

Stanford



Nicole Nova

Ph.D. Student in Biology, admitted Autumn 2016

Bio

BIO

Nicole is a graduate student co-advised by Dr. Erin Mordecai and Dr. Dmitri Petrov in the Department of Biology at Stanford University. She received her undergraduate and graduate training in dental surgery at Karolinska Institutet in Sweden, and earned a M.S. in Statistics at Stanford University. Nicole has previously worked on (1) mathematical modeling of cancer evolution at Dana-Farber/Harvard Cancer Center, and (2) eco-evolutionary dynamics of infectious diseases at Duke University. Nicole is generally interested in ecology, evolution, data science, statistics, complexity science, mathematical biology, disease ecology, molecular evolution, animal behavior, population dynamics, population genetics, eco-evolutionary dynamics, evolutionary genomics, planetary health, and wildlife conservation.

HONORS AND AWARDS

- Outstanding Paper Award (honorable mention), Disease Ecology Section, Ecological Society of America (ESA) (August 2021)
- Murray F. Buell Award for Excellence in Ecology runner-up (honorable mention), Ecological Society of America (ESA) (April 2021)
- Annabelle B. Bush Memorial Endowed Scholar Award, Philanthropic Educational Organization (P.E.O.) (June 2020)
- P.E.O. Scholar Award, International Chapter of the P.E.O. Sisterhood (April 2020)
- Excellence in Teaching Award, Stanford University, Department of Biology (June 2017)

EDUCATION AND CERTIFICATIONS

- Master of Science, Stanford University , STATS-MS (2020)
- M.S., Stanford University , Statistics (2020)
- M.Sc., B.Sc., Karolinska Institutet , Dental Surgery (2012)

LINKS

- Personal Website: <http://nicolenova.com/>
- LinkedIn: <https://www.linkedin.com/in/nicolenova>

Publications

PUBLICATIONS

- **Individual Variation Does Not Regulate Foraging Response to Humidity in Harvester Ant Colonies** *FRONTIERS IN ECOLOGY AND EVOLUTION*
Nova, N., Pagliara, R., Gordon, D. M.
2022; 9
- **How will mosquitoes adapt to climate warming?** *eLife*
Couper, L. I., Farner, J. E., Caldwell, J. M., Childs, M. L., Harris, M. J., Kirk, D. G., Nova, N., Shocket, M., Skinner, E. B., Uricchio, L. H., Exposito-Alonso, M., Mordecai, E. A.

2021; 10

- **The influence of vector-borne disease on human history: socio-ecological mechanisms.** *Ecology letters*
Athni, T. S., Shocket, M. S., Couper, L. I., Nova, N., Caldwell, I. R., Caldwell, J. M., Childress, J. N., Childs, M. L., De Leo, G. A., Kirk, D. G., MacDonald, A. J., Olivarius, K., Pickel, et al
2021
- **Cross-Species Transmission of Coronaviruses in Humans and Domestic Mammals, What Are the Ecological Mechanisms Driving Transmission, Spillover, and Disease Emergence?** *Frontiers in Public Health*
Nova, N.
2021; 9: 717941
- **Environmental Drivers of Vector-Borne Diseases** *POPULATION BIOLOGY OF VECTOR-BORNE DISEASES*
Shocket, M. S., Anderson, C. B., Caldwell, J. M., Childs, M. L., Couper, L. I., Han, S., Harris, M. J., Howard, M. E., Kain, M. P., MacDonald, A. J., Nova, N., Mordecai, E. A., Drake, et al
2021: 85-118
- **The impact of long-term non-pharmaceutical interventions on COVID-19 epidemic dynamics and control: the value and limitations of early models.** *Proceedings. Biological sciences*
Childs, M. L., Kain, M. P., Harris, M. J., Kirk, D., Couper, L., Nova, N., Delwel, I., Ritchie, J., Becker, A. D., Mordecai, E. A.
2021; 288 (1957): 20210811
- **Human-mediated impacts on biodiversity and the consequences for zoonotic disease spillover.** *Current biology : CB*
Glidden, C. K., Nova, N., Kain, M. P., Lagerstrom, K. M., Skinner, E. B., Mandle, L., Sokolow, S. H., Plowright, R. K., Dirzo, R., De Leo, G. A., Mordecai, E. A.
2021; 31 (19): R1342-R1361
- **Susceptible host availability modulates climate effects on dengue dynamics.** *Ecology letters*
Nova, N., Deyle, E. R., Shocket, M. S., MacDonald, A. J., Childs, M. L., Rypdal, M., Sugihara, G., Mordecai, E. A.
2020
- **How to identify win-win interventions that benefit human health and conservation** *NATURE SUSTAINABILITY*
Hopkins, S. R., Sokolow, S. H., Buck, J. C., De Leo, G. A., Jones, I. J., Kwong, L. H., LeBoa, C., Lund, A. J., MacDonald, A. J., Nova, N., Olson, S. H., Peel, A. J., Wood, et al
2020
- **Population-scale longitudinal mapping of COVID-19 symptoms, behaviour and testing.** *Nature human behaviour*
Allen, W. E., Altae-Tran, H., Briggs, J., Jin, X., McGee, G., Shi, A., Raghavan, R., Kamariza, M., Nova, N., Pereta, A., Danford, C., Kamel, A., Gothe, et al
2020
- **The biogeography of ecoregions: Descriptive power across regions and taxa** *JOURNAL OF BIOGEOGRAPHY*
Smith, J. R., Hendershot, J., Nova, N., Daily, G. C.
2020
- **Mosquito and primate ecology predict human risk of yellow fever virus spillover in Brazil.** *Philosophical transactions of the Royal Society of London. Series B, Biological sciences*
Childs, M. L., Nova, N., Colvin, J., Mordecai, E. A.
2019; 374 (1782): 20180335
- **Ecological interventions to prevent and manage zoonotic pathogen spillover.** *Philosophical transactions of the Royal Society of London. Series B, Biological sciences*
Sokolow, S. H., Nova, N., Pepin, K. M., Peel, A. J., Pulliam, J. R., Manlove, K., Cross, P. C., Becker, D. J., Plowright, R. K., McCallum, H., De Leo, G. A.
2019; 374 (1782): 20180342