

# Michael Casey

## Curriculum Vitae

Institute For Life Sciences  
University of Southampton, SO17 1TR  
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Nationality: Irish/British

### Education

- 2018–Present **PhD Mathematical Sciences, University of Southampton,**  
*“On the Mathematics of Cell Type” supervised by Ben D MacArthur and Rubén J Sánchez-García.*
- 2017–18 **MSci Natural Sciences (Systems Biology) (1st), University of Cambridge,**  
*Courses - Data Acquisition and Handling [R], Modelling and Analysis of Networks [MATLAB], and Synthetic and Executable Biology.*
- 2014–17 **BA Natural Sciences (Genetics) (2.i), University of Cambridge,**  
*Selected Courses - Developmental Genetics, Genomics and Systems Biology, and Evolutionary Genetics.*

### Preprints & Publications

- 2020 ‘Measuring the Information Obtained from a Single-Cell Sequencing Experiment’ *BioRxiv*, **Michael J. Casey**, Rubén J. Sánchez-García and Ben D. MacArthur
- 2020 ‘Genome reduction is associated with bacterial pathogenicity across different scales of temporal and ecological divergence’ *BioRxiv*, Gemma G. R. Murray, Jane Charlesworth, Eric L. Miller, **Michael J. Casey**, Catrin T. Lloyd, Marcelo Gottschalk, A. W. (Dan) Tucker, John J. Welch and Lucy A. Weinert
- 2019 ‘Theory of Cell Fate’ *WIREs Systems Biology and Medicine*. **Michael J. Casey**, Patrick S. Stumpf and Ben D. MacArthur. December 2019.

### Conferences and Workshops Attended

- 2019 Marine Biological Laboratory Advanced Training Course: Gene Regulatory Networks for Development, University of Chicago
- 2019 Stem Cells UK Day, Francis Crick Institute
- 2019 Physics of Living Matter Symposium, 14th Edition, University of Cambridge
- 2019 Industrially Focused Mathematical Modelling (InFoMM) UK Graduate Modelling Camp, University of Oxford
- 2018 Quantitative Systems Biology Workshop, Kings College London

### Research Visits

- 2019 Research Internship (2 weeks) in Hitoshi Takizawa group, IRCMS, Japan
- 2019 Enrichment Studentship (6 months), The Alan Turing Institute

### 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)

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## References

Prof Ben MacArthur    Position: Primary PhD Supervisor, Professor of Applied Mathematics  
Affiliations: Institute for Life Sciences and School of Mathematical Sciences, University of Southampton  
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