

EDUCATION

Ph.D. Candidate, Chemical Engineering, Massachusetts Institute of Technology	Anticipated: 2019
M.S. Chemical Engineering, Massachusetts Institute of Technology	2016
M.Phil. Chemistry, University of Cambridge	2014
B.S. Chemical Engineering, University of Pittsburgh (Minors: Chemistry, Bioengineering)	2013

RESEARCH

National Science Foundation Graduate Research Fellow Prof. Daniel Anderson, Department of Chemical Engineering, MIT Developing responsive biomaterials for self-regulated insulin delivery.	2015 – present
Whitaker International Fellow Prof. Tuomas Knowles, Department of Chemistry, University of Cambridge Fabricated core-shell protein microgels using microfluidic techniques for applications in drug delivery.	2013 – 2014
Research Assistant Prof. Yadong Wang, Department of Bioengineering, University of Pittsburgh Created novel, porous poly(glycerol sebacate) scaffolds for applications in tissue engineering.	2011 – 2013
Amgen Scholar Prof. Suzie Pun, Department of Bioengineering, University of Washington Synthesized reduction-sensitive block copolymer as an efficient gene vector.	2012

SELECTED PUBLICATIONS

1. [Volpatti LR](#) et. al. Micro- and nanoscale hierarchical structure of core-shell protein microgels. *J. Mat. Chem. B.* 2016, 4, 7989–7999.
2. [Volpatti LR](#), Yetisen AK. Commercialization of microfluidic devices. *Trends Biotechnol.* 2014, 7, 347-350.
3. [Volpatti LR](#), Knowles TPJ. Polymer Physics Inspired Approaches for the Study of the Mechanical Properties of Amyloid Fibrils. *J. Poly. Sci. B: Poly. Phys.* 2014, 52, 281–292.
4. [Volpatti LR](#), Vendruscolo M, Dobson CM, and Knowles TPJ. A Clear View of Polymorphism, Twist, and Chirality in Amyloid Fibril Formation. *ACS Nano.* 2013, 7, 10443–10448.
5. Wei H, [Volpatti LR](#), Sellers DL, Maris DO, Andrews IW, Hemphill AS, Chan L, Chu D, Horner P, Pun S. Dual Responsive, Stabilized Nanoparticles for Efficient In Vivo Plasmid Delivery. *Angewandte Chemie International Edition.* 2013, 52, 5377–5381. (VIP publication awarded to only 5% of submissions)

TEACHING

Lecturer, Undergraduate Science Writing Workshop Series, Langer Lab, MIT Co-developed 8-week course on science communication and data visualization.	2018
Invited Guest Lecturer, Polymer Science Laboratory, MIT Lecture: “Stimuli-Responsive Polymers and Binding Constants”	2017
Teaching Assistant, Polymer Science Laboratory, MIT Created novel laboratory module on glucose-responsive polymers and developed corresponding lecture.	2016

SERVICE

Founder, Women in Chemical Engineering, Chemical Engineering, MIT Developing professional and social support group for women in Chemical Engineering.	2018 – present
Founding Member, Churchill Women’s Society, Churchill College, University of Cambridge Created an inclusive and open environment for women in a STEM-focused college.	2014
Founder, “Middle School Engineering Day,” University of Pittsburgh Implemented a new outreach event for 100 underrepresented middle school students.	2010 – 2013

SELECTED AWARDS

Young Investigator’s Award, ALPCO	2019
Student Design and Research Award, Biomedical Engineering Society	2018
Society of Women Engineers National Rapid Fire Competition First Place Winner, SWE	2017
Women Chemist Committee/Merck Research Award, Merck	2017
Churchill College Conference on Everything Grand Prize Winner, Churchill College	2014
Cambridge International Scholarship, University of Cambridge	2014
National Science Foundation Graduate Research Fellowship, NSF	2013
Whitaker International Fellowship, Institute of International Education	2013
Brackenridge Research Fellowship, University of Pittsburgh Honors College	2012
University Honors Full Tuition Scholarship and Engineering Alumni Scholarship	2009 – 2013