



# Nicole Nova

## Curriculum Vitae

Mobile (617) 852-2546

E-mail nicole\_nova@dfci.harvard.edu

Website www.nicolenova.com

Nationality Swedish

### Education

- 2012–2013 **Electrical Engineering**, ROYAL INSTITUTE OF TECHNOLOGY (KTH), Stockholm, Sweden.  
GPA 4.94/5.00
- 2011 **Dentistry**, QUEEN MARY'S SCHOOL OF MEDICINE AND DENTISTRY, London, UK.  
*Exchange studies, one semester.*
- 2007–2012 **Doctor of Dental Surgery, MSc in Dental Surgery**, KAROLINSKA INSTITUTET, Stockholm.  
**Master's Thesis**
- Project: *Chronic inflammation and pain: Assessment of c-Fos and ATF-3 as markers of spinal neuronal activity in a pain model of rheumatoid arthritis*
  - Supervisors: Per Alstergren, DDS, PhD & Camilla Svensson, PhD
- 2004–2007 **Natural Sciences**, INTERNATIONAL ENGLISH GYMNASIUM (IEG), Stockholm, Sweden.  
*Extended curriculum by 300 credits (2800/2500) – GPA 20.0/20.0 + honors 2.5/2.5*

### Research Experience

- 2014 – **Research Intern**, DANA-FARBER / HARVARD CANCER CENTER, Cambridge, USA.  
present Working on stochastic processes, especially tunneling, in evolutionary dynamic models of cancer.
- Department: Biostatistics and Computational Biology, Dana Farber Cancer Institute
  - Supervisor: Dr. Franziska Michor, michorlab.harvard.edu
- 2013 **Robotics Programmer**, ROYAL INSTITUTE OF TECHNOLOGY (KTH), Stockholm, Sweden.  
Worked in a team of five KTH students to deliver a functioning hardware/software robot prototype in less than four weeks.
- Project: *Autonomous Robot Accomplishing Standstill Balance and Forward Motion Using Segway Technology*
  - Supervisor: Dr. Cristian Rojas, Automatic Control Laboratory, School of Electrical Engineering.
- 2010 **Research Program in Medical Sciences**, KAROLINSKA INSTITUTET (KI), Stockholm.  
Admitted to a summer research program for talented KI students.
- Project: *Assessment of c-fos as a marker of spinal neuronal activity in a pain model of rheumatoid arthritis*
  - Supervisor: Dr. Camilla Svensson, Department of Physiology and Pharmacology.
- 2008 **National Youth Science Forum (NYSF)**, AUSTRALIAN NATIONAL UNIVERSITY (ANU), Canberra, Australia.  
Recipient of a scholarship to be one of the two Swedish participants in an international science camp with 180 bright students, sponsored by the *Australian Rotary Club*.

2007 **Research Science Institute (RSI)**, MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT), Cambridge, USA.

Participant of a six week summer research program for the top 80 high school students worldwide, held at MIT and organized by the Center for Excellence in Education (CEE).

- Project: *What does performance on one visual search task tell you about performance on another?*
- Supervisor: Dr. Jeremy Wolfe, Department of Brain and Cognitive Sciences, Harvard Medical School, Brigham and Women's Hospital.

2006 **Research Program in Biomedical Sciences**, KAROLINSKA INSTITUTET, Stockholm, Sweden.

Participant of a six week summer research program for the top 20 high school students in the country.

- Project: *Activation of Liver X Receptor affects the function and differentiation of osteoclasts*
- Supervisor: Dr. Kirsten Robertson, Department of Biosciences and Nutrition.

## Publications

1. Van Wert, M., Nova, N., Horowitz, T., Wolfe, J. (2008). What does performance on one visual search task tell you about performance on another? *Journal of Vision*, 8(6), 312. Vision Sciences Society, Naples, USA, May 2008.

Access [www.journalofvision.org/content/8/6/312](http://www.journalofvision.org/content/8/6/312)

## Work & Leadership

2011–2013 **Committee Member, Mentorship Director, Speaker**, *Research Academy for Young Scientists (Rays)*, Strängnäs, Sweden.

Member of steering committee and director of mentorships for the summer research program. The fully sponsored four week program is entirely organized by university students and admits 18 top Swedish high school students to work on research projects at prestigious universities in Stockholm. [raysforexcellence.se](http://raysforexcellence.se)

2010–2011 **President, Co-Founder of EDSA Research Program**, *European Dental Students' Association (EDSA)*, Dublin, Ireland.

President and co-founder of the EDSA Research Program for European dental students to have a research internship in a different European country. [edsaweb.org](http://edsaweb.org)

2010 **Summer Intern**, MEDICAL UNIVERSITY OF VIENNA, Austria.

Admitted to a four week medical program to shadow/assist physicians/surgeons at the General Hospital (AKH). Organized by the International Federation of Medical Students' Association (IFMSA).

- Department: Cranio-, Maxillofacial and Oral Surgery
- Supervisor: Prof. Dr. Dr. Rolf Ewers

2010 **International Student Training Course in Dental Implantology**, *Chiemsee Akademie & Maxillofacial Federation (MFF)*, Munich, Germany.

Organized by the European Dental Students' Association (EDSA). Course, one week.

2007–2009 **Committee Member**, *Swedish Federation of Young Scientists (FUF)*, Stockholm, Sweden.

Member of the executive committee for the annual National Science Fair for senior high school students, in charge of lectures and event logistics.

## Awards and Honors

2013 Google Grant – *Women in Tech Conference and Travel Grant (EMEA)* to attend the EuroBSDcon 2013 Conference, Hilton Conference Center, St. Julian's, Malta

2011 *ERASMUS Exchange Scholarship* – for university studies in Europe

2008 *Australian Rotary Club Scholarship* – to attend National Youth Science Forum at ANU

2007 Valedictorian – Best student of class 2007 at INTERNATIONAL ENGLISH GYMNASIUM

2007 First Prize in the Swedish National Science Fair – *Knut and Alice Wallenbergs Scholarship* to attend a research program (RSI) at MIT

## Computer skills

Advanced PYTHON, HTML/CSS/JS,  $\text{\LaTeX}$ , Linux, Gimp  
Intermediate MATLAB, C, C++, Bash, Mathematica, Prism, Blender, ImageJ  
Basic JAVA, R, DJANGO, NODE.JS, BSD

## Languages

Proficient **Swedish, English, Czech, Polish** *Native Proficiency*  
Intermediate **Spanish** *Conversational*

## MOOC courses

2013 edX **Dynamics**, MITx, 2.03x, Prof. David Gossard.  
Grade: A (94%)  
2013 edX **Neuronal Dynamics**, ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE, BIO465x,  
Prof. Wulfram Gerstner.  
Grade: A (92%)  
2013 edX **Electricity & Magnetism**, RICEx, PHYS102x, Assoc. Prof. Jason Hafner.  
Grade: A (94%)

## Teaching

2013 **Class in Scientific Paper Writing**, *Research Academy for Young Scientists (Rays)*, Strängnäs,  
Sweden.  
[raysforexcellence.se](http://raysforexcellence.se)