

Tyler Funnell

New York, USA

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EDUCATION

Since 2015 **PhD Candidate Computational Biology and Medicine**
Weill Cornell Medicine

2011–2014 **MSc Bioinformatics**
University of British Columbia

2004–2009 **BSc Computer Science**
University of Northern British Columbia
GPA 3.99

2007–2008 **Certificate Japanese Studies**
Osaka International University
Graduated top of class

PUBLICATIONS

Funnell, T., Zhang, A. W., Grewal, D., McKinney, S., Bashashati, A., Wang, Y. K. & Shah, S. P. Integrated structural variation and point mutation signatures in cancer genomes using correlated topic models. *PLoS computational biology* **15**, e1006799 (2019).

Zhang, A. W., McPherson, A., Milne, K., Kroeger, D. R., Hamilton, P. T., Miranda, A., **Funnell, T.**, *et al.* Interfaces of malignant and immunologic clonal dynamics in ovarian cancer. *Cell* **173**, 1755–1769 (2018).

Funnell, T., Tasaki, S., Oloumi, A., Araki, S., Kong, E., Yap, D., Nakayama, Y., *et al.* CLK-dependent exon recognition and conjoined gene formation revealed with a novel small molecule inhibitor. *Nature Communications* **8**, 7 (2017).

Ding, J., McConechy, M. K., Horlings, H. M., Ha, G., Chun Chan, F., **Funnell, T.**, Mullaly, S. C., *et al.* Systematic analysis of somatic mutations impacting gene expression in 12 tumour types. *Nature Communications* **6**, 8554 EP - (Oct. 2015).

EXPERIENCE

Since 2018 **PhD Student**

Shah Lab, MSKCC, New York, USA

- Developed machine learning approaches for detecting mutation signatures.
- Implemented computational workflows for analyzing single cell whole genome sequencing data.

2015–2018 **PhD Student**

Shah Lab, BCCRC, Vancouver, Canada

- Transferred to Weill Cornell Medicine.

2012–2014 **MSc Student**

Shah Lab, BCCRC, Vancouver, Canada

- Lead the analysis of an mRNA processing study in collaboration with Takeda Pharmaceuticals.

2012–2014 **Bioinformatics Graduate Program Student Mentor**

Vancouver, Canada

- Provided academic and other advice to incoming bioinformatics students.

2013 **INK Journal Reviewer**

Vancouver, Canada

- Reviewed and provided written feedback for non-academic articles.

2012–2013 **Bioinformatics/IOP Retreat Committee Member**

Vancouver, Canada

- Organized an expert panel discussion with local university faculty members.

2012 **Rotation Student**

Gaffney Lab, Wellcome Trust Sanger Institute, Hinxton, UK

- Investigated the relationships between promoter features in lymphoblastoid cells and their effect on gene expression.

2012 **Rotation Student**

Wasserman Lab, CMMT, Vancouver, Canada

- Analyzed mouse cerebellum transcriptome time-course data to identify transcription factors essential to cerebellum development.

2011 **Rotation Student**

Pavlidis Lab, CHiBi, Vancouver, Canada

- Worked on a method for measuring accuracy of metrics comparing gene lists obtained from studies performing differential gene expression analysis.

2009–2011 **Software Engineer**

Goldstream Publishing Inc., Prince George, Canada

- Designed and implemented a web-based method of organizing and searching data based on its geospatial footprint.
- Developed ways of generating geospatial meta-data and searching the stored information in a way that is intuitive to the user and provides meaningful results.

2007–2008 **English Tutor**

Osaka, Japan

- Assisted with teaching children of various ages, helping increase exposure to the English language and western culture.
- Taught private English lessons for adults, improving ability of the student to communicate effectively with English speakers.

Summer **Research Assistant**

2006 UNBC Professors Desanka and Jernej Polajnar, Prince George, Canada

- Developed Java software components for a research project.
- Assisted in developing algorithms used in software simulations.

AWARDS

2017 **Faculty of Science Graduate Award**

\$3,465.00

2016 **Faculty of Science Graduate Award**

\$5,557.66

2015 **Faculty of Science Graduate Award**

\$3,236.22

2014 **Mitacs Accelerate**

\$15,000

Awarded to qualified research projects following expert review.

2012 **College for Interdisciplinary Studies Graduate Award**

\$415.61

Awarded based on academic merit.

- 2011 **CIHR/MSFHR Bioinformatics Training Program for Health Research**
\$44,000 Awarded based on academic merit.
- 2011 **College for Interdisciplinary Studies Graduate Award**
\$2,000
Awarded based on academic merit.
- 2007 **One World Scholarship — Irving K. Barber British Columbia Scholarship Society**
\$3,000
Awarded based on academic merit, the students' educational objectives, institutional and/or community involvement, and readiness for participation in an overseas exchange program.
- 2007 **UNBC In-course Scholarship**
\$1,200
Awarded based on academic excellence.
- 2006 **UNBC In-course Scholarship**
\$1,200
Awarded based on academic excellence.
- 2005 **UNBC In-course Scholarship**
\$1,200
Awarded based on academic excellence.
- 2004 **Academic Excellence Award**
\$536.46
Awarded based on academic excellence. Tuition waiver for one 3-credit course, application fee waived for UNBC.
- 2004 **Provincial Scholarship Award**
\$1,000
Awarded to high school graduates based on provincial exam results.

Last updated: April 21, 2020