Nicole Nova

Curriculum Vitae

Ph.D. Student in Ecology and Evolutionary Biology
Department of Biology, Stanford University

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Interests: Biodiversity and conservation of wildlife, ecology and evolution of infectious diseases, population genetics, genomics, eco-evolutionary dynamics, rapid adaptation, mathematical modeling.

Education

2016 - present	**Ph.D.** (Student)	Biology, Stanford University
2007 - 2012	**D.D.S., M.Sc., B.Sc.**	Dental Surgery, Karolinska Institutet

Academic Positions & Research Experience

2016 - present	*Graduate Student*, Mordecai Lab & Petrov Lab, Department of Biology, Stanford University
2016 - present	*Chair*, Department Seminar Series Speaker Selection Committee, Department of Biology, Stanford University
2016 - 2017	*Director*, Research Science Institute, Massachusetts Institute of Technology (MIT) and the Center for Excellence in Education (CEE)
2015 - 2016	*Research Associate*, Koelle Research Group, Department of Biology, Duke University
2014 - 2015	*Research Trainee*, Michor Lab, Department of Biostatistics and Computational Biology, Dana-Farber/Harvard Cancer Center
2012 - 2013	*Enrolled Student*, Electrical Engineering, Royal Institute of Technology (GPA 3.93/4.00)
2011 - 2013	*Mentorship Director*, Research Academy for Young Scientists
Spring 2011	*Exchange Student*, St. Bartholomew's and the Royal London School of Medicine and Dentistry, Queen Mary University of London
Summer 2010	*Surgical Intern*, Department of Cranio-, Maxillofacial and Oral Surgery, Medical University of Vienna
Summer 2010	*Research Assistant*, Department of Physiology and Pharmacology, Karolinska Institutet
Summer 2007	*Research Intern*, Department of Brain and Cognitive Sciences, Harvard Medical School and Brigham and Women's Hospital
Summer 2006	*Research Intern*, Department of Biosciences and Nutrition, Karolinska Institutet

Awards & Scholarships

2017	Excellence in Teaching Award, Department of Biology, Stanford University
2013	Google Women in Tech Conference and Travel Grant (€1,000)
2011	European Union (EU) Erasmus Mundus Scholarship for studies abroad (€1,000)
2010	Summer Research Scholarship in Medical Sciences, Karolinska Institutet (9,000 SEK)
2008	Swedish Federation of Young Scientists Scholarship to attend National Youth Science Forum (NYSF), a science camp at the Australian National University (sponsored by the Australian Rotary Club)
2007	Knut and Alice Wallenbergs Scholarship to attend Research Science Institute (RSI), a summer research program for high school students at Massachusetts Institute of Technology (MIT) (co-sponsored by MIT and CEE - all expenses paid)
2007	Best Student of the Year Award, Internationella Engelska Gymnasiet (High School)
2007	1^{st} prize, Swedish National Science Fair
2006	Summer Research Scholarship in Biomedical Sciences, Karolinska Institutet (5,000 SEK)

Publications

Van Wert M, Nova N, Horowitz T, Wolfe J. What does performance on one visual search task tell you about performance on another? Journal of Vision. 2008;8(6):312.

Papers in Preparation

Nova N, Koelle K. Virological and immunological factors impacting the development of antibody breadth during HIV infection. [*Manuscript in preparation*]

Nova N, Ashcroft P, Iwasa Y, Michor F. Stochastic tunneling of three mutations in a population of cancer cells. [*Manuscript in preparation*]

Theses

Nova N, Alstergren P, Svensson C. Chronic inflammation and pain – assessment of c-Fos and ATF-3 as markers of spinal neuronal activity in a pain model of rheumatoid arthritis. M.Sc. Thesis, Karolinska Institutet, June 2012. Access: `edu.ofa.ki.se/examensarbete/detail.asp?Id=343`

Invited Talks

2015 *Mathematical Modeling in the Biosciences*, 30th Jubilee Symposium of Research Program in Biomedicine, Stockholm, Sweden.

2015 *Mathematical Modeling of Cancer and Infectious Diseases*, guest speaker at the NSF REU program in Mathematical Biology, University of North Carolina at Greensboro (UNCG), Greensboro, NC.

Poster Presentations

Nova N, Shocket M, MacDonald A, Childs M, Rypdal M, Sugihara G, Mordecai E. Environmental factors driving dengue incidence in Central and South America. Ecology and Evolution of Infectious Diseases (EEID) Conference. June 2017, University of California, Santa Barbara, CA.

Nova N, Koelle K. Modeling the development of neutralizing antibody breadth in chronic-stage HIV infection. Triangle Center for Evolutionary Medicine Symposium. November 2015, The Solution Center in Research Triangle Park, Durham, NC.

Mideus G, Nova N, Härenstam-Nielsen L, Enqvist A, Tomaszuk M, Rojas C. Autonomous Robot Accomplishing Standstill Balance and Forward Motion Using Segway Technology. Annual Electrical Engineering Symposium. May 2013, Royal Institute of Technology, Stockholm, Sweden.

Nova N, Bas D, Svensson K. Assessment of c-Fos as a marker of spinal neuronal activity in a pain model of rheumatoid arthritis. Medical Sciences Symposium, August 2010, Karolinska Institutet, Stockholm, Sweden.

Nova N, Robertson K. Activation of Liver X Receptor affects the function and differentiation of osteoclasts. Biomedical Sciences Symposium, August 2006, Karolinska Institutet, Stockholm, Sweden.

Teaching

Winter 2017 *Teaching Assistant*, Fundamentals of Molecular Evolution (BIO 113, BIO 244), Prof. Dmitri Petrov, Stanford University.

Spring 2017 *Teaching Assistant*, Introduction to Research in Ecology and Evolutionary Biology (BIO 47), Dr. Jessica Coyle, Prof. Tadashi Fukami, Dr. Daria Hekmat-Scafe, Dr. Shyamala Malladi, Stanford University.

Conferences

June 2017 Ecology & Evolution of Infectious Diseases (EEID) Conference, University of California, Santa Barbara, CA.
Dec. 2015 Epidemics - Fifth International Conference on Infectious Disease Dynamics, Clearwater, FL.
May 2015 Ecology & Evolution of Infectious Diseases (EEID) Conference, University of Georgia, Athens, GA.
April 2015 Evolutionary Game Theory Conference, Mathematical Biosciences Institute, Ohio State University, Columbus, OH.
Sep. 2013 EuroBSDcon 2013 Conference (attended as a Google Women in Tech Scholar), St. Julian's, Malta.

Computer Skills

Advanced Python, HTML/CSS/JS, LaTeX, Gimp
Intermediate Matlab, C, C++, Mathematica, Prism, Blender, ImageJ
Basic Java, R, Django, Node.JS

Languages

Native Proficiency Swedish, English, Czech, Polish
Conversational Spanish