

Serena Corr is Chair of Functional Nanomaterials at the Departments of Chemical and Biological Engineering and Materials Science and Engineering at the University of Sheffield. Recipient of the RSC Journal of Materials Chemistry lectureship in 2017, her research focuses on the design, synthesis and characterization of functional nanomaterials in particular for applications in energy storage and the environment, with an emphasis on understanding their intimate structure-property interplay. She leads multiple multi-institutional, interdisciplinary research activities, including the UK Faraday Institution project on Next Generation Cathodes for Li-ion batteries (FutureCat). She is deeply committed to early career researcher mentoring, the promotion of women in science and engineering and public outreach activities, sitting on the Faraday Institution Diversity Panel, EPSRC's Energy Strategic Advisory Committee & RSC's Equity in Publishing group. She also sits on multiple beamtime access panels in the UK and EU.



s.corr@sheffield.ac.uk

Daniil Kitchaev is a postdoctoral scholar in the UCSB Materials Department and the Materials Research Laboratory, advised by Prof. Anton Van der Ven. He received his B.S. in Chemical Engineering and Computer Science from Caltech in 2008, where he worked in the group of Prof. Sossina Haile on experimentally characterizing proton conductors for hydrogen fuel cells. After briefly working as a software engineer at Microsoft, he moved to EPFL to work with Prof. Nava Setter on developing polymer-based multiferroic nanomaterials. In 2017, he completed his Ph.D. in Materials Science and Engineering at MIT advised by Prof. Gerbrand Ceder, where he switched to computational work on first-principles prediction of inorganic synthesis and the development of new disordered materials for Li-ion batteries. After working as a scientific consultant for the battery industry, he came to UCSB in 2018 to lead the theoretical effort within IRG-1 of the UCSB MRSEC. His current focus is the development of first-principles models of complex magnetic phases, and the discovery of new materials where these exotic magnetic structures may be observed and controlled by mechanical means.



dkitch@ucsb.edu

Prof. Abigail (Abby) Knight returned to the UNC Chemistry Department in the summer of 2018 - she completed her Bachelor of Science in Chemistry with minors in Mathematics and Biology as UNC undergraduate and she completed an undergraduate research in Prof. Marcey Waters' research group developing new ligands for RNA and DNA structures. After graduating from UNC, Abby pursued a PhD in the chemical biology program at the University of California, Berkeley in the lab of Prof. Matthew Francis. Her PhD research focused on the development of a platform applying combinatorial libraries for the identification of selective metal ligands to address major challenges in water and environmental remediation and metal poisoning. During her postdoctoral position with Prof. Craig Hawker at the University of California, Santa Barbara, she designed smart nanomaterials with unique architectures and both biological and materials applications. These pursuits provided expertise in materials characterization, supporting the Knight Research Group's mission to design novel macromolecular materials with unrestrained chemical diversity and fine-tuned binding profiles inspired by biological systems.



aknight@unc.edu

Brian Long studied chemistry as an undergraduate at North Georgia College & State University where he conducted research with Professor Dan Thompson, and as an NSF-REU student at Furman University working with Professors John Wheeler and Noel A. P. Kane-Maguire. After completing his B.S. degree in 2003, BL attended the University of Texas at Austin for his doctoral studies where he worked under Professor C. Grant Willson and was co-advised by Christopher W. Bielawski. After receiving his Ph.D. in 2009, BL began his postdoctoral studies at Cornell University under the supervision of Professor Geoffrey W. Coates. BL returned to the southeast as an Assistant Professor of Chemistry at the University of Tennessee (UTK) in 2011, and was promoted to the rank of Associate Professor with tenure in 2018. During his time at UTK, BL has been the recipient of the Ffrancon Williams Endowed Faculty Award, an Army Research Office Young Investigator Award, a Department of Energy Early Career Award, and was named the Gleb Mamantov Professor of Chemistry in 2020.



long@utk.edu

Hannah Murnen is the Chief Technical Officer at Compact Membrane Systems, an advanced materials company using novel fluoropolymers for industrial separations. Hannah directs the research and product development efforts across the organization. She joined CMS in 2015 to lead business development efforts and shifted to the CTO role in 2018. Prior to her role at CMS, Hannah worked at McKinsey and Company as a consultant for industrial, material and chemical companies in areas encompassing supply chain, growth strategy development, market differentiation, and others. She holds a PhD in Chemical Engineering from University of California Berkeley and a Bachelors in Engineering from Dartmouth College.



hannah.murnen@gmail.com

Rachel O'Reilly is currently a Professor of Chemistry and Head of School at the University of Birmingham. She got her first degree from the University of Cambridge and went on to complete her PhD at Imperial College, London in 2003 with Professor Vernon Gibson. She then moved to the US under the joint direction of Professors Craig J. Hawker and Karen L. Wooley. In 2006 she took up a Royal Society Fellowship at the University of Cambridge and then in 2009 she moved to the University of Warwick and in 2012 was promoted to full professor. She moved to Birmingham in 2018. Her group undertakes research in the area of catalysis, responsive polymers, nanostructure characterization and DNA nanomaterials. She has published over 200 papers to date and has received a number of awards, including the IUPAC-Samsung young polymer scientist award in 2012, and in 2013 the American Chemical Society Mark Young Polymer Scientist award. In 2017 she was awarded the Macromolecules/Biomacromolecules young investigator award from the ACS in recognition of her innovative research in polymer science and in 2020 the RSC Corday-Morgan Prize.



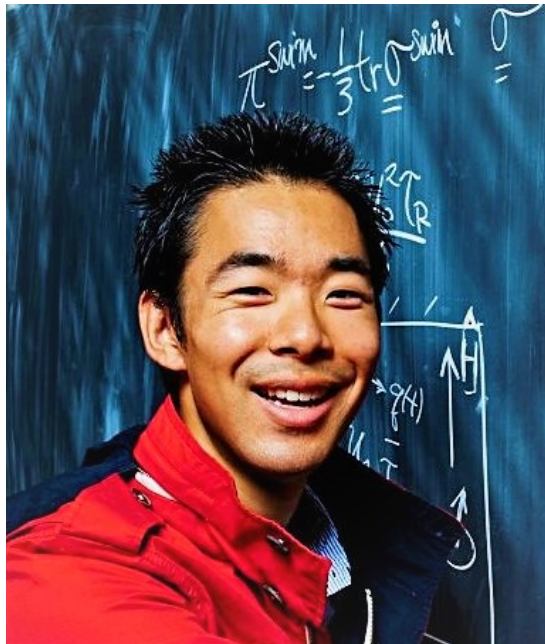
R.OReilly@bham.ac.uk

Jose Rodriguez is an Assistant Professor of Chemistry & Biochemistry at UCLA. His work is aimed at understanding fundamental aspects of protein structure. This includes an improved understanding of the relationship between molecular structure and function, the development of new treatments to combat incurable diseases, and the development of new tools and approaches that advance our knowledge of biochemistry.



jrodriguez@mbi.ucla.edu

Sho Takatori is an Assistant Professor in the Chemical Engineering Department at UCSB since 2020. He was previously a Miller Research Fellow at UC Berkeley, and obtained his Ph.D. from Caltech and B.S. from UC Berkeley (all in Chemical Engineering). His lab studies the multiphase transport dynamics of soft materials using a combination of hydrodynamic theories, coarse-grained molecular dynamics simulations, and bottom-up reconstitution experiments. The Takatori lab aims to engineer soft materials with controllable interfacial and collective properties based on a fundamental understanding of the material properties of living biological systems driven away from thermodynamic equilibrium.



stakatori@ucsb.edu

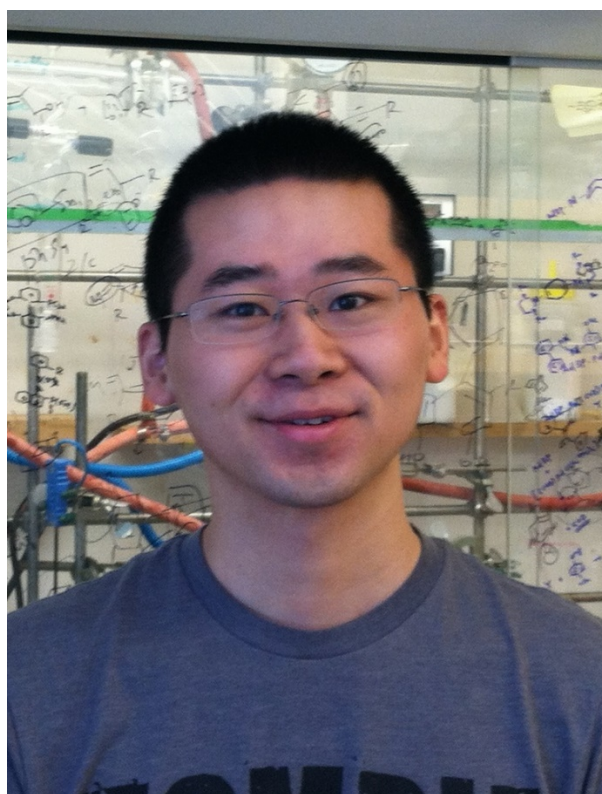
Megan T. Valentine is a Professor of Mechanical Engineering at the University of California, Santa Barbara. Her interdisciplinary research group investigates many aspects of biological and bioinspired materials, with an emphasis on understanding how forces are generated and transmitted in living materials, how these forces control cellular outcomes, and how the extraordinary features of living systems can be captured in manmade materials. This highly interdisciplinary experimental work lies at the intersection of engineering, physics, biology and chemistry, and advances diverse application areas, ranging from marine-inspired materials to mechanobiology to soft robotics.

Megan received her B.S from Lehigh University ('97), M.S. from UPenn ('99) and Ph.D. from Harvard ('03), all in Physics. She completed a postdoctoral fellowship at Stanford in the Department of Biological Sciences, where she was the recipient of a Damon Runyon Cancer Research Postdoctoral Fellowship, and a Burroughs Wellcome Career Award at the Scientific Interface. In 2008, she joined the faculty at the University of California, Santa Barbara, where she now serves as the Co-Director of the California NanoSystems Institute, and a co-leader of an IRG on Resilient Multiphase Soft Materials within the UC Santa Barbara Materials Research Laboratory, an NSF MRSEC. In 2013, she was awarded an NSF CAREER Award for her work on neuron mechanics, and in 2015 was awarded a Fulbright to study adhesion mechanics in Paris, France. In 2019 she was elected as a Fellow of the American Physical Society.



valentine@engineering.ucsb.edu

Dr. Yang obtained his B.S. in Chemistry from Peking University in 2011. He then carried out graduate research under the guidance of Prof. Stephen L. Buchwald at the Massachusetts Institute of Technology and received his Ph.D. degree in Organic Chemistry in 2016. At MIT, Dr. Yang's research focused on copper-catalyzed asymmetric hydrofunctionalization of simple olefins. In 2014, Dr. Yang spent a summer in the laboratory of Prof. Peng Liu at the University of Pittsburgh, where he explored computational tools to elucidate the mechanism of organic and organometallic reactions. As an NIH Postdoctoral Fellow working with Prof. Frances H. Arnold at the California Institute of Technology, Dr. Yang engineered P450 enzymes for asymmetric C-H amination. By bridging the fields of chemistry and biology, the Yang lab at UCSB devises new biocatalytic strategies to solve challenging problems in synthetic chemistry.



yang@chem.ucsb.edu