

- Described by the lead academic as “*absolutely the best GTA I have ever worked with*”

Academic Leader (Mathematics) | Imperial College London Outreach 2023 – 2025
Sutton Trust, STEM Futures, STEM Potential, and Insights summer schools; Primary Maths Transition Programme; Primary Science Club. Delivered sessions on infinity, fractals, number theory, fluid dynamics, game theory, and probability to Year 5–12 students from widening participation backgrounds.

- STEM Futures (2025): 90% of students reported ideas were clearly explained; 85% reported increased confidence in mathematics

Mathematics Admissions Test Mentor | MEI 2019, 2022
Mentored Year 12 students preparing for the Oxford Mathematics Admissions Test; designed extension problems and provided detailed written feedback.

Science Communication & Public Engagement

Freelance Mathematics Communicator 2025 – Present
Designing and delivering talks and workshops for audiences from Year 5 through Sixth Form.

Guest Lecturer | Royal Institution, Climate Innovation Day Mar 2024
Delivered a lecture on fluid dynamics to 300+ Year 5/6 students in the Main Lecture Theatre.

- Teacher feedback: “*The best explanation of fluid dynamics I have ever heard, and I did a mechanical engineering degree!*”

FameLab Regional Winner and National Finalist | Cheltenham Science Festival / KMTV 2023

Chair | RCSU Science Challenge 2022 – 2023
Managed a £7,000 budget; increased participation by 80%; introduced *Science Shorts* video series; established partnership with the Young Scientist’s Journal. Also the 2022 overall winner.

Co-creator | Hello World Hack, Imperial College London 2019 – Present
Coding workshop for girls aged 7–10. Awarded £2,000 from the Imperial Societal Engagement Seed Fund; now an annual event; cumulative reach of 90+ children.

Maths at the Carnival | Begbroke Science Festival 2024
Co-created and delivered a Game Theory festival stall to 2,000+ attendees.

Wisdom from Wonderland | Short Talk Series (YouTube)
Original short-form science communication videos on statistics, data, and ocean science.

Recreational Mathematics

Reviewer, *The Mathematical Gazette* 2025 – Present

Speaker | MathsJam Annual Gathering 2023, 2025
2025: “*On Sequences of Consecutive Odd Semi-Primes*” (original research). 2023: “*An Alternative Approach to Mathematical Modelling*”.

Speaker | Gathering 4 Gardner (G4G15), Atlanta 2024
“*A Chaotic Series of Mathematical Accidents*”. Awarded full G4G scholarship.

Regular attendee: MathsJam · Gathering for Gardner · Recreational Mathematics Colloquium · Talking Maths in Public

Selected Talks & Panels

- *Is a Maths PhD Right for Me?* – PhD Your Way Webinar (Panelist) 2026
- *MVN NGBoost for Ocean Surface Current Prediction* – Changing the Face of Science Symposium 2025
- *Rubber Ducks, Oceans, and Ridiculous Hypotheticals About Jam Tarts* – Young Scientists Journal Conference, King’s School Canterbury 2024
- *Exploring Mathematical Ocean Sciences* – Royal Institution, Climate Innovation Day 2024
- *A Chaotic Series of Mathematical Accidents* – Gathering 4 Gardner, Atlanta 2024
- *What Maths Has to Do with Marbles, Oceans and Rubber Ducks* – Hello World Hack 2023

- *Mathematics in Motion: Exploring Fluid Dynamics* – Young Scientist Journal Podcast 2023
- *Why the Future of STEM is in our Four-year-olds* – TEDxImperialCollege 2019
- *The Hidden Link Between Groups and Hydrogen* – Imperial College Undergraduate Colloquium 2019

Writing

- *Science is Best When it's Shared* – Womanthology (2024)
- *Do Ducks Have Knees?* – Imperial College London FoNS Blog (2024)
- *The Universe, in Rhyme and Verse – When a Star Gets Old* – Medium (2024)
- *Nursery Rhymes for Curious Minds – The Queen of Hearts* – Medium (2023); featured in the Carnival of Mathematics
- *Black Lives Matter on Campus Too* – Imperial College London FoNS Blog (2020)
- *The Making of a Modeller* – Challenger Society Art & Photography Competition 2024, **First Runner-up**
- *History of Mathematics Window Display* – Huxley Building, Imperial College London (on display until at least 2034)

Awards & Honours (Selected)

President's Award for Excellence in Societal Engagement – Imperial College London	2020, 2024
RCSA Prize – Academic Excellence and Contribution to the College Community	2023
RCSU President's Award – Royal College of Science Union	2023
Dean's List – Top 10% of MSci Mathematics cohort	2022
Rare Rising Star Award – Top 10 Black Students in the UK	2020
Outstanding Achievement Medal – Imperial College London	2020
Women of the Future – Young Star Award	2019
Imperial College First Year Project Prize	2019

Research Funding & Grants (Selected)

EPSRC PhD Studentship (2023–2027) · US CLIVAR Ocean UQ Summer School, Miami (fully funded, 2024) · CLASS Ocean Modelling Workshop, NOC Southampton (fully funded, 2024) · SIAM UKIE Student Travel Award (2024) · G4G Full Scholarship + £900 Dean's Fund Travel Grant (2024) · Imperial College Societal Engagement Seed Fund £2,000 (2019)

Professional Memberships

Royal Statistical Society · Association of British Science Writers · Challenger Society for Marine Science

Press & Media (Selected)

Imperial College London Stories: *Play, Empathy, and Sharing the Magic of Maths; Making Their Mark; Outreach at 50: Counting on Maths; Carving Out Your Own Lane* · BBC Breakfast TV (2021) · Womanthology (multiple features) · RCSA Prize citation (2023)