TEACHING EXPERIENCE

Teaching Assistant

Chemical Engineering Kinetics. Antoniewicz MR, Xu B. University of Delaware. Fall 2014
Chemical Engineering Thermodynamics II. Furst EM, Sandler S. University of Delaware. Spring 2013
Chemical Kinetics and Reactor Design. Duncan TM. Cornell University. Spring 2012
Introduction to Chemical Engineering. Duncan TM. Cornell University. Fall 2011

PUBLICATIONS (PRIMARY AUTHOR)

Long CP*, Au J*, Sandoval NR, Gebreselassie NA, Antoniewicz MR (2016). Enzyme I facilitates reverse flux from pyruvate to phosphoenolpyruvate in *Escherichia coli*. Accepted, *Nature Communications*.

Long CP*, Au J*, Gonzalez JE, Antoniewicz MR (2016). ^{13}C metabolic flux analysis of microbial and mammalian systems is enhanced with GC-MS measurement of glycogen and RNA labeling. *Metabolic Engineering*, 38, 65-72.

Crown SB*, **Long CP***, Antoniewicz MR (2016). Optimal tracers for parallel labeling experiments and ^{13}C metabolic flux analysis: A new precision and synergy scoring system. *Metabolic Engineering*, 38, 10-18.

Long CP, Gonzalez JE, Sandoval NR, Antoniewicz MR (2016). Characterization of physiological responses to 22 gene knockouts in *Escherichia coli* central carbon metabolism. *Metabolic Engineering,* 37, 102-113.

Long CP, Antoniewicz MR (2014). Quantifying biomass composition by gas chromatography/mass spectrometry. *Analytical Chemistry*, 86(19), 9423–7.

Long CP, Antoniewicz MR. (2014). Metabolic flux analysis of Escherichia coli knockouts: lessons from the Keio collection and future outlook. *Current Opinion in Biotechnology*, 28, 127–133.

*equal contribution

SELECTED PRESENTATIONS

Metabolic Engineering XI. Kobe, Japan. June 2016 (Poster)
Long CP, Antoniewicz MR. *Metabolic Flux Rewiring and Physiology in* E. coli *Upper Central Carbon Metabolism Knockout Strains*

Metabolic Engineering XI. Kobe, Japan. June 2016 (Poster)
Au J*, **Long CP***, Antoniewicz MR. *^{13}C-Metabolic Flux Analysis of the Pentose Phosphate Pathway Using GC-MS Analysis of RNA and Glycogen*

University of Delaware CBE Winter Research Review. Newark, DE. January 2016 (Oral)
Long CP, Antoniewicz MR. *Comprehensive study of metabolic flux rewiring in* E. coli *knockout strains*

Metabolic Engineering X. Vancouver, BC, Canada. June 2014 (Rapid Fire, Poster)
Long CP, Antoniewicz MR. *Comprehensive study of metabolic flux rewiring in* E. coli *knockout strains*

ACS BIOT Meeting. New Orleans, LA. April 2013 (Poster)
Crown SB, **Long CP**, Antoniewicz MR*. High-resolution ^{13}C-metabolic flux analysis in* E. coli *using novel tracers and parallel labeling experiments*

FELLOWSHIPS AND AWARDS

University of Delaware Graduate Fellowship	2015-2016
University of Delaware Chemistry-Biology Interface Trainee (NIH Kirschstein Institutional Training Grant)	2012-2014
Cornell Tradition Fellowship	2008-2012
National Merit Scholarship	2008-2009