Carly Daiek

3452 Wolverine Dr., Troy, MI 48083 daiekcar@msu.edu (248)-247-9665

Education

Michigan State University, East Lansing, MI

B.S. in Biosystems Engineering

• GPA: 3.75/4.0, Dean's List

Expected December 2017

Experience

EnSURE Internship

Michigan State University, East Lansing, MI

May 2016 - Current

- Conduct research in a biofuel lab which focuses on the effect of light intensity on microalgal biomass accumulation
- Construct a carbon dioxide reactor to reach a desired concentration of CO2 for algae cultivation
- Analyze the cell growth through use of a scanning electron microscope, photospectrometer, and nutrient test kits
- Utilize Excel and MATLAB for data analysis
- C. Daiek, W. Liao, Y. Liu. "Effect of Light Intensity on Microalgal Biomass Accumulation" Poster presented at the Mid-Michigan Symposium for Undergraduate Research Experiences, Michigan State University, July 27, 2016.

Undergraduate Research Assistant

Michigan State University, East Lansing, MI

May 2015 - Current

- Assist in research involving tree fruit horticulture and physiology along with sweet cherry genetic improvement under Dr. Gregory Lang
- Analyze several fruit parameters which include the use of a digital brix refractometer and BioWorks Firmtech
- Analyze data using Excel and SAS (Statistical Analysis Software)
- Format and organize data from 5 separate locations participating in sweet cherry research

Undergraduate Research Assistant

Michigan State University, East Lansing, MI

September 2015 - December 2015

- Volunteered as an assistant in a pathogenesis lab conducted by Dr. Neal Hammer
- Assisted with cloning gene ahrC into plasmid pEPSA5 within E. coli

Undergraduate Research Assistant

Michigan State University, East Lansing, MI

March 2015 - May 2015

• Assisted in research involving cucumber fruit development and disease resistance by conducting cross-pollination procedures in the MSU greenhouses