

Anjali Gopal

6420 Colby St
Oakland, CA, 94618
☎ 510-847-5241
✉ anjali.gopal@berkeley.edu

Education

- 2015–Present **Ph.D. Candidate, Bioengineering, University of California, Berkeley, Berkeley, CA, GPA 3.9/4.0.**
Advisor: Amy Herr
- 2009–2014 **Bachelor of Applied Sciences, Honours Nanotechnology Engineering, University of Waterloo, Waterloo, ON, GPA 92/100.**
Graduated with Distinction; Dean's Honours List

Technical Skills

- Languages R, Python, MATLAB
- Analysis Optical Microscopy, Scanning Electron Microscopy (SEM), Atomic Force Microscopy (AFM), UV-Visible Spectroscopy, Next Generation Sequencing Analysis (NGS)
- Software AutoCAD, SolidWorks, Adobe Creative Suite

Research & Work Experience

- Jun. 2014 – **Research Assistant, University of Toronto, Toronto, ON.**
Jul. 2015 Dr. Frederick Roth Research Group
- Designed a pipeline for processing NGS data from *S. cerevisiae* samples
 - Streamlined variant calling via external software packages (Bowtie/Bowtie-2 & Samtools)
 - Developed a front-end web interface to display and visualize data output
 - Cultured and analyzed basic yeast strains for yeast two-hybrid analysis
- Sept. 2013 – **Undergraduate Researcher, University of Waterloo, Waterloo, ON.**
Apr. 2014 SoftSimu, Dr. Mikko Karttunen Group
- Performed molecular dynamics simulations of the magainin-2 peptide in lipid bilayer membranes via GROMACS
- May 2013 – **Research Assistant, University of Waterloo, Waterloo, ON.**
Aug. 2013 Advanced Miniaturization Laboratory, Dr. Chris Backhouse Group
- Investigated temperature dependence of fluorescence of Rhodamine-B
 - Developed software to test & control various microfluidics modules (PCR, capillary electrophoresis, peristaltic pump)
- Sept. 2011 – **Engineering Assistant, Baylis Medical Company, Mississauga, ON.**
Apr. 2012 & Cardiology/Radiology Research & Development Team
- Jan. 2011 –
- Investigated echogenicity of radiofrequency guidewires, including creating & testing prototype models
 - Investigated techniques of implantation and extraction of pacemaker leads
 - Performed statistical analysis of data for new device models
 - Verified integrity of products by performing testing according to ISO standards
 - Negotiated with vendors to create and verify custom tooling and design manufacturing methods

Publications

Petsalaki E, Helbig A, **Gopal A**, Pasculescu A, Roth FP, Pawson T. *Selphi: Correlation-based identification of kinase-associated networks from global phospho-proteomics datasets*. *Nucleic Acids Research*, 43(W1):W276-82 (2015).

Awards

- 2016 NSERC Postgraduate Scholarship (PGS-D), *University of California, Berkeley*
- 2014 Paula Plummer Award, Engineering Society, *University of Waterloo*
- 2013 Debate Award, Sandford Flemming Foundation, *University of Waterloo*
- 2012 First Place, NanoCarbon Cellulose Design Competition, *University of Waterloo*
- 2012 Karen Mark Award, Sandford Flemming Foundation, *University of Waterloo*
- 2011 Faculty of Engineering Upper Year Scholarship, *University of Waterloo*
- 2011 Iron Pen Award, The Iron Warrior Engineering Newspaper, *University of Waterloo*
- 2010 C. D. Howe Memorial Foundation National Engineering Award, *Association of Universities and Colleges of Canada*
- 2009 Paul B. Spafford Entrance Scholarship, *University of Waterloo*
- 2009 President's Scholarship of Distinction, *University of Waterloo*
- 2009 Excellence Award, *Canada Millennium Scholarship Foundation*

Leadership Experience & Volunteering

- Nov. 2015 – Present **Bioengineering Association of Students, Visit Weekend Committee**, *University of California, Berkeley, Berkeley, CA.*
 - Assisted in organizing two interview weekends for prospective graduate students of the UCB/UCSF Bioengineering program.
 - Facilitated networking events between prospective students, current students, and faculty members.
- Sept. 2015 – **Mentor, Women in Engineering**, *University of Waterloo, Waterloo, ON.*
- Dec. 2013 ○ Mentored and guided first year engineering students through several aspects of university life (academic, extra-curricular, and social)
- Nov. 2011 – **Federation Orientation Committee**, *University of Waterloo, Waterloo, ON.*
- Nov. 2012 ○ Contributed over 900 hours of volunteer service to the Federation Orientation Committee
- Created a detailed schedule of orientation programming for 1600 incoming engineering students
- Created and maintained detailed budgets and risk management forms for all events
- Recruited, hired, and mentored 400 Orientation Leaders in their interaction with incoming first year students and in event planning for first year students
- Maintained regular communication with the Dean of Engineering, the Federation Orientation Committee Chair, the Orientation Advisor, and 400 Orientation Leaders
- Ensured the smooth execution of orientation week programming, including troubleshooting
- Sept. 2009 – **Writer & Copy Editor, The Iron Warrior**, *University of Waterloo, Waterloo, ON.*
- Dec. 2012 ○ Contributed well-written, insightful articles to the official Engineering Society newspaper
- Proofread and edited articles written by other writers.