

Dr Lucy Colwell

University Lecturer in Molecular Informatics

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Research Interest Group: Theory, Modelling and Informatics **For more information, please visit:** www-ucc.ch.cam.ac.uk



About Me

I became a lecturer at Cambridge University in the chemistry department and the Unilever centre in 2013. I was an undergraduate in maths at Cambridge, and completed a PhD in applied maths with Michael Brenner at Harvard in 2010. During my PhD I became really interested in the relationship between protein sequence and phenotype and wrote fellowship proposals on this topic. I did a short 9 month postdoc at Harvard, before starting an EPSRC fellowship in chemistry and chemical biology. I was fortunate to work with collaborators at MSKCC (New York), the Human Genetics Foundation (Torino), Princeton, Harvard, MRC-LMB, the Institute for Advanced Study (Princeton) and Harvard medical school. I also worked with Alexander Manta as part of a proposal funded by Roche on techniques for identifying signal in large datasets.

My Research Interests

I am interested in understanding the structure of large datasets, in particular the correlation structure of large sets of protein sequences. Recently we have used the inferred correlation structure to make predictions about protein structure (tertiary and quaternary) and protein-protein interactions. I am particularly interested in the relationship between protein sequence and function, and in identifying those amino acids that control particular properties of a protein.

Mentoring Support I Can Provide

- Career development and progression: career values, aspirations, training and paths
- Career development and progression: routes to academic careers
- Career development and progression: routes to industry careers
- Work-life balance (including 'women in science' and related issues)
- Provide motivation, confidence and inspiration

Mentoring Availability and Contact

Please email me at: ljc37@cam.ac.uk