

Dr Jason Woodgate

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[LinkedIn](#) | [Google Scholar](#) | [ORCID](#) | [GitHub](#)

WORK EXPERIENCE

Postdoctoral Research Associate

Nov 2021 - Present

Newcastle University. Zenkin Lab, Centre for Bacterial Cell Biology

- Researching the coupling of transcription and translation in bacteria using in vitro biochemical, structural (cryo-EM), and molecular biology techniques.
- Published first-author paper in Nature (2024) and co-authored publications in PNAS, Molecular Microbiology, and ACS Infectious Diseases.
- Developed novel cryo-EM sample preparation technique for liquid ethane vitrification under liquid nitrogen.
- Awarded 2025 BBSRC Fellowship (March 2026).
- Supervision and mentoring of PhD and BSc students.
- Presented novel work at conferences including UK Annual RNAP Workshops.
- Collaboration with labs across the Centre for Bacterial Cell Biology and internationally.
- Expertise in biological and chemical safety, and handling radioactive open sources.

PhD Candidate

Oct 2017 - Oct 2021

Newcastle University. Zenkin Lab

- Developed bespoke in vitro reconstituted biochemical transcription-translation system.
- Published high-impact novel data in PNAS (2020).
- Thesis: Close encounters between E. coli RNA polymerase and the ribosome during transcription-translation coupling: a biochemical and structural investigation.

Research Assistant

Jun - Sep 2017

Newcastle University. Zenkin Lab

- Pre-PhD summer research placement.

Placement Student

Jun - Aug 2016

Imperial College London

- 8-week research placement investigating the effect of pesticides and molluscicides on the spread of antibiotic resistance genes via mobile genetic elements.

Customer Assistant to Team Leader

Dec 2004 - Sep 2014

Tesco PLC. Basingstoke, UK

- Stock management, customer relations, mobile phone contract sales, and staff leadership.

EDUCATION

PhD Biochemistry & Molecular Biology

Graduated July 2022

Newcastle University

BSc Biochemistry (First Class)

Graduated July 2017

University of Reading. Year averages: 84%, 83%, 84%.

A-Levels

2012 - 2014

Queen Mary's College. A* Biology, A* Chemistry.

PUBLICATIONS

Woodgate, J., Sumang, F.A., Salliss, M.E., Belousoff, M., Ward, A.C., Challis, G.L., Zenkin, N., Errington, J. & Dashti, Y. Mode of action and mechanisms of resistance to persiathiacin A. *ACS Infect. Dis.* 11(1), 155-163 (2025).

Woodgate, J., Mosaei, H., Brazda, P., Stevenson-Jones, F. & Zenkin, N. Translation selectively destroys non-functional transcription complexes. *Nature* 626, 891-896 (2024).

Woodgate, J. & Zenkin, N. Transcription-translation coupling: Recent advances and future perspectives. *Mol. Microbiol.* 120(4), 539-546 (2023).

Stevenson-Jones, F., Woodgate, J., Castro-Roa, D. & Zenkin, N. Ribosome reactivates transcription by physically pushing RNA polymerase out of transcription arrest. *Proc. Natl. Acad. Sci.* 117(15), 8462-8467 (2020).

FELLOWSHIPS & AWARDS

2025 BBSRC Fellowship - Awarded March 2026.

Royal Society of Biology Top Student - Best degree score across biological sciences, graduating class of 2017, University of Reading.

Biochemical Society Prize - Best performance at Part 2 in Biochemistry and Biomedical Sciences, University of Reading (2016).

CONFERENCES & PRESENTATIONS

Oral talk, **UK Annual RNAP Workshop**, University of Birmingham (2024).

Oral talk, **Annual Mol Micro Conference**, University of Birmingham (2022).

Oral talk, **UK Annual RNAP Workshop**, Newcastle University (2022).

Poster presentation, **UK Annual RNAP Workshop**, University of Oxford (2019).

Poster presentation, **UK Annual RNAP Workshop**, Biochemical Society (2018).

SOFTWARE & COMPANY

Feedings Ltd - Software company. Company No. 16795680. Founded October 2025.

- **BenchCalc** - Lab calculator for scientists. 55 tools, 414 glossary terms, 13 protocols, 7 troubleshooting wizards. iOS & Android. (2026)
- **FeeDings!** - RSS reader. iOS & Android. (2025)
- **Influence** - AI-powered interactive fiction. (2026)

SKILLS & INTERESTS

Skills: Biochemistry, molecular biology, structural biology (cryo-EM), in vitro reconstituted systems, cloning, statistical analysis, in silico 3D modelling, academic writing, project management, mobile software development (iOS & Android).

Interests: Fitness, cycling, weightlifting, building computers, technology, Formula One, football, cooking.