Dr Augustinas Silale
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Employment

11/2026-present	Jr. PI & Project Associate Professor, Bio2Q Human Biology-Microbiome-Quantum Research Centre, Keio University, Tokyo, Japan.
01/2025-10/2026	Postdoctoral Research Associate, Tracy Palmer & Lis Lowe groups, Newcastle, UK.
11/2019-12/2024	Postdoctoral Research Associate, Bert van den Berg group, Newcastle University, UK.
06/2015-08/2015	Research Support Assistant, Ingo Greger group, MRC LMB, Cambridge, UK.
06/2014-08/2014	Summer Student, Tom Blundell group, University of Cambridge, UK.
06/2013-09/2013	Research Support Assistant, Rob Kay group, MRC LMB, Cambridge, UK.
06/2012-08/2012	Research Support Assistant, Leo James group, MRC LMB, Cambridge, UK.

Education

2015-2019	Wellcome Trust Cellular Structural Biology DPhil Programme, University of Oxford, UK. Thesis: "Investigation of the DNA uptake machinery in naturally competent bacteria." Supervised by Prof Ben Berks and Prof Susan Lea.
2011-2015	BA & MSci Natural Sciences (Biochemistry), 1st Class (Hons), University of Cambridge, UK. BA Project with Prof Sir Tom Blundell, MSci Project with Dr Ingo Greger.

Funding

- BBSRC ALERT 2023 Equipment Grant: Northern Eye - A Cryo-Electron Microscopy Resource in the North East, 2024-2025 (Project Co-Lead, €975,000)
- Microbiology Society Travel Grant, 2019 (Project Lead)
- Wellcome Trust 4-year DPhil Studentship, 2015-2019 (Project Lead, €186,000)

Awards

- David Shaw Prize for best early career researcher paper (Silale *et al. Nat. Microbiol.* 2025), Faculty of Medical Sciences, Newcastle University, 2026
- David Shaw Prize for best postdoc paper (Silale *et al. Nat. Commun.* 2023), Faculty of Medical Sciences, Newcastle University, 2024
- David Blow Poster Prize, Biological Structure Group of the British Crystallographic Association, 2024
- David Thompson Scholarship for outstanding Tripos results, Homerton College, Cambridge, 2015

Publication list

1. Feasey M., **Silale A.**, Baslé A., van den Berg B. Structural and functional characterisation of the dextran utilisome from *Bacteroides thetaiotaomicron*. *J. Struct. Biol.: X* (2026) https://doi.org/10.1016/j.yjsbx.2026.100153.
2. **Silale A.**[#], Soo Y.L., Mark H., Motz R. N., Baslé A., Nolan E. M., van den Berg B.[#] Structural basis of iron piracy by a human gut *Bacteroides*. *Proc. Natl. Acad. Sci. U.S.A.* **123**, e2528036123. [#]**Co-corresponding author**.
3. **Silale A.***, Madej M.*, Mikruta K., Frey A.M., Hart A.J., Baslé A., Scavenius C., Enghild J.J., Trost M., Hirt R.P., van den Berg B. Structure of a distinct β-barrel assembly machinery complex in the Bacteroidota. *Nat. Microbiol.* **10**, 2845–2859 (2025). ***Co-first author**.
4. Parr R.J., Santin Y.G., Ratkevičiūte G., Caulton S.G., Radford P., Gurvič D., Jenkins M., Doyle M.T., Mead L., **Silale A.**, van den Berg B., Knowles T.J., Sockett R.E., Stansfeld P.J., Laloux G., Lovering A.L. A porin-like protein used by bacterial predators defines a wider lipid-trapping superfamily. *Nat. Commun.* **16***,* 6213 (2025).

5. **Silale A.**, Zhu Y., Witwinowski J., Smith R.E., Newman K.E., Bhamidimarri S.P., Baslé A., Khalid S., Beloin C., Gribaldo S., van den Berg B. Dual function of OmpM as outer membrane tether and nutrient uptake channel in diderm Firmicutes. *Nat. Commun.* **14**, 7152 (2023).
6. Abellon-Ruiz J., Jana K., **Silale A.**, Frey A.M., Baslé A., Trost M., Kleinekathöfer U., van den Berg B. BtuB TonB-dependent transporters and BtuG surface lipoproteins form stable complexes for vitamin B12 uptake in gut Bacteroides. *Nat. Commun.* **14**, 4714 (2023).
7. White J.B.R.*, **Silale A.***, Feasey M., Heunis T., Zhu Y., Zheng H., Gajbhiye A., Firbank S., Baslé A., Trost M., Bolam D.N., van den Berg B., Ranson N.A. Outer membrane utilisomes mediate glycan uptake in gut Bacteroidetes. *Nature* **618**, 583–589 (2023). ***Co-first author**.
8. **Silale A.**[#], van den Berg B.[#] TonB-Dependent Transport Across the Bacterial Outer Membrane. *Annu. Rev. Microbiol.* **77**, 67–88 (2023). [#]**Co-corresponding author.**
9. van den Berg B., **Silale A.**, Baslé A., Brandner A.F., Mader S.L., Khalid S. Structural basis for host recognition and superinfection exclusion by bacteriophage T5. *Proc. Natl. Acad. Sci. USA*. 119(42):e2211672119 (2022).
10. **Silale A.**, Lea S.M., Berks B.C. The DNA transporter ComEC has metal-dependent nuclease activity that is important for natural transformation. *Mol. Microbiol.* **116**, 416-426 (2021).
11. Hennell James R., Deme J.C., Kjær A., Alcock F., **Silale A.**, Lauber F., Johnson S., Berks B.C., Lea S.M. Structure and mechanism of the proton-driven motor that powers type 9 secretion and gliding motility. *Nat. Microbiol.* **6**, 221–233 (2021).
12. Paschke P., Knecht D.A., **Silale A.**, Traynor D., Williams T.D., Thomason P.A., Insall R.H., Chubb J.R., Kay R.R. & Veltman D.M. Rapid and efficient genetic engineering of both wild type and axenic strains of Dictyostelium discoideum. *PLoS One* 13: e0196809 (2018).

Teaching & supervision

- Newcastle University: co-lead for genetic transformation practical class (2021-2025); protein structure and function seminar leader (2021); undergraduate essay marker (2021).
- University of Oxford: demonstrator for medical student bacteriology practical classes (2018).
- Supervised five final year undergraduate project students; three visiting postdocs; day-to-day supervision of three PhD students.

Academic service and citizenship

- LEAF Award sustainability lead, Palmer lab, Newcastle University (2025-present).
- Scientific Committee Member, 2024 CCP4 Northern Structural Biology Meeting, Newcastle, UK.
- Invited reviewer for *Cell Discovery, Communications Biology*, *microLife*, *Nature, Nature Communications, Science Advances, Structure* (>10 reviews).
- Member of Newcastle University Biosciences Institute Research Associate Committee (2022-2024).

Invited talks

- "*Energised transport across the outer membrane in gut microbiota*" (2026) WPI Bio2Q Center, Keio University, Tokyo, Japan.
- "*Structural basis of iron piracy by human gut* Bacteroides." Early Career Microbiologists Symposium 2025, John Innes Centre, Norwich, UK.
- "*Outer membrane nutrient transporters and their biogenesis in gut* Bacteroides*."* (2024) Microbiology and Systems Biology Guest Seminar, Department of Biochemistry, University of Oxford, UK.

Conference attendance and presentations

- (poster) CBM16 – 16th Carbohydrate Engineering Meeting, Elsinor, Denmark (2026)

- (talk) CCP4 Northern Structural Biology Meeting, Newcastle, UK (2025)
- (organiser) CCP4 Northern Structural Biology Meeting, Newcastle, UK (2024)
- (poster) Bacterial Cell Surfaces, Gordon Research Conference/Seminar, Portland, Maine, USA (2024)
- (talk, poster) British Crystallographic Association Spring Meeting, Leeds, UK (2024)
- (talk) FEMS Congress of Baltic Microbiologists, Vilnius, Lithuania (2023)
- (poster) Bacterial Cell Surfaces, Gordon Research Conference, Mount Snow, Vermont, USA (2022)
- (talk) Bacterial Cell Surfaces, Gordon Research Seminar, Mount Snow, Vermont, USA (2022)
- (talk) 6th Midlands Molecular Microbiology Meeting, Nottingham, UK (2019)
- (poster) Annual Biochemistry Graduate Symposium, Oxford, UK (2019)
- 5th Midlands Molecular Microbiology Meeting, Warwick, UK (2018)
- 5th Molecular Microbiology & 4th Midlands Molecular Microbiology Meeting, Birmingham, UK (2017)
- 19th IUPA Congress and 11th EBSA Congress, Edinburgh, UK (2017)
- (poster) Medical Sciences Doctoral Training Centre Annual Symposium, Oxford, UK (2017)
- 3rd Midlands Molecular Microbiology Meeting, Leicester, UK (2017)