

Emma Dumble

07724310054 · Emma.Dumble@ed.ac.uk · [linkedin.com/in/emmadumble/](https://www.linkedin.com/in/emmadumble/)

Professional Statement

Final year Neuroscience PhD candidate (graduating Oct. 2026) with over 5 years of experience translating complex scientific data into succinct and impactful narratives for diverse audiences. Proven track record of building and sustaining relationships with Key Opinion Leaders (KOLs). Deeply committed to operating with scientific integrity and working within regulated environments. Curious and agile scientific communicator, adept at cross-functional collaboration, seeking to leverage strong scientific insight and communication expertise to drive medical strategy and improve patient outcome as a field-based Medical Science Liaison.

Key Expertise and Strategic Impact

External Engagement and Scientific Leadership

- **Conference prize winner:** delivered high-impact scientific presentations at international conferences (e.g. Cold Spring Harbor), earning a 'Best Poster' prize and establishing enduring relationships with academics and clinicians in neuroscience.
- **International collaboration:** actively participated in 3 international collaborations with McGill University, Notre Dame University and Washington University, facilitating smooth communication to advance shared technical goals.
- **Journal clubs:** led journal clubs and scientific discussions, disseminating complex research and facilitating critical evaluation among peers and faculty.
- **Public engagement:** ran neurodevelopment science workshops for 6th form students (Science Insights), communicated advanced neuroscience topics in an accessible way, sparking interest in STEM subjects among young students.
- **Strategic networking:** Attended and presented at national and international scientific congresses, proactively engaging with KOLs to exchange knowledge and identify emerging trends in neuroscience.

Scientific Writing and Strategic Communication

- **Publications:** 10+ conference abstracts, posters, slide decks and articles including a paper (*in review: pre-print [here](#)*) with Nature Neuroscience.
- **Grant writing:** conceptualised and wrote a grant to secure centre equipment, resulting in winning £2.5K in funding. Proposed PhD project and was awarded ~£100K by UKRI. Demonstrating strong scientific writing, strategic ideation and project justification skills.
- **Lay communication:** authored and edited content for Edinburgh University Science magazine (EUSci), translating complex biomedical concepts for broad audiences while maintaining scientific accuracy and balanced perspective. [Article here.](#)
- **Cross-functional business communication:** experience in healthcare insurance sector (WPA) developing AI tools, leading data analytics projects and liaising with hospitals, clinicians and consultants on complex invoicing matters. Operated within strict regulatory and data governance frameworks when handling sensitive healthcare information.

Research and Project Management

- **Agile research adaptability:** rapidly transitioned across diverse scientific domains (obesity, heart development, neuroscience, agricultural IVF), demonstrating intellectual curiosity and ability to quickly master new therapeutic areas.
- **Regulatory compliance and ethics:** hold a personal licence to conduct animal research, ensuring all experimental work strictly adhered to Home Office regulations. This instilled a rigorous commitment to ethical standards, safety protocols, and accurate documentation.
- **PhD project leadership:** from ideation to data dissemination; conducting experiments, coordinating with multiple labs, demonstrating exceptional time management and prioritisation skills. Cultivated a keen attention to detail through developing and validating rigorous experimental methodologies, ensuring accuracy.

Teaching and Mentoring

- **Lab training:** trained new lab staff on experimental techniques and equipment protocols, ensuring a smooth transition into lab operations and fostering team integration.

- **Mentorship:** Supervised an 8-month Master's student and launched a mentoring program to support first-year Biomedical Science students adjusting to university life during my undergraduate degree.
- **Teaching:** Assisted teaching a Masters' course on experimental techniques in *Xenopus laevis* at the Pasteur Institute (Paris). Provided clear instruction and troubleshooting support, ensuring students understood the scientific principles and technical skills involved.

Software skills MS Office, LaTeX, Adobe Illustrator, GraphPad Prism, Imaris, and ImageJ.

Selected Research Output

Primary Research Articles

Dumble E., [...], Czopka T (2025). *Neuronal pre-synapses are stabilised by activity-dependent vesicle release by oligodendrocyte precursor cells.* Manuscript in review.

Dumble E., [...], Czopka T (2026). Spatiotemporal characterisation of oligodendrocyte precursor cells post-synapses. Manuscript in preparation in collaboration with PI at Notre Dame University.

Key Conference Contributions

- Talk at Glia in Health and Disease (2024) conference in Cold Spring Harbor, USA.
- Prize winning poster presentation at Scottish Developmental Biology Group (2025), Edinburgh.
- Poster presentations at The University of Edinburgh Neuroscience Day (2024+2023), and Euroglia Meeting (2023).

Education/Work

PhD in Neuroscience. (2022 – 2026).

University of Edinburgh, College of Medicine and Veterinary Medicine. Funded by EastBIO DTP. Research title: Identifying mechanisms by which neuron-oligodendrocyte interactions regulate nervous system function and dysfunction using zebrafish as a model.

Research Assistant. (2021– 2022).

University of Edinburgh, College of Medicine and Veterinary Medicine.

Masters in Developmental Biology. (2019 – 2021).

Sorbonne Université, Ecole de Biologie, Paris. Grade obtained: 'Mention bien' (with Merit).

BSc in Biomedical Science. (2015 – 2018).

Cardiff University, School of Biomedical Science. Grade obtained: 2:1.

Analyst at Healthcare Insurance. (June-September 2016-2018).

Western Provident Association (WPA).

Data Analyst (2018)-Leader of data analytics project focused on profiling WPAs spend with major private hospitals. Liaised with hospitals/clinicians/consultants on invoicing matters.

Business Analyst (2017)- Analysed business invoicing operations through data analysis, document analysis, interviews with stakeholders and workflow analysis to identify software need. Used Agile software development methodologies to communicate the business requirements. Supported the creation of staff training protocols.

AI Trainer/Customer Care Operative (2016)- Trained award-winning AI software "DELOS" by mapping medical conditions with all known symptoms, associated diseases, side-effects of medication and common co-morbidities across various therapeutic areas. Tested on live customers, ensuring software made correct decisions. Compassionately communicated to customers when establishing claims and discussing their policy benefits and rights.

References available upon request
