Professor Stefanie Sydlik is an Assistant Professor of Chemistry and Biomedical Engineering at Carnegie Mellon University in Pittsburgh, Pennsylvania. Professor Sydlik received her PhD in Organic Chemistry from MIT under the direction of Professor Timothy Swager studying novel triptycene polymers and nanocarbon based materials. She continued her training as an NIH postdoctoral fellow with Professor Robert Langer, developing a novel biomimetic block copolymer for cartilage repair. She joined the Chemistry department at Carnegie Mellon University August of 2015. At Carnegie Mellon, the Sydlik Group focuses on the synthesis of novel polymers and materials via the principles of molecular design. Applications of these materials draw upon her diverse background in electronic, mechanical, and biological materials. Early results have concentrated on tough electronics, biomimetic graphene materials, stem cell instructive materials, and polymers with the capacity for covalent controlled release.