Michael Casey

Curriculum Vitae

AstraZeneca Cambridge, CB21 6GP ⊠ michael.casey1@astrazeneca.com 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 Ru
 - '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

Awards

- 2018 Bateman Scholar of Trinity Hall (for final year exam performance)
- 2016 Summer Studentship, UK Genetics Society
- 2014 Irish Team, International Chemistry Olympiad (Hanoi, Vietnam)

References

Prof Ben Affiliations: University of Southampton (UoS) & Alan Turing Institute (ATI)

MacArthur Position: Primary PhD Supervisor (UoS), Professor of Applied Mathematics & Medicine (UoS), Director of AI for Science and Government (ATI)