

Kieran O'Neill

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Current Position

Postdoctoral Fellow (Karsan Lab, Michael Smith Genome Sciences Centre, Vancouver, Canada)

Education

- 2014 **Ph.D. (Bioinformatics) University of British Columbia, Vancouver, Canada**
 Thesis: Automated analysis of single cell leukemia data
 Supervisor: Dr Ryan Brinkman
 Research undertaken at the BC Cancer Agency
- 2008 **M.Sc. (Computer Science) University of KwaZulu-Natal, Pietermaritzburg, South Africa**
 Dissertation: Relieving the Cognitive Load of Constructing Molecular Biological Ontology Based Queries by means of Visual Aids
 Research undertaken at National Bioinformatics Institute, Cape Town
 Internship at European Bioinformatics Institute, Hinxton, UK
- 2004 **B.Sc.(Hons), University of KwaZulu-Natal, Pietermaritzburg, South Africa**
 Dissertation: Creation of an Extensible Environment for the Investigation of Genetic Algorithmic Solutions to 3D Cubic Lattice Protein Folding
Cum Laude
 Dean's commendations for 7/10 semesters attended.
 Certificates of Merit (top in class) 14/43 modules completed.

Awards

- 2017 Postdoctoral Fellowship, Canadian Institutes of Health Research
- 2015 Postdoctoral Fellowship, Michael Smith Foundation for Health Research
 Poster Prize, *ISMB 2015*
- 2012 Student Travel Award, *CYTO 2012*
- 2005 Prestigious Masters Award, *National Research Foundation* (South Africa)
- 2004 Special Honours Award, *National Research Foundation* (South Africa)

First Author Publications

- Research Articles
- 2017 Assembling draft genomes using contiBAIT, *Bioinformatics*
- 2015 Deep profiling of multitube flow cytometry data, *Bioinformatics*
- 2014 Enhanced flowType/RchyOptimyx: a Bioconductor pipeline for discovery in high-dimensional cytometry data, *Bioinformatics*

	2008	OntoDas - a tool for facilitating the construction of complex queries to the Gene Ontology, <i>BMC Bioinformatics</i>
Commentary/Reviews	2016	Publishing code is essential for reproducible flow cytometry bioinformatics, <i>Cytometry A</i>
	2013	Flow Cytometry Bioinformatics, <i>PLoS Computational Biology</i>
Co-authored Publications	2016	MiR-139-5p is a potent tumor suppressor in adult acute myeloid leukemia, <i>Blood Cancer Journal</i>
	2013	Critical assessment of automated flow cytometry data analysis techniques, <i>Nature Methods</i>
		BAIT: Organizing genomes and mapping rearrangements in single cells, <i>Genome Medicine</i>
	2012	RchyOptimyx: Cellular hierarchy optimization for flow cytometry, <i>Cytometry A</i>
		Early immunologic correlates of HIV protection can be identified from computational analysis of complex multivariate T-cell flow cytometry assays, <i>Bioinformatics</i>
	2010	Developing Ontologies within Decentralised Settings, <i>Semantic e-Science</i>
	2008	Dasty2, an Ajax protein DAS client, <i>Bioinformatics</i>
Scientific Software	2017	Screw (in development)
	2016	ContiBAIT
	2013	flowBin
		BAIT
	2011	flowType
	2008	OntoDAS
Mentorship	2014-201	Eva Yap (Masters Student)
	2009	Six undergraduate/co-op students during PhD and post-doc (ongoing)
Work Experience	2010	Scientific Technical Advisor , <i>Twentieth Century Fox</i> , Vancouver, Canada Advised on the set of Rise of the Planet of the Apes
	2008	Web Developer , <i>ReportLab</i> , London, UK

2001 **Gap Year, *Various Positions***, London, UK