

Adrienne Jenner

School of Mathematics and Statistics
Queensland University of Technology, Brisbane, QLD, Australia

Phone : +61 412 437 953
Email : adrienne.jenner@qut.edu.au

Education

- 2015-2019 **PhD in Applied Mathematics**, University of Sydney, Australia
“Applications of mathematical modelling in oncolytic virotherapy and immunotherapy”
Co-supervisors: A/Prof Peter Kim, A/Prof Adelle Coster, Auxiliary: A/Prof Federico Frascoli
- 2014-2015 **Bachelor of Science Honours Class I, awarded 90/100**, University of Sydney, Australia
“Mathematical modelling of oncolytic virotherapy and immunotherapy”
Supervisor: A/Prof Peter Kim
- 2010-2013 **Bachelor of Mathematics (Distinction)**, University of Wollongong, Australia

Professional experience

Research Training

- 2021- current **Lecturer**, Queensland University of Technology, Australia
- 2019-2021 **Postdoctoral Research Fellow**, Université de Montréal, Canada
Supervision: Dr Morgan Craig
- 2019 **Postdoctoral Research Assistant**, University of Sydney, Australia
Supervision: Peter Kim
- 2018 **Research Affiliate (Visiting Scholar)**, Indiana University, United States
Sponsor: A/Prof. Paul Macklin

Teaching Experience

- 2021 **Lecturer**, Queensland University of Technology
Responsibilities: Unit coordinator MXB102 Abstract Mathematical Modelling
- 2020 **Guest lecturer**, Université de Montréal
Responsibilities: Guest lecture MAT6460 H - Génétique mathématique (Mathematics of genetics), a masters and doctorate level course, and help evaluate course assignments
- 2016-2019 **Postgraduate Teaching Fellow**, University of Sydney
Responsibilities: Preparing lecture material and lecturing MATH1001 Differential Calculus, teaching tutorials units (MATH1111, MATH1011, MATH1013, MATH1001, MATH1002, MATH1021, MATH1023), co-ordinating subject-specific student representative meetings with the Head of School, marking and setting of quizzes, assignments and exams, responding to student emails and online discussion boards, and co-ordinating tutorial content and teachers.
- 2017-2019 **Summer School Lecturer**, University of Sydney
Responsibilities: Preparing lecture material and lecturing MATH1001 Differential Calculus and MATH1023: Differential Calculus 2, teaching tutorials units MATH1001 and MATH1023, marking and setting of quizzes, assignments and exams, responding to student emails and online discussion boards, and co-ordinating tutorial content and tutorial teachers.
- 2014-2016 **Casual academic**, University of Sydney
Responsibilities: Teaching tutorial units (MATH1111, PHAR1811, MATH1011, MATH1013, MATH1014, MATH1001, MATH1002, MATH1021, MATH1023), marking quizzes and assignments

Publications

1. A.L. JENNER, R.A. AOGO, S. ALFONSE, V.CROWE, ... M.CRAIG (2021) "COVID-19 virtual patient cohort suggests immune mechanisms driving disease outcomes", *PLOS Pathogens* (accepted for publication June)
2. P. Crosley, A. FARIKKILA, A.L. JENNER,... M. HITT (2021), *International Journal of Molecular Sciences* 22. 9
3. A.L. JENNER, T. CASSIDY, K. BELAID, M.C. BOURGEOIS-DAIGNEAULT, M. CRAIG (2020), "In silico trails predict that combination strategies for enhancing vesicular stomatitis oncolytic virus are determined by tumour aggressivity", *Journal for ImmunoTherapy of Cancer* (accepted for publication November 2020)
4. S. ALFONSA, A.L. JENNER, M.CRAIG (2020), "Translational approaches to treating dynamical diseases through *in silico* clinical trails", *Chaos: An interdisciplinary Journal of Nonlinear Science* 30:123128
5. M. CRAIG, A.L. JENNER, B. NAMGUNG, L. LEE, A. GOLDMAN (2020), "Engineering in Medicine to address the challenge of cancer drug resistance: From micro- and nanotechnologies to computational and mathematical modelling", *Chemical Reviews*
6. A.L. JENNER, R.A. AOGO, C.L. DAVIS, A.M. SMITH, M. CRAIG (2020), "Leveraging Computational Modelling to Understand Infectious Diseases", *Current Pathobiology* 1-13
7. A.L. JENNER, F. FRASCOLI, C.O. YUN, P.S. KIM (2020), "Optimising Hydrogel Release Profiles for Viro-Immunotherapy Using Oncolytic Adenovirus Expressing IL-12 and GM-CSF with Immature Dendritic Cells", *Applied Science* 10(8):2872
8. T. LEE, A.L. JENNER, P.S. KIM, J.LEE (2020), "Application of control theory in a delayed-infection and immune-evading oncolytic virotherapy", *Mathematical Biosciences and Engineering* 17(3): 2361
9. A.L. JENNER, F. FRASCOLI, A.C.F. COSTER, P.S. KIM (2019), "Enhancing oncolytic virotherapy: Observations from a Voronoi Cell-Based model", *Journal of Theoretical Biology* 485: 110052
10. A.L. JENNER, P.S. KIM, F. FRASCOLI (2019), "Oncolytic virotherapy for tumours following a Gompertz growth law", *Journal of Theoretical Biology* 480: 129-140
11. A.L. JENNER (2019), "Applications of Mathematical Modelling in Oncolytic Virotherapy and Immunotherapy", University of Sydney
12. A.L. JENNER, C.O. YUN, A. YOON, P.S. KIM, A.C.F. COSTER (2018), "Modelling heterogeneity in viral-tumour dynamics: The effects of gene-attenuation on viral characteristics", *Journal of Theoretical Biology* 454: 41-52
13. A.L. JENNER, A.C.F. COSTER, P.S. KIM, F. FRASCOLI (2018), "Treating cancerous cells with viruses: insights from a minimal model for oncolytic virotherapy", *Letters in Biomathematics* 5(sup1): S117-S136
- A.L. JENNER, C.O. YUN, P.S. KIM, A.C.F. COSTER (2018), "Mathematical modelling of the interaction between cancer cells and an oncolytic virus: insights into the effects of treatment protocols", *Bulletin of Mathematical Biology* 80(6): 1615-1629

Fellowships and grants

2019 – 2021	Programme de bourse de formation postdoctorale pour les citoyens d'autres pays 90,000 CAD
2019	Center for Applied Mathematics in Bioscience and Medicine Postdoctoral fellowship 7,000 CAD
2019	Bourses de voyage pour la conference canadienne sur la recherche sur le cancer 1,000 CAD
2019	Australian Mathematics Society Lift-Off Fellowship \$4,000
2019	Postgraduate Research Support Scheme Funding \$3,500
2018	The Australian Federation of Graduate Women Tempe Mann Travel Scholarship \$8,000
2018	Sydney University Graduates Union of North America Alumni \$2,500
2018	Australian and New Zealand Industrial and Applied Mathematics Student Travel Support \$500
2017	K.E. Bullen International Conference Scholarship \$3,500
2017	Women in Mathematics Special Interest Group Travel Grant \$600
2017	Society for Mathematical Biology Landahl Travel Award 750 USD
2016	Society for Mathematical Biology Landahl Travel Award 250 USD
2016	Postgraduate Research Support Scheme Funding \$3,000
2015	Australian Postgraduate Award (APA) \$80,046
2010	Mathematics Undergraduate Scholarship at the University of Wollongong \$9,000

Other awards

2018	State finalist for FameLab: Science Communication Competition
2017	B.H. Neumann Prize for best student presentation at the Australian Mathematics Society (AustMS) Annual Meeting
2016	Runner up in the Three-Minute Thesis Competition at the AustMS Annual Meeting
2016	First prize poster at Séminaire de Mathématiques Supérieures, University of Alberta
2016	T.M. Cherry Prize for best student presentation at the Australian and New Zealand Industrial and Applied Mathematics Annual Meeting
2015	Honourable mention for the B.H. Neumann Prize for best student presentation at the Australian Mathematics Society Annual Meeting
2015	Australian Federation of Graduate Women Prize in Mathematics
2015	Chris Cannon prize for the best Applied Honours presentation

Supervision

2021-current	Hrshika Alajpur, Research Assistant, Queensland University of Technology, Australia
2021-current	Isobelle Parfitt, Research Assistant, Queensland University of Technology, Australia
2021-current	Noa Levi, Honours student, Queensland University of Technology, Australia
2021-current	Jaymie Tilbury, Honours student, Queensland University of Technology, Australia
2020-current	Justin Le Sauteur, PhD Candidate at the Université de Montréal, Canada
2020 (JUL-OCT)	Olivia Cardinal, summer internship, Université de Montréal, Canada
2020 (APR-JUL)	Chloé Burlot, summer internship, Université de Montréal, Canada
2019	Steve Laubie, internship, University of Sydney, Australia
2018	Ilham Harmach, internship, University of Sydney, Australia

Extracurricular activities

2019	Presenter at the live Ockham's Razor Event as part of Vivid Sydney
2018	Interviewed on the ABC 7.30 Report
2018	Volunteer mentor at the Accenture Girl's in STEM day
2018	Presenter in the Science Tent at Splendour in the Grass
2018	Vice President of the University of Sydney Mathematics Postgraduate Society (MaPS)
2016-2018	Society for Mathematical Biology Annual Meeting 2018 Social Media Coordinator
2017	Inaugural Debate participant at the Australian Mathematics Society Annual Meeting
2017	Student Volunteer for International Science week "Meet a Geek"
2017	Girl's in Math Day Out panel member

Selected conferences and presentations (2017-2020)

2020	Organiser of the workshop Computational Modelling to Study Cancer Biology and Treatments supported by Centre for Applied Mathematical in Biosciences and Medicine
2020	Presented at CAIMS-PIMS Coronavirus Modelling Conference
2020	Minisymposium organiser and presenter at the SIAM/CAIMS 2020 Annual Meeting (Postponed)
2020	Invited lecturer for the UBC Math Bio Seminar, Pacific Institute for the Mathematical Sciences
2019	Invited lecturer at the University of Alberta Math Bio Seminar
2019	Presented a poster at the Canadian Cancer Research Conference
2019	Presented at The Society for Mathematical Biology (SMB) Annual Meeting
2018	Presented at the Joint CMBAM/NSERC-CREATE in Complex Dynamics Summer School McGill
2018	Presented at the Australian and New Zealand Industrial and Applied Mathematics conference
2017	Presented at the Australian Mathematics Society Annual meeting (AustMS)
2017	Presented at the Women in Mathematics Special Interest Group Conference