

Jonathan Strutz

2145 Sheridan Rd. Tech E-149, Evanston, IL 60201 · (740) 497-2666
jonathanstrutz2021@u.northwestern.edu
github.com/jonstrutz11

EDUCATION

Northwestern University	Cumulative GPA: 3.81	Expected Graduation: 2021
<ul style="list-style-type: none">• Ph.D. Chemical & Biological Engineering• Advisors: Keith Tyo & Linda Broadbelt		
Ohio State University	Cumulative GPA: 3.82	Graduation: Dec. 2015
<ul style="list-style-type: none">• B.S. Chemical & Biomolecular Engineering• Minors: Biomedical Engineering, German		

PROFESSIONAL EXPERIENCE

Northwestern University Evanston, IL	2016 – Present
<ul style="list-style-type: none">• Ph.D. Candidate	
LanzaTech Skokie, IL	2018
<ul style="list-style-type: none">• Computational Biology Intern	
Wood Laboratory for Applied Protein Engineering Columbus, OH	2014 – 2016
<ul style="list-style-type: none">• Undergraduate Researcher	
Ohio State University Columbus, OH	2013 – 2015
<ul style="list-style-type: none">• Undergraduate Teaching Assistant	
DuPont Circleville, OH	Summer 2013
<ul style="list-style-type: none">• Manufacturing Technology Engineer Intern	

HONORS & AWARDS

ARCS Scholar Award (renewed twice)	2017, 2018, 2019
Biotechnology Training Program Trainee	2017
Undergraduate Research Award	2015
Honda-OSU Math Medal Award	2011
Columbus Dispatch Scholar-Athlete Runner-Up Male	2011
National Merit Finalist	2011
High School Valedictorian	2011

TEACHING EXPERIENCE

Northwestern University	
<ul style="list-style-type: none">• ChBE 373 – Global Health & Biotechnology (Teaching Assistant) F 2019• ChBE 477 – Bioseparations (Teaching Assistant) S 2017, S 2018, S 2019	
Ohio State University	
<ul style="list-style-type: none">• CBE 2420 – Transport Phenomena I (Teaching Assistant) F 2013, S 2014, S 2015	

ORGANIZATIONS

Northwestern University

- Graduate Student Forum (2017 – 2018)

Ohio State University

- Phi Kappa Tau Fraternity, Gamma Chapter
 - Vice President (2013 – 2015)
 - Secretary (2012)
 - Founding Father (2012)
- Tau Beta Pi

PUBLICATIONS

Submitted and in Revision

Bhan NJ, **Strutz J**, Glaser J, Kalhor R, Boyden E, Church G, Kording K, Tyo KEJ (2019) Recording temporal data onto DNA with minutes resolution. *bioRxiv*, :634790.

Primary Research (Accepted and Published)

St. John P, **Strutz J**, Broadbelt LJ, Tyo KEJ, Bomble YJ (2019) Bayesian inference of metabolic kinetics from genome-scale multiomics data. *PLoS Computational Biology*, 15(11):e1007424.

Reviews and Opinions (Peer-Reviewed)

Strutz J, Martin J, Greene J, Broadbelt L, Tyo K (2019) Metabolic kinetic modeling provides insight into complex biological questions, but hurdles remain. *Current Opinion in Biotechnology*, 59:24–30.

Book Chapters and Technical Reports (Non-peer Reviewed)

Jeffries J, **Strutz J**, Henry C, Tyo KEJ (2019) Metabolic in silico network expansions to predict and exploit enzyme promiscuity. *Methods in Molecular Biology*, 1927:11–21.

Rosenfeld, D, Liew, F, Kopke, M, Gao, A, Harris, A, Mueller, A, Nagaraju, S, Smith, A, Tran, L, O'Brien, J, Tyo, K, Martin, J, **Strutz, J**, Metz, J. The Dow Chemical Company (2019) Bio-syngas to Fatty Alcohols (C6-14) as a Pathway to Fuels.

PRESENTATIONS

May 8, 2020 – Virtual Podium 2020 – Online

“MINEs: Open Access Databases of Computationally Predicted Enzyme Products for Untargeted Metabolomics”

May 21, 2019 – Mini-Symposium on Microbial Lignin Valorization – NREL – Golden, CO

“Discovery of Novel Metabolites and Gene Functions in Aromatic-Degrading Organisms (Proposed Work)”

October 31, 2018 – AIChE Annual Meeting – Pittsburgh, PA

“Addition of Thermodynamic Constraints to a Scalable Kinetic Modeling Framework”

March 4, 2018 – ARCS Illinois Chapter Meet & Greet – Evanston, IL

“Improving the Environmental Sustainability of Biorefineries: Engineering a Bacterium to Eat Plants”

June 26, 2017 – Mini-Symposium on Microbial Lignin Valorization – NREL – Golden, CO

“Modeling Catabolism of Lignin-Derived Aromatics in *Acinetobacter baylyi* ADP1”