

JENNY LUONG

Grammou 44, Heraklion
Greece, 71307

Email: baohangluong@gmail.com

LinkedIn: <https://www.linkedin.com/in/jennyluong90/>

Notable skills

Biology

- Molecular biology (DNA, RNA, protein)
- Drosophila husbandry and microinjection
- Behavioural assays (locomotion, sleep)
- CRISPR mutagenesis

Computer

- ImageJ
- R programming
- Geneious
- Inkscape

Languages

- Vietnamese (fluent)
- English (fluent)
- Japanese (beginner)
- Greek (beginner)

Education

The University of Melbourne

Expected submission: March 2018

Doctor of Philosophy

Synopsis: In this project, CRISPR was used to genetically dissect sleep behaviour in *Drosophila melanogaster*. First, when each subunit of nAChRs was genetically manipulated, they all showed sleep abnormalities. Then, disrupting an accessory protein of nAChRs, *DmRIC3*, also phenocopied sleep behaviours of perturbed nAChRs. These data confirmed a significant role of acetylcholine signalling in sleep.

- Used CRISPR-Cas9 to create precise knockouts of various genes in multiple genetic backgrounds
- Conducted sleep assays and different insecticide screens on *Drosophila* larvae and adults
- Utilized GAL4-UAS for overexpression, somatic CRISPR and neuron manipulation
- Used R for statistical analyses and data visualization
- Used RT-qPCR and Western blot to quantify gene expression
- Established transgenic lines with micro-injection

The University of Melbourne

2013

Bachelor of Science (with Honours)

Synopsis: In this project, the role of an accessory protein, *DmRIC3*, for nicotinic acetylcholine receptors was characterized in *Drosophila melanogaster*. A series of behavioural assays, including activity level, longevity, geotaxis response, insecticide response and aging effects, were carried out for two transgenic lines harbouring partial deletions at the end of *DmRIC3*.

- Conducted phenotypic assays (adult and larval locomotion, longevity, insecticide response)
- Validated transgenic lines with RNA and RT-qPCR

Other Research Experiences

Research Assistant

2012-2013

Robin Laboratory, Bio21, The University of Melbourne

- Assisted in larval toxicology assays of *Drosophila melanogaster* lines for a genome-wide association study

Undergraduate Research Scholar

2011- 2012

Scott Laboratory, Walter & Eliza Hall Institute of Medical Research

- Assisted in the generation and validation of a transgenic mouse model for epithelial ovarian cancer
- Extracted DNA and used diagnostic PCR to identify triple mutant mice
- Cryo-sectioned tissue slices and conducted immunohistochemical staining for cancer markers

Teaching Experiences

Scientist Mentor

2012-2017

Gene Technology Access Centre

- Taught and guided school students through biotechnology workshops

Lab Demonstrator (Experiments in Genetics)

2015-2017

School of BioSciences, The University of Melbourne

- Provided demonstration of genetic techniques to undergraduate students
- Invigilated tests and exams and marked assessments

Residential Tutor

2015- 2016

International House, The University of Melbourne

- Provided weekly tutorials, ongoing pastoral care and administrative tasks for undergraduate students

Selected Awards and Scholarships

- Science Abroad Travelling Scholarship (\$AUD 1500; 2016)
- Bio21 Travel Award (\$AUD 1000; 2016)
- Melbourne International Research Scholarship (\$AUD 25,000 per annum; 2014-2017)
- Genetics Society of AustralAsia Travel Award (\$AUD 250; 2012)
- Victorian Comprehensive Cancer Centre Undergraduate Research Stipend (\$AUD 10,500; 2011-2012)
- International House Academic Achievement Scholarship (\$AUD 2000; 2011)
- Deans Honours List, Faculty of Science, The University of Melbourne (2010)

Conference Proceedings

Poster

- Luong, J., Somers, J., Perry, T., Batterham, P. Courtship, sleep and longevity are greatly impacted by loss of the *Da1* nicotinic acetylcholine receptor subunit. *The Allied Genetics Conference, Orlando, Florida, USA, 2016*
- Luong, J., Yang, Y. T., Perry, T., Batterham, P. RIC3 – analysis of its critical role in neurological receptor functions. *Genetics Society of AustralAsia Conference, Melbourne, Victoria, Australia, 2014.*

Oral presentation

- Denecke, S., Fusetto, R., Luong, J., Wei, C. Functional analysis of nicotinic acetylcholine receptors using sub-lethal doses of insecticides. *AusFly Meeting Warburton, Victoria, Australia, 2015.*
- Luong, J. Generation of an epithelial ovarian cancer transgenic mouse model. *UROP Conference Day, Melbourne, Victoria, Australia, 2012.*

Publications

- Somers, J., Luong, H. N. B., Mitchel, J., Batterham, P., Perry, T. Pleiotropic effects of genomic knockout of the *Da1* nicotinic acetylcholine receptor subunit of *Drosophila melanogaster* on courtship, sleep and circadian rhythm. *GENETICS January 1, 2017 vol. 205 no. 1 263-271*
- Somers, J., Luong, H. N. B., Batterham, P., Perry, T. Deletion of the nicotinic acetylcholine receptor subunit gene *Da1* confers insecticide resistance, but at what cost? *FLY(AUSTIN). November 2, 2017 Nov 2 (online)*

Non-scientific Experiences

- Casual employment in education services (graduation, exam, student union, library)
- Volunteer experiences in events, services and not-for-profit organisations

References

Prof. Philip Batterham
Bio21 Institute
The University of Melbourne
Parkville, 3010 Australia
+61 8344 2363
p.batterham@unimelb.edu.au

Dr. Tony Chiovitti
Deputy Director
Gene Technology Access Centre
Parkville, 3010 Australia
+61 9340 3613
tchiovitti@gtac.edu.au

Carolynne Venn
Community Development Coordinator
The Centre
58 Errol St, North Melbourne
+61 9328 1126
commdev@centre.org.au