

EDUCATION	New York University , New York, NY	Sep 2020-present
	M.A. in Journalism (Science, Health & Environmental Reporting)	
	California Institute of Technology , Pasadena, CA	Sep 2018-May 2020
	M.S. in Bioengineering (<i>dropped out of PhD during pandemic</i>)	
	Imperial College London , London, UK	Sep 2017-Sep 2018
	Master of Research in Systems and Synthetic Biology, with <i>Distinction</i>	
	University of Iowa , Iowa City, IA	Aug 2013-May 2017
	B.S. in Biochemistry, Honors (3.94/4.00), High Distinction, Phi Beta Kappa Certificate, Clinical and Translational Science	
RESEARCH	California Institute of Technology, Rob Phillips Lab	Apr 2019-May 2020
	Single-molecule biophysics in <i>E. coli</i> .	
	Imperial College, Rodrigo Ledesma-Amaro & Tom Ellis	Dec 2017-Sep 2018
	CRISPR-based tools for metabolic engineering and flux control in yeast.	
	Co-Founder/Co-Leader, Iowa Synthetic Biology Laboratory	Dec 2016-Aug 2017
	Co-founded the first synthetic biology laboratory in eastern Iowa, recruited 12 students, 3 faculty mentors, raised \$17k, and set up lab to enter 2017 International Genetically Engineered Machine (iGEM) competition in Boston.	
	University of Iowa, Mentor – E. Dale Abel	Sep 2013-Aug 2017
	Why does heart failure occur in adult mice lacking insulin receptors?	
WRITING	Contributing Writer, SynBioBeta.com	Jan 2019-Apr 2020
	Semi-weekly article for SynBioBeta.com, the largest network for synthetic biology researchers and investors. Articles have appeared in Forbes, GreenBiz, elsewhere.	
	Contributing Writer, PLoS SynBio	Sep 2019-Feb 2020
	Weekly article for PLoS community, highlighting researchers and offering “behind-the-scenes” look at recent articles.	
	Science Contributor, Little Village Magazine	Apr 2017-Aug 2017
	Science writer for Little Village, and art and culture magazine in Iowa City.	
	National Writing Fellow, Phi Beta Kappa	Jan 2016-May 2016
	Fifteen students selected from a national pool each semester. Five published articles can be found online at www.keyreporter.org .	
ACADEMIC PAPERS	McCarty NS, et al. “Multiplexed CRISPR Technologies for Gene Editing and Transcriptional Regulation.” (2020) <i>Nature Communications</i> .	
	Riehle C, et al. “Insulin Receptor Substrates Differentially Exacerbate Insulin-Mediated Left Ventricular Remodeling” (2020) <i>JCI Insight</i> .	
	McCarty NS, et al. “Rapid Assembly of gRNA Arrays via Modular Cloning in Yeast.” (2019) <i>ACS Synthetic Biology</i> .	
	McCarty NS & Ledesma-Amaro R. “Synthetic Biology Tools to Engineer Microbial Communities for Biotechnology.” (2019) <i>Trends in Biotechnology</i> .	
	Riehle C, et al. “Leukocytoclastic Vasculitis Associated with Endocarditis in a Patient with Transposition of the Great Arteries and Mechanical Valve Replacement.” (2017) <i>Cardiovascular Pathology</i> .	
SKILLS	Science Writing and Journalism, JavaScript (D3, jQuery, ScrollTrigger), Python (Web Scraping, NumPy, SciPy, Matplotlib/Seaborn), Web development (HTML, Sass/CSS, JS)	
SELECTED HONORS	Rennie Taylor/Alton Blakeslee Fellowship, CASW	2020
	Arthur Carter Fellowship, New York University	2020
	Pilot Grant, Center for Environmental Microbial Interactions at Caltech	2019
	Centenary Prize for MRes Systems and Synthetic Biology (Top marks in program)	2018
	Matthew Barzun Prize for Youth Engagement	2018
	US-UK Fulbright Scholar, Imperial College London	2017
	Barry Goldwater Scholar	2016