



Tristram O'Brien Dodge

Ph.D. Student in Biology, admitted Autumn 2021

Bio

BIO

I'm a PhD student in the Schumer Lab, interested in adaptation, hybridization, genome structure, and conservation.

EDUCATION AND CERTIFICATIONS

- BA, Carleton College , Biology (2019)

Teaching

COURSES

2024-25

- Revealing the Hidden Dimensions of Genomic Structural Variation: BIOS 424 (Win)

Publications

PUBLICATIONS

- **Insertion of an invading retrovirus regulates a novel color trait in swordtail fish.** *bioRxiv : the preprint server for biology*
Haghani, N. B., Dodge, T. O., Baczenas, J. J., Gunn, T. R., He, Q., Pangburn, W., Sood, R., Fascinetto-Zago, P., Du, K., Kaatmann, A., Ou, Z., Dougan, S., Yang, et al
2025
- **Evolutionary adaptation under climate change: *Aedes* sp. demonstrates potential to adapt to warming.** *Proceedings of the National Academy of Sciences of the United States of America*
Couper, L. I., Dodge, T. O., Hemker, J. A., Kim, B. Y., Exposito-Alonso, M., Brem, R. B., Mordecai, E. A., Bitter, M. C.
2025; 122 (2): e2418199122
- **Structural genomic variation and behavioral interactions underpin a balanced sexual mimicry polymorphism.** *Current biology : CB*
Dodge, T. O., Kim, B. Y., Baczenas, J. J., Banerjee, S. M., Gunn, T. R., Donny, A. E., Given, L. A., Rice, A. R., Haase Cox, S. K., Weinstein, M. L., Cross, R., Moran, B. M., Haber, et al
2024
- **Recurrent evolution of small body size and loss of the sword ornament in Northern swordtail fish.** *Evolution; international journal of organic evolution*
Preising, G. A., Gunn, T., Baczenas, J. J., Powell, D. L., Dodge, T. O., Sewell, S. T., Pollock, A., Machin Kairuz, J. A., Savage, M., Lu, Y., Fitschen-Brown, M., Meyer, A., Scharl, et al
2024
- **Swordtail fish hybrids reveal that genome evolution is surprisingly predictable after initial hybridization.** *PLoS biology*
Langdon, Q. K., Groh, J. S., Aguillon, S. M., Powell, D. L., Gunn, T., Payne, C., Baczenas, J. J., Donny, A., Dodge, T. O., Du, K., Scharl, M., Ríos-Cárdenas, O., Gutiérrez-Rodríguez, et al

2024; 22 (8): e3002742

- **Phylogenomic analyses of all species of swordtail fishes (genus *Xiphophorus*) show that hybridization preceded speciation.** *Nature communications*
Du, K., Ricci, J. M., Lu, Y., Garcia-Olazabal, M., Walter, R. B., Warren, W. C., Dodge, T. O., Schumer, M., Park, H., Meyer, A., Schartl, M.
2024; 15 (1): 6609
- **Genome evolution is surprisingly predictable after initial hybridization.** *bioRxiv : the preprint server for biology*
Langdon, Q. K., Groh, J. S., Aguillon, S. M., Powell, D. L., Gunn, T., Payne, C., Baczenas, J. J., Donny, A., Dodge, T. O., Du, K., Schartl, M., Ríos-Cárdenas, O., Gutierrez-Rodríguez, et al
2023
- **Genomes of two Extinct-in-the-Wild reptiles from Christmas Island reveal distinct evolutionary histories and conservation insights.** *Molecular ecology resources*
Dodge, T. O., Farquharson, K. A., Ford, C., Cavanagh, L., Schubert, K., Schumer, M., Belov, K., Hogg, C. J.
2023
- **Introgression.** *Current biology : CB*
Aguillon, S. M., Dodge, T. O., Preising, G. A., Schumer, M.
2022; 32 (16): R865-R868
- **Predictability and parallelism in the contemporary evolution of hybrid genomes.** *PLoS genetics*
Langdon, Q. K., Powell, D. L., Kim, B., Banerjee, S. M., Payne, C., Dodge, T. O., Moran, B., Fascinetto-Zago, P., Schumer, M.
1800; 18 (1): e1009914