

Poster #	Time	Last Name	First Name	Judging Category	Poster Title
1	11:00-12:00	Adam	Ryan	BME	Abnormal Airway Growth In Cystic Fibrosis Piglets
2	10:00-11:00	Beauchene	Madeline	BME	Nanoparticles and Drug Release using Ultrasonic Waves: novel approach to drug delivery
3	11:00-12:00	Conlan	Henry	BME	Human Engineered Skin as an In Vitro Model of Wound Healing
4	11:00-12:00	Corrigan	Rae Ann	BME	Advanced Physics-Based Models of Cancer Therapeutics
5	9:00-10:00	El-Hattab	Mariam	BME	Perturbation of Fibrin Gels Seeded with Fibroblast Cell Aggregates using a Linearly Actuated Acupuncture Needle
6	11:00-12:00	Gerard	Sarah	BME	Convolutional Neural Networks for Pulmonary Fissure Detection and Segmentation in Computed Tomography Datasets
7	1:00-2:00	Halberg	Spencer	BME	A Functional Model of Cell Migration on a Dynamic Neo-Hookean Substrate
8	3:00-4:00	Keil	Anna	BME	Comparison of Image Registration Direction on Pulmonary 4DCT Datasets
9	1:00-2:00	Mendenhall	Alyssa	BME	Response of Epithelial Thyroid Cells to Vibrational Stimuli
10	2:00-3:00	Moghram	Waddah	BME	A Combined Approach of Traction Force Microscopy (TFM) and Magnetic Tweezers (MT) to Study the Structure of Keratin Intermediate Filament-Desmosome-Hemidesmosome Network in Human Epidermal Keratinocytes
11	1:00-2:00	Muckenhirn	Logan	BME	Nanoscale Surface Modification Through "Click Chemistry" and Its Effect on Biofilm Formation
12	1:00-2:00	O'Connell	Claire	BME	Accelerating Computational Protein Design via Advanced Thermodynamic Paths
13	10:00-11:00	Rendleman	Michael	BME	Developing Machine Learning Tools for Cancer Prediction from Genomic Data
14	2:00-3:00	Thompson	Jessica	BME	Optimizing the photopolymerization parameters of high-resolution, 3D biodegradable tissue scaffolds
15	9:00-10:00	Algharrawi	Khalid	CBE	Production of Theobromine from Coffee Waste
16	11:00-12:00	Aljaafari	Haydar	CBE	Effect of Heat Shock on Growth Rate of Pseudomonas aeruginosa Biofilms
17	3:00-4:00	Alsaedi	Abdulsattar	CBE	Improved electro dialysis by using complex 3-D electrode architecture
18	10:00-11:00	Bartley	Alex	CBE	Carbon Capture and Sequestration Technology for the State of Iowa
19	9:00-10:00	Bess	Alexandra	CBE	Analysis of the Protein Effects on Nanoparticle-Cell Association
20	3:00-4:00	Countryman	Alec	CBE	Integrated Lab-On-A-Chip Life Support Device for Human Space Missions
21	1:00-2:00	Delcau	Michael	CBE	Determination of Sugar Composition and Distribution in Pseudomonas sp. ADP by Fluorescent Lectin Binding Analysis
22	2:00-3:00	Do	Anh-Vu	CBE	Using Ultrasound to Enhance Tumor Cell Killing by anti-PD1 and Doxorubicin-loaded Particles
23	9:00-10:00	Ford	Chad	CBE	Ethanol: Fuel of the future

24	11:00-12:00	Giles	Katherine	CBE	Shining a Light on the Irradiance and Wavelength Properties of Light Emitting Diodes in Dental Applications
25	10:00-11:00	Givens	Brittany	CBE	The Effect of Solution Properties on Protein Corona Formation and Nano-Bio Interactions
26	10:00-11:00	Green	Brian	CBE	Improving 3D Photocured Systems
27	10:00-11:00	Hasa	Erion	CBE	Nano/Microstructured Materials Obtained Using Photopolymerization-Induced Phase Separation (PhIPS)
28	9:00-10:00	Kaalberg	Sara	CBE	Cationic Photopolymerization of Epoxides and Oxetanes: Effect of Secondary Functional Groups on Kinetics and Viscosity
29	11:00-12:00	King	Benjamin	CBE	Copper Oxide Nanoparticle Toxicity in Acute Lung Cell Exposure
30	10:00-11:00	Kloepfer	Nicole	CBE	A Recipe for Success: Correlating Monomer Chemistry to Dose Rate Effects in Electron Beam Polymerization
31	1:00-2:00	Knapp	Eric	CBE	Evaluating the absorption spectra of cationic photoinitiators
32	10:00-11:00	Koonce	Jonathan	CBE	Hydrogen as Fuel for the Future
33	1:00-2:00	Kurpius	Rena	CBE	Curing Dose Rate Effects: Predicting Polymer Properties in Electron Beam Polymerization
34	2:00-3:00	Leigh	Braden	CBE	Engineered Zwitterion
35	9:00-10:00	Lennartson	Elizabeth	CBE	Preliminary Analysis of the Diurnal Variation of Aerosol Optical Depth during the KORUS-AQ Campaign
36	2:00-3:00	Lewis	Devyn	CBE	Opportunities and Barriers of Electric Vehicles in Iowa
37	10:00-11:00	Mat Desa	Wan	CBE	Improving the Estimates of Particulate Matter Impact on Human Health through Remote Sensing
38	3:00-4:00	Mat Desa	Wan	CBE	UI Nuclear Power Plant Installation
39	2:00-3:00	Mattingly	Taylor	CBE	Team Solar
40	9:00-10:00	McKee	Austin	CBE	Electrochemical Reduction of CO <sub>2</sub> into Usable Chemicals and Fuels
41	9:00-10:00	McLaughlin	Jacob	CBE	Improved Toughness in Photopolymerized Films via RAFT Modification
42	2:00-3:00	Pattee	Emily	CBE	The Effect of Cyanuric Acid on the Expression of Atrazine-degrading Genes in Pseudomonas sp. ADP
43	11:00-12:00	Qian	Jiajie	CBE	Development and application of electrospun nanofiber mats as passive sampler media for hydrophilic and hydrophobic organic compounds
44	10:00-11:00	Rassoolkhani	Alan	CBE	Acid Stable Bismuth Vanadate for Photo Electrochemical Chlorine production
45	12:00-1:00	Ricker	Erica	CBE	Combined Treatment of Heat and Antibiotic to Mitigate Pseudomonas Aeruginosa Biofilm Implant Infections
46	2:00-3:00	Seibt	Michael	CBE	Recovery Storage Unit for The Seamans Center
47	2:00-3:00	Shamsul Akmal	Zubair	CBE	UI Wind Power Installation
48	2:00-3:00	Sobhani	Negin	CBE	Modeling the Climatic Effects of Black Carbon and Arctic Snow and Ice
49	1:00-2:00	Weis	Adam	CBE	Economics-Informed Discovery of Solar Energy Conversion Systems
50	1:00-2:00	Wersinger	Kyle	CBE	Outreach and Environmental Education about Air Pollution

51	1:00-2:00	Young	Graham	CBE	Porous Aluminum Oxide: Templates for High Throughput Production of Ordered Metallic and Semiconducting Nanowires
51.5	1:00- 2:00	Koonce	Jonathan	CBE	Low Iridium Content Transparent Electrocatalyst for Oxygen Evolution Reaction
52	3:00-4:00	Black	Ellen	CEE	The impact of freshwater mussels on anaerobic ammonium oxidizers and other nitrogen-cycle bacteria in upper Mississippi river sediment
53	2:00-3:00	Ewald	Jessica	CEE	Polychlorinated Biphenyl Biodegraders in a Altavista Lagoon
54	11:00-12:00	Herkert	Nicholas	CEE	Calibration and Evaluation of PUF-PAS Sampling Rates across the Global Atmospheric Passive Sampling (GAPS) Network
55	1:00-2:00	Jahnke	Jacob	CEE	Is Paint a Significant Source of PCBs to Indoor Air?
56	2:00-3:00	Mattson	Rebecca	CEE	Treating Ammonia in Small Town Iowa Wastewater Systems: A Case Study on a Submerged Attached Growth Reactor
57	11:00-12:00	Yildirim	Enes	CEE	Flood Emergency Decision Support System and Loss Estimation on the Web using HAZUS
58	10:00-11:00	Amir	Asgharzadeh Shishavan	ECE	The Effect of PV System Size and Installation Parameters on the Performance of Bifacial Arrays
59	12:00-1:00	Biswas	Sampurna	ECE	Convex recovery of continuous domain piecewise constant images from non-uniform Fourier samples
60	11:00-12:00	Cho	Myung	ECE	Phaseless Super-Resolution In The Continuous Domain
61	2:00-3:00	Davidson	Lauren	ECE	Improved Efficiency of Silicon Solar Cells utilizing Sputtered Silicon Nitride Films
62	2:00-3:00	Duan	Wenqi	ECE	A Novel Approach to the Development of a Highly Sensitive Silicon Nanowire Biosensor
63	3:00-4:00	Finley	Matthew	ECE	System Development for Roadway Safety Study
64	2:00-3:00	Haque	K A S M Ehteshamul	ECE	Copper Catalyzed Etched Nanoporous Black Silicon for Efficient Solar Cells
65	10:00-11:00	Jin	Xin	ECE	Spectrally-selective solar window coatings to improve energy efficiency
66	10:00-11:00	McClurg	Josiah	ECE	Fast Demand Response with Datacenter Loads
67	1:00-2:00	Mo	Yuanqiu	ECE	Robustness of the Adaptive Bellman-Ford Algorithm
68	9:00-10:00	Nadeem	Syed Ahmed	ECE	An iterative method for airway segmentation using multiscale leakage detection
69	1:00-2:00	Poddar	Sunrita	ECE	Clustering of data in the presence of missing entries
70	1:00-2:00	Salino-Hugg	Michael	ECE	A Flexible Electronic Flash for Ophthalmology Research
71	3:00-4:00	Sink	Joseph	ECE	E-beam lithography: Nanohole patterning and InAs nanowire-based device fabrication
72	11:00-12:00	Snyder	Adam	ECE	Cardiac Catheter Control Using Actuator Wire
73	1:00-2:00	Xiaoliu	Zhang	ECE	Human Femur Active Shape Model From Hip MRI
74	2:00-3:00	Esmailpour	Mehdi	ME	Computational Fluid Dynamics Study of the Dead Water Problem

75	9:00-10:00	Feldmeier	Chris	ME	Modeling of Wheel and Rail Profile Wear on Small Radius Curved Track in Vehicle Dynamics Simulation
76	3:00-4:00	He	Li	IE	Additive Manufacturing of Support-free Ceramic Components
77	3:00-4:00	He	Yusen	IE	Modeling and performance evaluation of wind turbines
78	10:00-11:00	Heiderscheit	Tim	ME	Experimental Study of Single-Pass Laser Machining of CFRP
79	11:00-12:00	Rojas-Murillo	Salvador	IE	Identification of Object Features - Edges, Landmarks and Texture - That Visually Guide an Assembly Process In Real and Virtual Environments
80	11:00-12:00	Samanta	Avik	ME	Simulations of Microstructure Evolution during Friction Stir Blind Riveting using a Cellular Automaton Method
81	1:00-2:00	Sun	Zhiyu	IE	Deep Spectral Descriptors Learning the point-wise correspondence metric via Siamese deep neural networks
82	11:00-12:00	Wang	Qinghua	ME	Nanosecond Laser Shock Processing of Steel for Superhydrophobic, High Absorption and Mechanically Enhanced Surface
83	2:00-3:00	Weger	Nathaniel	ME	Gasification and Combustion of Miscanthus
84	10:00-11:00	Brown	Bartley	CBCB	A Pipeline for RNAseq-Based Differential Expression Analysis of Neuroendocrine Tumors
85	Withdrawn				
86	11:00-12:00	LuCore	Stephen	CBCB	Asymptotically optimal and intrinsic scaling constant-pH simulations with physically rigorous sampling and a polarizable multipolar potential
87	1:00-2:00	Nishimura	Jacob	CBCB	The International Clubfoot Registry Database
88	11:00-12:00	Tessmann	Jonathon	CBCB	Genomic Analysis for Identifying Mutations in Neuroendocrine Tumors
89	10:00-11:00	Tollefson	Mallory	CBCB	Evaluating Genetic Variants of Unknown Significance Using Protein Thermodynamic Simulations in the Context of Non-Syndromic Hearing Loss.
90	11:00-12:00	Walls	Daniel	CBCB	AudioGene: Predicting Hearing Loss Genotypes from Phenotypes to Guide Genetic Screening
91	2:00-3:00	Schutz	Lauren	CCAD	Analysis and Comparison of the Plie to Functional Dance Movement
92	10:00-11:00	Abdi-Oskouei	Maryam	CGRER	Understanding Methane and VOC Emissions from Natural Gas Operation
93	9:00-10:00	Dong	Can	CGRER	Physical and Model-Based Characterization of Ultrafine Particle Size Distributions, Nucleation, and Particle Growth in the Central US
94	9:00-10:00	Nathan	Janecek	CGRER	Experimental Characterization of Secondary Aerosol from D5 Cyclic Siloxane Oxidation
95	11:00-12:00	Berdon	Randall	IIHR	Rolling Wings At High Angles of Attack
96	10:00-11:00	Boesen	Aaron	IIHR	Air-Water Exchange of PCBs in Southern Lake Michigan: Chicago a Source of Airborne PCBs
97	10:00-11:00	Drake	Chad	IIHR	Modeling and measurements to estimate nitrate removal from a large constructed wetland

98	9:00-10:00	Haghighi	Babak	IIHR	Multiscale Imaging-Based Clusters in Current Smokers of the COPD (SPIROMICS)
99	3:00-4:00	Jadidoleslam	Navid	IIHR	Soil Moisture Dynamics Assessment in Different Scales.
100	12:00-1:00	Perez	Gabriel	IIHR	Classification of streamflow and flood conditions at ungauged sites for the State of Iowa
101	10:00-11:00	Sermet	Yusuf	IIHR	Knowledge Discovery, Integration and Communication for Extreme Weather and Flood Resilience Using Artificial Intelligence: Flood Ai Alpha
102	10:00-11:00	Volpi	Silvia	IIHR	Towards the High-fidelity Multidisciplinary Design Optimization of a 3D Composite Material Hydrofoil
103	1:00-2:00	Balachandrasekaran	Arvind	IIBI	Novel Structured Low rank algorithm for accelerated parameter mapping
104	12:00-1:00	Guo	Zhihui	IIBI	Machine learning in a graph-based framework for subcortical segmentation
105	11:00-12:00	Hammond	Emily	IIBI	Development of A Lung Cancer Pig Model: Non-Invasive Characterization with Computed Tomography
106	2:00-3:00	Pan	Yue	IIBI	Varifold-Based Registration of Lung Vessel and Surface.
107	2:00-3:00	Shao	Wei	IIBI	Estimation of pulmonary function by total variation of regional lung volume
108	10:00-11:00	Su	Qingyang	IIBI	Spectral-Domain Optical Coherence Tomography Optic-Nerve-Head and Macular En-Face Image Registration in Cases of Papilledema
109	2:00-3:00	Uthoff	Johanna	IIBI	Reduction and Selection of Uncorrelated Features for Lung Cancer Computer Aided Diagnosis
110	11:00-12:00	Xie	Hui	IIBI	An Innovative Four-Neighbour Stepping Interpolation
111	10:00-11:00	Austin	Brett	Creative Kick-Start	T4: Table Top Tension Tester
112	9:00-10:00	Butler	Sy	Creative Kick-Start	The Bandit: A DIY Quadcopter
113	2:00-3:00	Gharse	Sachin	Other	Novel antibiotic formulations for eradication of biofilms of a Pseudomonas aeruginosa clinical isolate
114	11:00-12:00	Gowdampally	Bharath Kumar	Other	Particle - Lung Surfactant Interactions Depend on Particle Surface Properties
115	2:00-3:00	Hagan	Liam	Creative Kick-Start	Smart Mirror
116	3:00-4:00	Ismail	Abdualrahman	Creative Kick-Start	Iowa Marine Autonomous Racing Club (IMARC)
117	11:00-12:00	Moore	James	Creative Kick-Start	Hand Garment to Provide Additional Grip Assistance in Peripheral Neuropathy Patients.
118	3:00-4:00	Regan	David	Creative Kick-Start	Creative Kick-Start Project: Custom CNC Machine/3d Printer Build
119	12:00-1:00	Remy	Matthew	Creative Kick-Start	Improving AAA Surgery Utilizing 3D Modeling
120	1:00-2:00	Truka	Alicia	Creative Kick-Start	The Little Jonny That Could: Providing Independence for Congenital Arm Amputees
121	9:00-10:00	Watkins	Michael	Creative Kick-Start	Precision Landing System for Unmanned Aircraft
122	9:00-10:00	Zarei	Kasra	Creative Kick-Start	Buccal Drug Delivery System

