200+ participants.
100+ visiting students.
100+ alumni.

research.
networking.
professional development.

#UMichEGS
THE BIGGEST GRADUATE RESEARCH SHOWCASE IN THE COLLEGE OF ENGINEERING
13th ANNUAL ENGINEERING GRADUATE SYMPOSIUM
Contents.
OFFICE OF STUDENT AFFAIRS STAFF

Debby Mitchell Director of Partnerships, Outreach and Retention
Jeanne Murabito Executive Director of the Office of Student Affairs
Tiffany Porties Assistant Director of Partnerships, Outreach and Retention Coordinator for Graduate Programs
Andria Rose Recruiting Coordinator
Shira Washington

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Victoria Florence
Angela Wu

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Xinan Huang
Houtan Jebelli
Niloufar Salehi

Towne Research
Eshita Khera
Peter Paquet
Boyang Zhang

Scientific Visualization
Maryam Akram
Samuel Pellone

Undergraduate Research Poster
Farah Huq

Sponsorship
Pengyuan Xiu
You Zhang

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Carlos Anaya

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Phone: 734.975.0496  E-mail: usa1781@fedex.com
Exponent Consulting Panel: Join us for a technical consulting panel discussion and networking session with Michigan Alumni. The panelists will talk about their transition from graduate school, career progression, day-to-day of a technical consultant, and will also offer advice to graduate students. Snacks and refreshments will be provided.

Joshua White, Ph.D.
Biomedical Engineering
Michigan '13 Alum

Alexandra Emily, Ph.D.
Materials & Corrosion Engineering
Michigan '15 Alum

Serge Gregoire, Ph.D.
Vehicle Engineering
Michigan '12 Alum

Friday, October 26 | 2 p.m. - 3 p.m. | 1180 Duderstadt Center

For more information or to apply, contact Patricia Mafioletti with your CV: pmafioletti@exponent.com
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Charles Bussy-Virat
Julia Dshemuchadse
Ayumi Fujisaki-Manome
Richard Furness*
Deanna H. Gates

Cynthia Gerlein-Safdi
Anne Juggernauth*
Tim Moore
Line van Nieuwstadt
David Reed*
Judit Szente*

Advanced Graduate Student Research
Al-Thaddeus Avestruz
Mahmood Barangi*
Melina Bautista
Djamel Bouzit*
Brian Carvill
Yu-Chih Chen
Amanda Esquivel
Evgueni Filipov
Erik Fischer
Yuji Fujii*
Joan Greve
John Heron
Yaoxian Huang
Samuel Kachuck
Brendan Kochunas
Benedikt Krohn
Chad Kymal
Yongxi Li
Albert Liang*
Ryan McBride
Patrick McNally*
Deborah Mielewski*
Viswanath Nagarajan
Sophia Orbach
Mark Van Oyen
Prabhu Ponnam
Cristina Risio
Arunabha Roy
Daniel Seipt
Ashwin Shahani
Yinsi Shou
Yichun Wang
Yuqing Zhou
Mazen Hammoud

Emerging Graduate Student Research
Kurt Ansorge*
Pradeep Attibele*
Tracy Berman
Tierra Bills
Nicholas Capicotto*
Christian Casper
Crystal Chen*
Daniel Cooper*
Kevin Fok*
Xavier Fonoll Almansa
Tom Harkaway*
Amr Ibrahim*
German Martinez
Stanley Materka*
Shubhankar Mohan*
A. Bilge Ozel*
Danielle Paniccia*
Qing Peng
Frederick Porter*
Shreya Raghavan
Leonardo Regoli
Sara Shashaani
Rohit Tangri*
Serdar Yonak*
Jared Finney*

Undergraduate Exhibition
Abhinav Achreja
Anver Aftab*
Afroze Ahmed*
Asli Aka*
David Bloom*
Steven Carl*
Dan Diebolt*
Molong Duan
Jon Estrada
Krishnendu Ghosh
Michael Gross
Cam Hill*
Wan-Thai Hsu
Zhenguang Huang
Samuel Kachuck
Sudarat Lee
Russell Monahan*
Bill Niester*
Harpreet Oberoi*
Sechang Oh
Ali Pakniyat
Yutao Qin
Lucas Rieckhoff*
Rasoul Salehi
Steve Schwinke*
Reza Soroshmehr
Andrew Wong*
Christopher Worrel*
Hong Zhou

*Indicates alum
registration.
8:00 - 15:00
Public registration
Pierpoint Corner Commons

7:30 - 16:00
Judge Registration
Duderstadt Center Basement Level

networking.
9:30 - 9:45
Coffee Break
Chesebrough Lobby

16:00 - 17:00
Networking event
Duderstadt Center Basement Level

17:00 - 17:30
Raffle prize drawing
Duderstadt Center Basement Level

sponsors.
9:30 - 14:30
Sponsor Table
Exponent and
FedEx
Duderstadt Atrium

14:00 - 15:00
Exponent
Information
Session
1180 Duderstadt

Welcome.
Chesebrough Auditorium
8:30 - 9:30
Welcome Remarks
EGS Co-Chairs
Keynote Address
Dr. James Duderstadt

Welcome.
Chesebrough Auditorium
8:30 - 9:30
Welcome Remarks
EGS Co-Chairs
Keynote Address
Dr. James Duderstadt

contest.
10:00 - 15:00
Scientific Visualization Contest
Duderstadt Center Atrium and Connector;
Pierpont Commons Atrium and Hallway

People’s Choice Voting
Pierpont Corner Commons

awards.
19:00 - 20:00
Dinner Reception
Chesebrough Auditorium
Lobby, Chrysler Center;
Duderstadt Center Atrium,
Connector, and Gallery;
Pierpont Commons Atrium
and Hallway

20:00 - 21:00
Awards Ceremony
Chesebrough Auditorium

location is listed in italics

SYMPOSIUM TIMELINE

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visiting students.

welcome.
Chesbrough Auditorium, Chrysler Center
8:30 - 9:30
Welcome Remarks
EGS Co-Chairs

Keynote Address
Dr. James Duderstadt

admissions success.
Chesbrough Auditorium, Chrysler Center
9:35 - 10:20
Workshop on applying to graduate school and preparing for your campus visit
Presentation by:
Kevin Pipe,
Director of Academic Programs,
Office of Graduate Education

department visits.
various locations on North Campus, CoE
13:45 - 14:00
Meet and greet with department representatives
14:00 - 17:00
Department visits
RICHARD & ELEANOR TOWNER PRIZE
FOR OUTSTANDING Ph.D. RESEARCH

Morning Session  9:45 a.m. - 12:00 p.m.

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<td>AERO</td>
<td>Sarah Cusson</td>
<td>A. Gallimore, B. Jorns</td>
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<td>BME</td>
<td>Olivia Palmer</td>
<td>Joan Greve</td>
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<td>ChE</td>
<td>William Kelley</td>
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<td>Callan Luetkemeyer</td>
<td>Ellen Arruda</td>
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<td>NERS</td>
<td>Amanda Lietz</td>
<td>Mark Kushner</td>
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<tr>
<td>Robotics</td>
<td>Katherine Skinner</td>
<td>Matthew J-Roberson</td>
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nominees.

TOWNER
MORNING SESSION

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Acceleration Region Movements in a Magnetically Shielded Hall Thruster (TOWNER_1)
Sarah E. Cusson, Ethan T. Dale, Benjamin A. Jorns, Alec D. Gallimore

Non-Invasive Determination of Thrombus Composition: Towards Patient-Specific Treatment Planning for Deep Vein Thrombosis (TOWNER_4)
Olivia R. Palmer, Jose A. Diaz, Joan M. Greve

Mobile EEG-based Field Construction Workers’ Stress Measurement (TOWNER_5)
Houtan Jebelli, SangHyun Lee

Neutrophil Function in Health and Disease (TOWNER_7)
William J. Kelley, Omolola Eniola-Adefeso

Pollen in the Atmosphere: Modeling Emissions, Role in Clouds and the Impacts of Climate Change (TOWNER_9)
Matthew Wozniak

Characterization of Effective Isotropic Radiated Power (EIRP) of the GPS Constellation for the CYGNSS Mission (TOWNER_10)
Tianlin Wang, Christopher Ruf, Bruce Block, Darren McKague

Heterogeneous Memory Subsystem for Natural Graph Analytics (TOWNER_11)
Abraham Addisie, Hiwot Kassa, Opeoluwa Matthews, Valeria Bertacco

Full Wave Simulations of Vegetation and Forest Effects in Microwave Remote Sensing of Soil Moisture (TOWNER_13)
Huanting Huang, Leung Tsang

Stochastic Load Balancing on Unrelated Machines (TOWNER_15)
Anupam Gupta, Amit Kumar, Viswanath Nagarajan, Xiangkun Shen

Pressure-Tunable Photonic Band Gaps in an Entropic Crystal (TOWNER_17)
Rose K. Cersovsky, Julia Dshemuchadse, James Antonaglia, Greg van Anders, Sharon C. Glotzer

Alloying Boron into InGaN Active Layers to Create Higher-Power, Higher-Efficiency LEDs (TOWNER_19)
Logan Williams, Kevin Greenman, Emmanouil Kioupakis

State-Of-The-Art Imaging and Inverse Methods Advance Mechanics-Based Approach to ACL Injury Prevention and Treatment (TOWNER_21)
Callan M. Luetkemeyer, Ellen M. Arruda

Plasma-Induced Flow Instabilities in Atmospheric Pressure Plasma Jets (TOWNER_23)
Amanda M. Lietz, Eric Johnsen, Mark J. Kushner

Unsupervised Learning for Depth Estimation and Color Correction of Underwater Imagery (TOWNER_25)
Katherine A. Skinner
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11:00 a.m. - 12:30 p.m.

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Programming Self-Organization of Colloidal Material at Miniature Scale (AGSR_2)
Mayank Agrawal, Isaac R. Bruss, Sharon C. Glotzer

A Self-Organization Route to Three-Dimensional Chiral Metamaterials (AGSR_5)
Saman Moniri, Tianxiang Lu, Ashwin J. Shahani

Interannual Variability and Seasonality of Precipitation in the Indus River Basin (AGSR_9)
Samar Minallah, Valeriy Y. Ivanov

Behaviorally Stable Vehicle Platooning for Energy Savings (AGSR_13)
Xiaotong Sun, Yafeng Yin

Modeling Climate Resilience in Smallholder Agricultural Systems: An Agent-Based Approach (AGSR_15)
Tim Williams, Seth Guikema

A Numerical Study of Confined Turbulent Jets for High-Temperature Homogeneous Combustion (AGSR_16)
Kumar Aanjaneya, Weiyu Cao, Arvind Atreya

Investigation on Coupling Between Plasma Self-Organization and Streamer-Induced Capillary Oscillations in Bubbles in Water (AGSR_17)
Janis Lai, John E. Foster

An Infrared Thermal Imaging Based Method for Personalized Thermal Comfort Assessment (AGSR_19)
Da Li, Carol C. Menassa, Vineet R. Kamat

Perception and Planning for Adaptive Robotized Construction Joint Filling (AGSR_20)
Kurt M. Lundeen, Vineet R. Kamat, Carol C. Menassa, Wes McGee

Personalized PageRank Dimensionality and Algorithmic Implications (AGSR_21)
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Hossein Rokni, Wei Lu

Design of an Indoor Localization System Based on Occupancy Grid Mapping in Visual SLAM (AGSR_25)
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Optimizing Inspection Routes in Pipe Networks (AGSR_30)
Thomas Ying-Jeh Chen, Connor Thomas Riley, Pascal Van Hentenryck, Seth David Guikema

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Accurate Transfer-Power Measurement for Wireless Charging of Electric Vehicles Under Misalignment (AGSR_41)
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Emine S. Turali-Emre, Ahmet E. Emre, Nicholas A. Kotov

Transition to Turbulence Prediction over Aerospace Configurations (AGSR_43)
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Best Practices for Modeling Structural Boundary Conditions due to a Localized Fire (AGSR_50)
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Digital Control of a Multi-Megahertz Variable-Frequency Boost Converter for Dynamic LiDAR (AGSR_51)
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A Multi-Objective Optimal Structural Design Framework for Wind-Excited Uncertain and Dynamic Building Systems (AGSR_60)
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A Distributed Simulation Platform to Probabilistically Quantify Hurricane Resilience of Communities (AGSR_82)
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Alyreza Nafari, Henry A. Sodano

Working Towards a Multivalent Battery: Effects of d-electron (De)localization on Ion Transport in Chevrel Phase Mo6S8 (AGSR_89)
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Peng-Kai Kao, Bryan J. VanSaders, Michael D. Durkin, Sharon C. Glotzer, Michael J. Solomon

Electrical Performance of Annealed Zinc-Tin-Oxide Thin-Film Transistors Deposited by Atomic Layer Deposition (AGSR_100)
Christopher Allemang, Orlando Trejo, Carli Huber, Neil P. Dasgupta, Rebecca L. Peterson

Effect of Crystal Quality on the Brilliance of Structural Color from Self-Assembled Colloidal Crystals (AGSR_101)
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Self-Healing Composites Materials (AGSR_104)
Lisha Zhang

Dynamics of Cavitation Bubble Near an Interface During the Inertial Collapse (AGSR_105)
Minki Kim, Shahaboddin Alahyari Beig, Mauro Rodriguez, Eric Johnsen

Flexibility Polytopes for Aggregated Energy Resources: Computation and Applications (AGSR_106)
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2D High-Resolution Acoustic Localization for Structural Health Monitoring (AGSR_107)
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Optimal Capacity Design for Distributed Energy Resources in Islanded Microgrid Using a Stochastic Approach (AGSR_110)
Sijia Geng, Ian A. Hiskens

A Multidisciplinary Framework to Assess Seismic Resilience of Communities (AGSR_111)
Omar A. Sediek, S. El-Tawil, J. McCormick

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EMERGING GRADUATE STUDENT RESEARCH
1:00 p.m. - 2:30 p.m.

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Ultrathin, Lightweight and Flexible Organic Light-Emitting Devices with a High Light Outcoupling Efficiency (EGSR_2)
Xiaheng Huang, Yue Qu, Dejiu Fan, Jongchan Kim, Stephen R. Forrest

Increasing GPS Localization Accuracy Using Reinforcement Learning (EGSR_3)
Ethan Zhang, Neda Masoud

Investigating the Role Assignment Stability in Large-scale Peer-to-Peer Ridesharing Markets (EGSR_4)
Amirmahdi Tafreshian, Neda Masoud

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Design and Electrohydrodynamic Jet Printing of Layered Periodic Photopolymers (EGSR_7)
Brian Iezzi, Zahra Afkhami, David Hoelzle, Kira Barton, Max Shtein

Stochastic Water Distribution Network Operation Considering Power Distribution Network Constraints (EGSR_8)
Anna K. Stuhlmacher, Johanna L. Mathieu

A Side-By-Side Comparison of The Solidification Dynamics of Quasicrystalline and Approximant Phases in the Al-Co-Ni System (EGSR_9)
Insung Han, Xianghui Xiao, Ashwin J. Shahani

Improving Modeling of the Thermospheric Density Using CubeSat Ephemeris Data (EGSR_10)
D. A. Brandt, A. J. Ridley, C. D. Bussy-Virat

An Augmented Reality Environment for Enhancing Clinical Training Experience: Stroke Assessment Simulation (EGSR_11)
Ci-Jyun Polar Liang, Charles Start, Hanna Boley, Vineet R. Kamat, Carol C. Menassa, Michelle Aebersold

Classification of Huntington Disease using Acoustic and Lexical Features (EGSR_12)
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Immunomodulation Facilitates Survival of Human Stem Cell-Derived B-Cells at a Clinically Translatable Transplant Site (EGSR_13)
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Active Flow Control for Helicopter Rotor Vibration Reduction (EGSR_16)
Ryan Patterson, Peretz Friedmann

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Mood State Prediction for Individuals with Bipolar Disorder (EGSR_20)
Katie Matton, Emily Mower Provost

A Semianalytical Solution for Rarefaction-Driven Fluid Interfaces (EGSR_22)
Michael Wadas, Eric Johnsen

Wearable and Collective Sensing Framework to Detect the Elderly’s Environmental Barriers (EGSR_23)
Gaang Lee, Byungjoo Choi, Houtan Jebelli, Changbum Ahn, SangHyun Lee

Three Dimensional Characterization of Short Fatigue Crack Growth in Rare-Earth Magnesium Alloys (EGSR_25)
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Experimental and Computational Testing of Tube-Based Seismic Collar Connections under Cyclic Loads (EGSR_26)
C. Flores Carreras, K. Amson, D. Wei, J. McCormick

Hysteresis and “Arrow of Time” in the Evolution of Grain Boundaries during Thermal Cycling (EGSR_27)
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Maxim Muermans, Shilva Shrestha, Lutgarde Raskin

Postural Instability in Autonomous Vehicles Following Front-Seat Passenger Exposure (EGSR_31)
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Reaction Kinetics Analysis in a Solar Device for Wastewater Treatment (EGSR_32)
Luisa Barrera, Rohini Bala Chandran

Hyperspectral Absorption of Monolayer Crystals (EGSR_34)
Claire Lu, Qiannan Wen, Mack Kira

Medium Chain Carboxylic Acid Recovery from Urban Waste Streams (EGSR_35)
Brittany Colcord, Shilva Shrestha, Lutgarde Raskin

Weakly-Supervised Video Object Grounding from Text by Loss Weighting and Object Interaction (EGSR_36)
Luowei Zhou, Nathan Louis, Jason J. Corso

Probabilistic Graph Theoretic Approaches for 3D Microstructure Reconstruction (EGSR_37)
Iman Javaheri, Aaditya Lakshmanan, Veera Sundararaghavan

Classification of Transients (EGSR_39)
Alvin Lee, David R. Dowling
Probing the Charge Transfer Mechanism of Vanadium Redox Flow Batteries (EGSR_42)
Harsh Agarwal, Jin-Xun Liu, Bryan Goldsmith, Nirala Singh

Multipoint Airfoil and Wing Shape Optimization for Subsonic and Supersonic Regimes (EGSR_44)
Marco Mangan, Joaquim R. R. A. Martins

Application of the Discrete Hankel Transform to Cylindrical Waveguides Structures (EGSR_45)
Faris Alsolamy, Anthony Grbic

Using Control Synthesis to Generate Corner Cases: A Case Study on Autonomous Driving (EGSR_46)
G. Chou, Y. E. Sahin, L. Yang, K. J. Rutledge, P. Nilsson, N. Ozay

Heat Treatment Effects on Precipitation in Irradiated HT9 Steel (EGSR_47)
Theresa Mary K Green, Li He, Lingfeng He, Brandon Miller, Todd Allen

Holistic and Predictive Safety Monitoring Toward Safe Human-Robot Collaboration In Construction (EGSR_48)
Daeho Kim, SangHyun Lee

Low-Loss Power IC for PV Cell-Level Balancing Using Diffusion Charge Redistribution (EGSR_49)
Yingying Fan, Yanqiao Li, Al-Thatdeus Avestruz

Morpheus: Securing Systems with Hardware-based Ensembles of Moving Target Defenses (EGSR_50)

Learning through Robot-Object Interactions (EGSR_51)
Victoria Florence, Brent Griffin, Sajan Patel, Jason J. Corso

Experimental Study on the Effects of Thermal Barrier Coatings on Heavy Duty Diesel Engine Efficiency and NOx Emissions (EGSR_52)
Erick Garcia, Andre L. Boehman

Design for Optimized Composite Structures Including Manufacturing Induced Defects (EGSR_54)
Minh Hoang Nguyen, Avinkrishnan Vijayachandran, Paul Davidson, Anthony M. Waas

Estimating the Aurora's electrical Conductance - Improvements in Space Weather Forecasting (EGSR_55)
Agnit Mukhopadhyay, Daniel T. Welling, Michael W. Liemohn, Shasha Zou, Aaron Ridley, Meghan Burleigh

High-Throughput Microfluidic Platforms to Deconstruct and Engineer Cellular Fusion (EGSR_56)
Benjamin Yang, Meng-Ting Chung, Katsuo Kurabayashi, Carlos Aguilar

Investigations of the Electromagnetic Properties of Fluorinated Nano-Fe3O4 and its Carbon-Based Compound (EGSR_57)
Yichun Zhang, Xiangyang Liu

Three-Dimensional Graphene Oxide Skeleton Guided Polyacrylic Acid Composite Hydrogel Particles with Hierarchical Pore Structure for Hemoperfusion (EGSR_58)
Jukai Zhou, Shuqing Zhang, Xiang Zhang, Changsheng Zhao

EMERGING GRADUATE STUDENT RESEARCH
UNDERGRADUATE RESEARCH EXHIBITION

1:00 p.m. - 2:30 p.m.

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Probing Topological Surface States in Bi2Te3-Bi2Se3 Alloy Films (UGRAD_1)
Gregory Cunningham, Christian Greenhill, Rachel Goldman

Aramid Nanofiber Composite Separators for High Performance Lithium Sulfide Batteries (UGRAD_3)
Alycia Gerber, Ahmet Emre, Nicholas Kotov

A Model -Free Predictor for Delay Compensation in Connected Testbeds (UGRAD_3)
Sicong Guo, Yuzhand Liu, Tulga Ersal

Assessing the Atmospheric Deposition of Phosphorus to the Great Lakes (UGRAD_4)
Sarah Hutchinson, Allison L. Steiner

Identifying Biomarkers in Active and Latent Tuberculosis Infection (UGRAD_5)
Edward Ionescu, Sriram Chandrasekaran

Constructing Microporous Polymer Scaffolds to Transplant Embryonic Stem Cell Derived Beta Cell Progenitors to Treat Type I Diabetes (UGRAD_6)
Georgios Mentzelopoulos, Daniel Clough, Richard Youngblood, Kevin Rychel, Lonnie D. Shea

Characterizing Al2O3 Dielectric Films Grown by Atomic Layer Deposition (UGRAD_7)
Shantam Ravan, Christopher Alleman, Rebecca L. Peterson

The Effect of Hematocrit Variation on Cellular and Particle Drug-Carrier Adhesion Efficacy in Blood Flow (UGRAD_8)
Tyler Tanski, Mario Gutierrez, Omolola Eniola Adefeso

Monte Carlo Simulation to Investigate Methods of Temporal Dosimetry (UGRAD_9)
Jack H. Thiesen, Kimberlee J. Kearfott

Computational and Analytical Normal Mode Analysis of 1D Arrays of Citrate Coated Gold Nanoparticles (UGRAD_10)
Maximilian Topel, Kalil Bernardino, André Farias de Moura, Nicholas Kotov
Validation of a Chamber Design for Improved and Efficient Electrohydrodynamic Jetting (UGRAD_11)
Hamza Turkistani, Jason Gregory, Joerg Lahann

Investigate Human Performance in Human-Robot Interaction – A Case Study (UGRAD_12)
Mukai Wang, Ruikun Luo, Xi Jessie Yang

DataSifter: Statistical Obfuscation of Electronic Health Records and Other Sensitive Datasets (UGRAD_13)
Nina Zhou, Simeone Marino, Yi Zhao, Lu Wang, Qiucheng Wu, Ivo D. Dinov

Refining a Synthetic Gene Circuit Designed to Regulate Chondrocyte Maturation (UGRAD_14)
Hannah Floyd, Biming Wu, Rhima M. Coleman

Compressive Big Data Analytics - CBDA Applications to Biomedical and Health Studies (UGRAD_15)
Simeone Marino, Jiachen Xu, Yi Zhao, Nina Zhou, Yiwang Zhou, Yehu Chen, Yingsi Jian, Qiucheng Wu, Yichen Yang, Ivo D. Dinov
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RICHARD & ELEANOR TOWNER PRIZE
FOR OUTSTANDING Ph.D. RESEARCH

Afternoon Session  2:00 p.m. - 4:00 p.m.

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Duderstadt Gallery
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Towards Hypersonic Aerothermoelastic Scaling Laws (TOWNER_2)
Daning Huang, Peretz P. Friedmann

Immunoisolating Poly(Ethylene Glycol) Capsules Support Ovarian Tissue Survival and Development to Restore Reproductive Endocrine Function in Mice (TOWNER_3)
James R. Day, Anu David, Marilia Cascalho, Ariella Shikanov

Hedgehog Particles (TOWNER_6)
Douglas G. Montjoy, Joong Hwan Bahng, Harrison Hou, Aydin Eskañ, Nicholas Kotov

Mechanical Integrity of Engineered Cementitious Composite During Geologic Carbon Storage (TOWNER_8)
Jubilee Adeoye, Victor Li, Brian Ellis

Improving Cross-Corpus Speech Emotion Recognition with Adversarial Discriminative Domain Generalization (ADDoG) (TOWNER_12)
John Gideon, Melvin McInnis, Emily Mower Provost

Designing Cyber Insurance Policies: The Role of Pre-Screening and Security Interdependence (TOWNER_14)
Mohammad Mahdi Khalili, Parinaz Naghizadeh, Mingyan Liu

Distributionally Robust Building Load Control to Compensate Fluctuations in Solar Power Generation (TOWNER_16)
Yiling Zhang, Jin Dong, Teja Kuruganti, Siqian Shen, Yaosuo Xue

Hexaarylbiimidazoles as Efficient Photoinhibitors of Radical-Mediated Chain Growth Photopolymerizations (TOWNER_18)
Harry L. van der Laan, Megan A. Cole, Timothy F. Scott

Enabling Solid-State Batteries by Understanding Solid Electrolyte-Electrode Interfaces (TOWNER_20)
Regina Garcia-Mendez, J.Sakamoto

Anticipating Bifurcations for Identifying Dynamic Characteristics of Complex Systems (TOWNER_22)
Amin Ghadami, Bogdan I. Epureanu

Emulation of BOR-60 Irradiated T91 Using Dual Ion Beam Irradiation (TOWNER_24)
Stephen Taller, Zhijie Jiao, Kevin Field, Gary S. Was

Geofencing In Complex Low-Altitude Airspace (TOWNER_26)
Mia N. Stevens, Ella M. Atkins
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SCIENTIFIC VISUALIZATION

10:00 a.m. - 3:00 p.m.

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27.12 MHz Reall-Time, Smart Controlled, Bi-directional Wireless Power Transfer (SCIVIZ_1)
Xin Zan, Sung Yul Chu, Fan Yingying, Michelle Gehner

An Experimental Investigation of Tractor and Pusher Hexacopter Performance (SCIVIZ_2)
Cosme Ochoa, Ella Atkins

Colloidal Pacman: Smart Behaviour Accomplished by Colloids Possessing Propulsion (SCIVIZ_3)
Mayank Agrawal, Sharon C. Glotzer

EBSD Orientation Map of Na-modified Al-Ge Eutectic Alloy. The Ge Lamellae are Colored according to their Crystallographic Orientations. (SCIVIZ_4)
Saman Moniri Ashwin J. Shahani
notes.
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