

Graduate Best Poster Displays

TIE for Biomedical:

Biomedical Engineering – **Sarah Gerard**

A Deep Learning Approach For Lung and Lobe Segmentation in CT Images

And

Jacob Hermann

Modeling Lung Tissue Interdependence and Collapse During Mechanical Ventilation

Chemical & Biochemical Engineering – **Austin McKee**

Plasmon Mediated Carbon Dioxide Reduction Pathways

Civil & Environmental Engineering – **Amina Grant**

Snapshot of Lead and Copper in Iowa Drinking Water

Electrical & Computer Engineering – **Wenqi Duan**

High Sensitivity Silicon Nanowire Biosensor for Estrogen Detection in Water Streams

Mechanical Engineering – **Avik Samanta**

Molecular dynamics simulation of diffusion bonding during ultrasonic welding of dissimilar materials

Industrial Engineering- **Hamed Salehi**

Hazards Mental Models and The issue of Trust

The Center for Bioinformatics & Computational Biology Graduate Poster – **Mallory Tollefson**

GPU Accelerated Protein Structure Optimization and Its Application to Genes Associated with Hearing Loss

The Center for Computer Aided Design – **Fan Fei**

Multi-scale Additive Manufacturing: A 3D-printing Method based on Digital Light Processing

The Center for Global & Regional Environmental Research – **Nathan Janecek**

Experimental Characterization and Hygroscopicity Determination of Secondary Aerosol from D5 Cyclic Siloxane Oxidation

IIHR-Hydroscience & Engineering – **Kim Yagin**

CFD Simulation of a Generic Submarine operating near the surface

Iowa Institute for Biomedical Imaging – **Sampurna Biswas**

Model based deep learning in free breathing, ungated, cardiac MRI recovery

Undergraduate Best Poster Displays

TIE for Biomedical:

Biomedical Engineering – **Brett Austin**

Multiaxial Failure Studies of Biological Soft Tissues

And

Russell Martin

Using zebrafish to test potential drugs for their efficacy against epileptic seizures

Chemical & Biochemical Engineering – **Eric Knapp**

Determining Parameters for Optimal Shadow Cure Polymerization

Electrical & Computer Engineering – **Joshua Deutsch**

Mie Scattering based Analytical Model to Compute Plasmon Resonances of Metal Nanoparticles

IIHR-Hydroscience & Engineering – **Jian Teng**

Investigation of the relationship between the wind turbine operating conditions and bat fatality

The Center for Computer-Aided Design – **Elizabeth Niedert**

Mechanical Testing of Neurovascular Stents

The Center for Global & Regional Environmental Research – **Austin Doak**

Investigating Pollution around Lake Michigan using Continuous Emissions Monitoring Systems

The Creative Kick-Start program – **James Chenoweth, Ford Minaghan, Michael Garneau, and Velarchana Santhana**

Minimizing Radiation during Gastrojejunal Tube Placement

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 –

Emily Pattee from **Chemical & Biochemical** for the poster:

Evaluation of Atrazine Bio-degradation Kinetics by Pseudomonas sp. ADP Biofilms and Planktonic cells

2nd place Popular Choice Award –

Christopher Feldmeier from **Mechanical Engineering** for the poster:

Wheel Profile Optimization to Mitigate Wear and Rolling Contact Fatigue for Railroad Vehicles

3rd place Popular Choice Award (tie)–

Amir Asgharzadeh Shishavan from **Electrical & Computer Engineering** for the poster:

Impact of Diffuse Shading Conditions on the Performance of Bifacial PV Modules

And to

Jian Teng from **IIHR** for the poster:

Investigation of the relationship between the wind turbine operating conditions and bat fatality