

Introducing our AUTHORS



Elizabeth H.C. Bromley

Current position: Postdoctoral Research Associate at the University of Bristol, U.K., Department of Chemistry, with Prof. Derek N. Woolfson

Education: University of Cambridge, M.Sc. in physics, 1996–2000; Ph.D. in biophysics with Prof. Athene Donald F.R.S., 2000–2003

Nonscientific interests: Badminton, creative writing

I am interested in both the development of the rules governing sequence to structure relationships in protein folding and the application of these rules to peptide design and engineering. As nature has demonstrated, protein structure is an ideal format for creating functional machinery that can span a wide range of both length scales and activities. Our article describes the recent progress made in elucidating the rules that govern protein folding and how, in combination with encapsulation, *de novo* protein design is a pathway toward the development of synthetic biology. (Read Bromley's article on p 38.)



Kevin Channon

Current position: Postdoctoral Research Assistant with Prof. Derek N. Woolfson, University of Bristol, U.K.

Education: University of Hull, U.K., M.Phys. in physics with Dr. Tom Stimer, 2002; University of Cambridge, U.K., Ph.D. in biological and soft systems with Dr. Cait MacPhee, 2007

Nonscientific interests: Rowing, martial arts, motor racing

My primary interest is in how proteins can be used as the basis of self-assembling systems and, in particular, how the resulting assemblies can be used for technological applications. By developing a tool kit of robust sequence-to-structure relationships, it should be possible to provide a basic set of structures and interactions from which to self-assemble nanostructures with functionality tailored to some predetermined task. My research is currently focused on the characterization of fibril-forming protein systems and on the development of self-assembling protein systems encapsulated within lipid vesicles. (Read Channon's article on p 38.)



Efrosini Moutevelis

Current position: University of Bristol, School of Chemistry, U.K., Postdoctoral Research Associate with Prof. Derek N. Woolfson

Education: Agricultural University of Athens, Greece, five-year course leading to an M.S. in biotechnology, bioinformatics project with Prof. Elias Eliopoulos, 1999; University of Manchester, U.K., Ph.D. in bioinformatics with Dr. James Warwicker, 2005

Nonscientific interests: Traveling, water skiing

I am interested in understanding the folding of proteins and their function by using sequence and structural analysis tools and molecular modeling. Electrostatic interactions control the function of many proteins. In my Ph.D. work, I developed an automated multiconformational FD/DH method for the calculation of pK_a and redox potential in the thioredoxin superfamily. In my current post, I have been studying the variation of coiled-coil structures, and I generated a structural classification. I am also comparing and developing methods for the prediction of coiled coils and their oligomer state from their sequence. Coiled coils can be used as building blocks in synthetic biology and be programmed to produce functional systems. (Read Moutevelis's article on p 38.)