Graduate Best Poster Displays

Biomedical Engineering – **Ryan Adam** Abnormal Airway Growth in Cystic Fibrosis Piglets

Chemical & Biochemical Engineering - Negin Sobhani Modeling the Climatic Effects of Black Carbon and Arctic Snow and Ice

Civil & Environmental Engineering - Ellen Black The impact of freshwater mussels on anaerobic ammonium oxidizers and other nitrogen-cycle bacteria in upper Mississippi river sediment

Electrical & Computer Engineering - Lauren Davidson Improved Efficiency of Silicon Solar Cells utilizing Sputtered Silicon Nitride Films

Mechanical & Industrial Engineering - Avik Samanta Simulations of Microstructure Evolution during Friction Stir Blind Riveting using a Cellular Automaton Method

The Center for Bioinformatics & Computational Biology Graduate Poster - **Mallory Tollefson** *Evaluating Genetic Variants of Unknown Significance Using Protein Thermodynamic Simulations in the Context of Non-Syndromic Hearing Loss.*

The Center for Global & Regional Environmental Research - Maryam Abdi-Oskouei Understanding Methane and VOC Emissions from Natural Gas Operation

IIHR-Hydroscience & Engineering - **Silvia Volpi** Towards the High-fidelity Multidisciplinary Design Optimization of a 3D Composite Material Hydrofoil

Iowa Institute for Biomedical Imaging - Johanna Uthoff Reduction and Selection of Uncorrelated Features for Lung Cancer Computer Aided Diagnosis

Undergraduate Best Poster Displays

Biomedical Engineering - Logan Muckenhirn Nanoscale Surface Modification through "Click Chemistry" and its Effect on Biofilm Formation

Chemical & Biochemical Engineering - Alec Countryman, Integrated Lab-On-A-Chip Life Support Device for Human Space Missions

Electrical & Computer Engineering - Matthew Finley System Development for Roadway Safety Study

Mechanical & Industrial Engineering - Nathaniel Weger Gasification and Combustion of Miscanthus

The Center for Bioinformatics & Computational Biology - Jacob Nishimura The International Clubfoot Registry Database

The Iowa Institute for Biomedical Imaging - **Qingyang Su** Spectral-Domain Optical Coherence Tomography Optic-Nerve-Head and Macular En-Face Image Registration in Cases of Papilledema

IIHR-Hydroscience & Engineering - **Aaron Boesen** Air-Water Exchange of PCBs in Southern Lake Michigan: Chicago a Source of Airborne PCBs

The Center for Computer-Aided Design - Lauren Schutz, Analysis and Comparison of the Plie to Functional Dance Movement

The Creative Kick-Start program - Alicia Truka, Kylie Hershberger, and Mitchell Miller The Little Jonny That Could: Providing Independence for Congenital Arm Amputees Winners of the Popular Choice Award. This award is granted to the favorite posters as voted on by the visitors to the Open House

1st place Popular Choice Award - <u>**Ryan Adam**</u> from Biomedical Engineering: Abnormal Airway Growth in Cystic Fibrosis Piglets

2nd place Popular Choice Award - <u>Nathaniel Weger</u> from Mechanical Engineering: Gasification and Combustion of Miscanthus

3rd place Popular Choice Award - <u>Emily Pattee</u> from Chemical & Biochemical Engineering: The Effect of Cyanuric Acid on the Expression of Atrazine-degrading Genes in Pseudomonas sp. ADP