

Michael Casey

Curriculum Vitae

AstraZeneca
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Nationality: Irish/British

Education

- 2014–18 **Integrated Masters Natural Sciences, 1st class, University of Cambridge,**
Part II Genetics, Part III Systems Biology.
- 2008–14 **St Louis Grammar School Ballymena,**
10 A/As at GCSEs, incl Maths and English; 4 A*s at A-level.*

Professional Experience

- 2021–Present **Data Scientist, AstraZeneca,**
Early CVRM, Translational Science & Experimental Medicine.
- 2018–Present **PhD Mathematical Sciences, University of Southampton,**
'On the Mathematics of Cell Type' supervised by Ben D MacArthur and Rubén J Sánchez-García.
- 2020 **PhD Enrichment Studentship, The Alan Turing Institute.**

Selected Preprints & Publications

- 2021 'Estimating Cellular Redundancy in Networks of Genetic Expression', *Mathematical Biosciences*, Raffaella Mulas & **Michael J. Casey**
- 2020 'Measuring the Information Obtained from a Single-Cell Sequencing Experiment', *BioRxiv*, **Michael J. Casey**, Rubén J. Sánchez-García and Ben D. MacArthur
- 2019 'Theory of Cell Fate', *WIREs Systems Biology and Medicine*, **Michael J. Casey**, Patrick S. Stumpf and Ben D. MacArthur.

Selected Additional Experience

- 2019 Research Internship (2 weeks) in Hitoshi Takizawa group, IRCMS, Japan
- 2019 Marine Biological Laboratory Advanced Training Course: Gene Regulatory Networks for Development, University of Chicago
- 2019 Industrially Focused Mathematical Modelling (InFoMM) UK Graduate Modelling Camp, University of Oxford

References

- Ian Henry Affiliations: AstraZeneca
Position: Line Manager (UoS), Head of Data Science for Early CVRM Translation Science & Experimental Medicine
- Ben MacArthur Affiliations: University of Southampton (UoS) & Alan Turing Institute (ATI)
Position: Primary PhD Supervisor (UoS), Professor of Applied Mathematics & Medicine (UoS), Director of AI for Science and Government (ATI)