



**Professor Adam Perriman**  
**Ph.D.(A.N.U.)**

Professor of Bioengineering

**Area of research**

Hybrid Biomolecular Systems

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**Summary**

**Hybrid Biomolecular Systems**

Adam Perriman is distinguished for pioneering research concerned with the construction and study of novel hybrid biomolecular systems using advanced physical techniques. His research interests are acutely interdisciplinary, are built on the solid foundations of fundamental science, and span the fields of nanotechnology, biophysical chemistry, and tissue engineering. His significant advances in these research areas has resulted in a number of invited seminars and colloquia, and Dr. Perriman has published thirteen papers in very high-impact scientific journals (out of a total of 28), including two articles in *Nature Chemistry* (including an invited cover) and a review in *ACS Nano*. His recent research into the unprecedented development of protein-polymer surfactant nanohybrids has generated extensive media coverage and featured in the popular science magazines *New Scientist*, *Pop Sci* and RSCs *Chemistry World*. In 2010 he was interviewed live on BB4's *Material World*, which was broadcast live nationally.

Research interests:

- Biophysics
- Protein bioconjugation
- Regenerative Medicine
- Functional Bionanomaterials
- Adult Stem Cell Membrane Re-engineering and Homing
- Small Angle Scattering (SANS and SAXS)

**Biography**

Adam Perriman is a member of the Biomedical Sciences Faculty at the University of Bristol in the School of Cellular and Molecular Medicine. He is also an Engineering and Physical Research Council (EPSRC) Early Career Fellow. He received his B.Sc from James Cook University before moving to the Research School of Chemistry at the Australian National University to complete Honours and PhD in 2007. After two years of postdoctoral work with Prof. S. Mann in the Centre for Organized Matter Chemistry (University of Bristol), he was awarded the Engineering and Physical Research Council (EPSRC) Cross-disciplinary Interfaces Fellowship.

**Biography**

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## Keywords

- Biophysics Regenerative Medicine Functional Bionanomaterials Adult Stem Cell Membrane Re-engineering and Homing Small Angle Scattering (SANS and SAXS)

## Memberships

### Organisations

[School of Cellular and Molecular Medicine](#)

### Other sites

- [Brissynbio](#)

## Recent publications

- Deller, RC, Richardson, T, Richardson, R, Bevan, L, Zampetakis, I, Scarpa, F & Perriman, AW, 2019, '[Artificial cell membrane binding thrombin constructs drive in situ fibrin hydrogel formation](#)'. *Nature Communications*, vol 10.
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- Deller, R, Carter, B, Zampetakis, I, Scarpa, F & Perriman, A, 2018, '[The effect of surface charge on the thermal stability and ice recrystallization inhibition activity of antifreeze protein III \(AFP III\)](#)'. *Biochemical and Biophysical Research Communications*, vol 495., pp. 1055-1060
- Campbell, E, Grant, J, Wang, Y, Sandhu, M, Williams, RJ, Nisbet, DR, Perriman, A, Lupton, DW & Jackson, CJ, 2018, '[Immobilizing supercharged proteins in a hydrogel matrix for biocatalysis](#)'. *Advanced Biosystems*.
- Farrugia, T, Perriman, AW, Sharma, KP & Mann, S, 2017, '[Multi-enzyme cascade reactions using protein-polymer surfactant self-standing films](#)'. *Chemical Communications*, vol 53., pp. 2094-2097

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