Andrew Sinkoe

sinkoa@rpi.edu

Degree: B.S. in Chemical Engineering

Institution of Undergraduate Study (2008 – 2013): Florida State University

Major: Chemical-Biomedical Engineering

Undergraduate Grade-Point Average: 3.951

Institution of Graduate Study (2013 - present): Rensselaer Polytechnic Institute

Department: Biomedical Engineering

Dissertation Project Focus:

Modeling of biological systems and optimal experimental design for model parameter estimation.

Journal Papers:

J. Andrew Jones, Victoria R. Vernacchio, Andrew L. Sinkoe, Shannon M. Collins, Mohammad H. A. Ibrahim, Daniel M. Lachance, Juergen Hahn, Mattheos A. G. Koffas. Experimental and computational optimization of an *Escherichia coli* coculture for the efficient production of flavonoids. Metabolic Engineering, Volume 35, May 2016, Pages 55-63.

Conference Abstracts and Presentations:

Sinkoe, A., Julius, A. A., Hahn, J. Computational Reconstruction of Transcriptional Networks. RPI Biomedical Engineering Graduate Research Symposium (2016).

Sinkoe, A., Julius, A. A., Hahn, J. In silico reverse-engineering of gene networks and the need for absolute measurement of RNA transcripts. RNA Institute New Grants Committee Mini-Symposium (2015).

Sinkoe, A., Julius, A. A., Hahn, J. Identifying Potential Regulatory Interactions of the MAPK-Associated Gene Network. Foundations of Systems Biology in Engineering (FOSBE, 2015).

Sinkoe, A., Julius, A. A., Hahn, J. In Silico Identification of Potential Transcriptional Regulators Associated with Human MAPK Signaling. 41st Annual Northeast Bioengineering Conference (NEBEC, 2015).

Laboratory Training:

Eukaryotic Gene Expression course at Cold Spring Harbor Laboratory (2015).

Trained in basic biochemistry techniques for gene cloning, protein expression, and protein purification (Florida State University).

Computer Training:

Microsoft Excel for data acquisition and analysis. Scientific computing with MATLAB. Image processing with Python. Aspen Plus for chemical process design.

Teaching Experience:

Teaching assistant for two semesters at Rensselaer Polytechnic Institute for a probability and statistics course and an introductory mechanical statics course.

Awards:

Helmsley Fellowship for Eukaryotic Gene Expression course at CSHL Research Assistantship, Rensselaer Polytechnic Institute Teaching Assistantship, Rensselaer Polytechnic Institute Florida State University President's List Florida State University Honors Program Inductee Florida Bright Futures 100% Scholarship