh), Pablo Jaramillo-Lopez (UNAM-Morelia). Award: \$150,000
- 2019 **Monarch Butterfly Fund Monarch Butterfly Flight Challenge.** Lead PI: Inhee Lee. Co-PIs: DAG II, David Blaauw, Hun-Seok Kim, Jaechan Lim (UM). Award: \$5,000
- 2019 **University of Michigan "Mcubed" Grant.** "M3 Monarch Migration Study". Co-PIs: DAG II, David Blaauw, Hun-Seok Kim. Award: \$15,000
- 2016 **US Fish and Wildlife Service Research Grant.** "The Genetic and Environmental Basis of Monarch Butterfly Migration". Co-authors: DAG II, Marcus Kronforst (PI; University of Chicago) and Ayse Tenger-Trolander (PhD student; University of Chicago). Award: \$22,000

¹ Presented to one MIT Biology major for outstanding *original* research in the life sciences.

PUBLICATIONS (*indicates corresponding author)

- Yang M, Hsiao R, Carichner G, Ernst K, Lim J, **Green II DA**, Lee I, Blaauw D and Kim HS (2019). Migrating Monarch Butterfly Localization Using Multi-sensor Fusion Neural Networks. *Submitted to the 2020 European Signal Processing Conference*. [arXiv:1912.06907](https://arxiv.org/abs/1912.06907) [eess.SP].
- Green II DA*** and MR Kronforst (2019). Monarch butterflies use an environmentally sensitive, internal timer to control overwintering dynamics. *Molecular Ecology*. 28: 3642-3655. <https://doi.org/10.1111/mec.15178>. [Press: 9 news outlets including [Popular Science](#), [The Wildlife Society](#), [Earthsy](#), and [UM News](#)]
- Loftus A, Murphy G, Brown H, Montgomery A, Tabak J, Baus J, Carroll M, **Green A**, Sikka S, and Sinha S (2017). Development and Validation of InnoQuant® HY, a System for Quantitation and Quality Assessment of Total Human and Male DNA Using High Copy Targets. *Forensic Science International: Genetics*. 29: 205-217. doi: <https://doi.org/10.1016/j.fsigen.2017.04.009>.
- Sinha S, Murphy G, Brown H, **Green A**, Montgomery A, Carroll M, and Tabak J (2015). Retrotransposable elements: Novel and sensitive DNA markers and their application in human identity. *Forensic Science International: Genetics Supplement Series*. 5: e627–e629. [doi:10.1016/j.fsigss.2015.10.005](https://doi.org/10.1016/j.fsigss.2015.10.005)
- Green II DA** and Extavour CG. Insulin Signalling Underlies Both Plasticity and Divergence of a Reproductive Trait in *Drosophila* (2014). *Proceedings of the Royal Society London: B*. 281: 20132673. doi.org/10.1098/rspb.2013.2673 PMID: 24500165
- Donoughe S, Nakamura T, Ewen-Campen B, **Green II DA**, Henderson L and Extavour CG (2014). BMP signalling is required for generation of primordial germ cells in an insect. *Proceedings of the National Academy of Sciences of the USA*. 111(11): 4133-4138. [doi: 10.1073/pnas.1400525111](https://doi.org/10.1073/pnas.1400525111) PMID: 24591634.
- Green II DA** and Extavour CG. Convergent evolution of a reproductive trait through distinct developmental mechanisms in *Drosophila* (2012). *Developmental Biology*. 372(1): 120-130. [doi: 10.1016/j.ydbio.2012.09.014](https://doi.org/10.1016/j.ydbio.2012.09.014) PMID: 23022298.
- Sarikaya DP, Belay AA, Ahuja A, **Green II DA**, Dorta A and Extavour, CG. The roles of cell size and cell number in determining ovariole number in *Drosophila* (2012). *Developmental Biology*. 363: 279-289. PMID: 22200592
- Green II DA***, Sarikaya DP* and Extavour CG (2011). Counting in oogenesis. *Cell and Tissue Research*. 344(2): 207-212. (* indicates co-first authorship) PMID: 21384182.

INVITED TALKS (RESEARCH)

- [2020] American Society of Naturalists Vice Presidential Symposium. Cleveland, OH.
- 2020 Albion College, Dept. of Biology, Albion, MI
- 2020 UM School for Environment and Sustainability Conservation Ecology Seminar. Ann Arbor, MI
- 2019 Ecological and Evolutionary Genomics Gordon Research Seminar. Manchester, NH.
- 2019 San Francisco State University, Microbiology, Cell, and Molecular Biology Colloquium. San Francisco, CA.
- 2017 University of Michigan, Dept. of Ecology and Evolutionary Biology. Ann Arbor, MI.
- 2017 Society for Integrative and Comparative Biology Annual Meeting. New Orleans, LA.
- 2016 University of Chicago Darwinian Sciences Cluster Retreat. Chicago, IL.
- 2013 23rd European *Drosophila* Research Conference. Barcelona, Spain.
- 2013 Conference of Ford Fellows. Washington, D.C.
- 2008 MIT Biology Undergraduate Research Symposium. Cambridge, MA.

INVITED TALKS (OUTREACH)

- 2019 **Wild Ones Ann Arbor Chapter January Meeting.** Ann Arbor, MI. "Monarch Butterfly Migration: Unsolved Mysteries of a Familiar Story".
- 2017 **Museum of Science and Industry "Black Creativity" Jr. Science Café Series.** Chicago, IL. "Monarch Butterfly Migration."

SELECTED PRESENTATIONS (ACCEPTED ABSTRACTS)

- 2013 "The role of insulin signaling in diversifying ovariole number in *Drosophila*." Harvard Evo-Devo Club. Cambridge, MA.
- 2013 Insulin signaling underlies both plasticity and divergence of a reproductive trait in *Drosophila*. 11th Annual Ecological Genomics Symposium. Kansas City, KS.
- 2013 Evolution of insulin signaling sensitivity mediates divergence of reproductive capacity between two *Drosophila* species. 54th Annual *Drosophila* Genetics Conference. Washington, DC.
- 2012 Convergent evolution of a reproductive trait through distinct developmental mechanisms in *Drosophila*. Germ Cells Meeting. Cold Spring Harbor, NY.
- 2012 Independent evolution of a reproductive trait occurs through distinct developmental mechanisms in *Drosophila*.
- 1) VI International Meeting of the Latin American Society for Developmental Biology. Montevideo, Uruguay.
- 2) 53rd Annual *Drosophila* Genetics Conference. Chicago, IL.
- 3) MCO Program Retreat. Cambridge, MA.
- 2010 A model for counting in cell groups: terminal filament morphogenesis in *Drosophila*. 51st Annual *Drosophila* Genetics Conference. Washington, D.C.
- 2008 The Dengue virus 3' untranslated region contains discrete elements that stimulate translation. MIT-Amgen UROP Scholars Poster Session. Cambridge, MA.
- 2007 New model for investigating the role of *evi-1* in acute myelodysplastic syndrome. National Society for Black Engineers Region I Fall Conference. Buffalo, NY.

PROFESSIONAL SERVICE/LEADERSHIP

- 2017 Career Development Subcommittee Liaison, Genetics Society of America Early Career Scientist Steering Committee
- 2016-2017 Postdoctoral Trainee Representative, GSA Mentoring and Professional Development Committee
- 2013-2014 Graduate Student Representative, GSA Communications Committee
- 2009-2013 Institutional Review Board, Full member. The Fenway Institute. Boston, MA.

PROFESSIONAL AFFILIATIONS & SERVICE

Reviewer: Insects, Molecular Biology and Evolution

Membership: Genetics Society of America, Society for Developmental Biology, Ecological Society of America (incl. Black Ecology Section), Society for Integrative and Comparative Biology

ADVISEES (latest/current position)

Current: Derek Glaser (UM '22), Kathryn Sullivan (UM '22); Kathleen Young (UM '21), Autumn Zwiernik (UM '23)

Previous: Anna Deroque (UM '21), Yifei Long (UM '22); Andra Campbell (UROP, UM '22); Jacob Lusk (UROP, UM '22); Grant Lobert (Kalamazoo College '19); Michelle Noyes (University of Washington, Genome Sciences Program graduate student); Elena Sparrow (Bowdin College '20); Yuncheng Duan (Duke University biology graduate student); Guillermo Zapata; Jennifer Rodriguez (Bain & Company)

ADVISEES (thesis committee)

Current: Eric Gulson (primary advisor: Benjamin Winger, UM EEB), Meagan Simons (primary advisor: Elizabeth Tibbetts, UM EEB)