

| Proposal Title | Student Full Name | Fac Full Name | Fac Dept Name |
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| UMTC | | | |
| Investigation of Optical Microcavities in Organic Photovoltaic Cells | Jon Bertram | Russell Holmes | Chemical Engineering & Materials Science |
| The Synthesis of 5-Hydroxymethylfurfural from Fructose: a Kinetic Study | Leon Binitie-Cassidy | Michael Tsapatsis | Chemical Engineering & Materials Science |
| Bose-Einstein Condensation in Supercooled Liquid Helium-4 | Sean Bowman | J. Halley | Physics & Astronomy |
| Electric Detection of Ferromagnetic Resonance in Crystalline Iron Thin Film | Teresa Brecht | Paul Crowell | Physics & Astronomy |
| Proximity Effects in Superconductor/Normal Metal and Superconductor/Ferromagnet Junctions | Matthew Bryan | Oriol Valls | Physics & Astronomy |
| The Performance and Efficiency of Axial Piston Hydraulic Pumps | John Carlson | Thomas Chase | Mechanical Engineering |
| Colloidal Thin Film Fabrication | Si Chen | Michael Tsapatsis | Chemical Engineering & Materials Science |
| Impact of Emission Reductions on Exposures and Exposure Distributions: Application of a Geographic Exposure Model | Liang Chow | Julian Marshall | Civil Engineering |
| Study of Pheromone-Inducible Conjugation Model in <i>Enterococcus faecalis</i> and Qualification of Inducer and Inhibitor Relationship | Yuqing Cui | Wei-Shou Hu | Chemical Engineering & Materials Science |
| Heating of Coated Nanoparticles Using RF Heating | Deshmukh | John Bischof | Mechanical Engineering |
| Image Analysis of the Supermassive Star Eta Carinae and the Homunculus Nebula | Justin Ely | Roberta Humphreys | Astronomy |
| Catalytic Non-Oxidative Conversion of Saturated Hydrocarbons by Sigma-bond Metathesis Over Transition Metal Centers | Bingxin Fan | Aditya Bhan | Chemical Engineering & Materials Science |
| Driver Infrastructure Interface Development | Jacob Fischer | Craig Shankwitz | Mechanical Engineering |
| Numerical Simulation of a Stochastic Differential Equation | Ya Gao | Daniel Spirn | Mathematics |
| The Photophysics and Chemistry of the Common Antibacterial Triclosan | Cole Grasse | David Blank | Chemistry |
| Holographic Tracker/Solar Concentrator | Philip Greenberg | James Leger | Electrical & Computer Engineering |
| Modeling the Performance of Organic Solar Cells | Robert Halperin | Russell Holmes | Chemical Engineering & Materials Science |
| Learning Space Research | Tabinda Hasan | Aimee Whiteside | Institute of Technology Center for Educational Programs |

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| Comparing the Effect of Different Agitation Situations on Anaerobic Digestion | Andrew Healy | Charles Clanton | Bioproducts and Biosystems Engineering |
| Investigating the Feasability and Potential Noise Control Applications of Carbon Nanotube Loudspeakers | Matthew Hildebrand | Rajesh Rajamani | Mechanical Engineering |
| Phase Response Curves in Rat Hippocampal Neurons | Aaron Huus | Theoden Netoff | Biomedical Engineering |
| Synthesis of Layer-by-Layer J-Aggregate Thin Films | Scott Isaacson | Russell Holmes | Chemical Engineering & Materials Science |
| The Effect of Surface Properties on the Cellular Interaction of Magnetic Nanoparticles | Sarah Jabari | John Bischof | Mechanical Engineering |
| Solar Cells Based On PbSe Nanocrystals on ZnO Nanowires | Alan Jacobs | Eray Aydil | Chemical Engineering & Materials Science |
| Microrheology Method to Measure Local Viscosity in Coatings | Ryan Jacobs | Lorraine Francis | Chemical Engineering & Materials Science |
| Mathematical Model of the Drug Release Kinetics of Matrix Tablets | Zhifei Jing | Peter Hinow | Mathematics |
| Quantum-Dot- and Dye-Sensitized Solar Cells | Brent Keller | Eray Aydil | Chemical Engineering & Materials Science |
| Dehydration Reactions of Glycerol | Joshua Kranz | Aditya Bhan | Chemical Engineering & Materials Science |
| Synthesis of a Fluorinated Benzophenone n-Type Organic Semiconductor | Susie Krzmarzick | Christopher Douglas | Chemistry |
| Susceptibility of Triclosan-Resistant Bacteria to Ciprofloxacin, Ampicillin, Tetracycline and Erythromycin | Wenye Camilla Kuo | Timothy LaPara | Civil Engineering |
| Knots, Quandles and Abstract Algebra | Peter Lofgren | Paul Garrett | Mathematics |
| Flying Wing Optimization | Arion Mangio | Bernard Mettler | Aerospace Engineering & Mechanics |
| Ubiquitous Interactive Visualization of 3-D Data Sets | Jonathan McLane | David Yuen | Geology & Geophysics |
| Conversion of Lignocellulosic Biomass to Synthetic Fuels | Edward Michor | Aditya Bhan | Chemical Engineering & Materials Science |
| Biosynthetic Studies Towards Methyl Sarcophytoate Via Intermolecular Diels-Alder Reactions | Angelika Neitzel | Thomas Hoye | Chemistry |
| Characterization of Film Structures and Electrical Properties of DDBA | Justin Nelson | C. Daniel Frisbie | Chemical Engineering & Materials Science |
| Change Detection in Taylor Valley, Antarctica using Remote Sensing, Aerial Photography and High Resolution Satellite Imagery | Spencer Niebuhr | Katsumi Matsumoto | Geology & Geophysics |

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| Analysis of Effective Pathogen Reduction by Thermophilic Anaerobic Digestion for Developing World Applications | Eric O'Hara | Charles Clanton | Bioproducts and Biosystems Engineering |
| Methane Bioreactors: Carbon to Nitrogen Ratio of Intake Slurry Experimentation | Jamil Orfali | Charles Clanton | Bioproducts and Biosystems Engineering |
| Carbon Nanotube and Nanoparticle-based Acetylcholine ISFET Biosensors | Brendan Pankratz | Tianhong Cui | Mechanical Engineering |
| Strengthening Poly(L-lactide) with polySOY | Jessica Paxton | Marc Hillmyer | Chemistry |
| Assessing the Merit of F14T Structural Bolts | Joel Petersen-Gauthier | Taichiro Okazaki | Civil Engineering |
| Optimization of Configuration of CMS Photodetector Array | Pretegard | Jeremiah Mans | Physics & Astronomy |
| Efficient Support for Context-Aware Database Management System | Ensiiea Rizwani | Mohamed Mokbel | Computer Science & Engineering |
| Mechanical Properties of a Frozen Arterial Wall | Joanna Rys | Victor Barocas | Biomedical Engineering |
| Predicting the Drug Release Kinetics of Matrix Tablets | Aarti Sathyanarayana | Peter Hinow | Mathematics |
| Organic Synthesis: Green Acids | Schreiter | Steven Kass | Chemistry |
| Lattice Boltzmann Fluid Flow Simulation Parallelization via Distributed System using CUDA and MPI | Daniel Segura | David Lilja | Electrical & Computer Engineering |
| Di- and Tri- Heteroaryl Compounds Undergoing Diels-Alder Reactions | Jaskirat Sethi | Wayland Noland | Chemistry |
| Measurement of Forces in Buckling Restrained-brace Frames | Gannon Stromquist- | Taichiro Okazaki | Civil Engineering |
| Analysis of Social and Technological Shortfalls of Wikipedia | David Stuart | John Riedl | Computer Science & Engineering |
| Continue Study of Sensor Particle Behaviors in Bulk Flow | Zhen Sun | Kimberly Hill | Civil Engineering |
| Catalytic Dehydration of Ethanol Using Different Structures of Zeolites | Mingwei Tian | Bhan Aditya | Chemical Engineering & Materials Science |
| Simulation of an Indium Gallium Nitride Multi-junction Photovoltaic Cell | Ethan Torrey | Philip Cohen | Electrical & Computer Engineering |
| Measuring Critical Stress in Coatings | Yinzi Wang | Lorraine Francis | Chemical Engineering & Materials Science |
| Increasing Absorption in Organic Solar Cells Through the Use of Molecular Aggregates | Gareth Westler | Russell Holmes | Chemical Engineering & Materials Science |
| Gain Orientation Mapping by Transverse Shear Microscopy | Mun Ee Woo | C. Daniel Frisbie | Chemical Engineering & Materials Science |

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| Nanoparticle Coating | Liang Zhang | Michael Tsapatsis | Chemical Engineering & Materials Science |
| Do Legume-Rhizobia Interactions Limit Range Expansion of <i>Chamaecrista Fasciculata</i> ? | Carolyn Anderson | Peter Tiffin | Plant Biology |
| Identifying Novel Natriuretic Peptide Receptor-A Phosphorylation Sites | Kathryn Barbieri | Lincoln Potter | Biochemistry-Med School |
| Biology Video-podcast: An Enzyme for Education or a Neutral Addiction to Learning? | Nicholas Beermann | Sehoya Cotner | Biological Sciences |
| Characterization of Disease-Associated Human HRAS1 Minisatellite Alterations in Stationary-Phase Yeast Mutants | Laura Brosnan | David Kirkpatrick | Genetics, Cell Biology and Development-CBS |
| Examining Dia2 Binding Partners and Ambulance of Replicative Proteins During S Phase of the Yeast Cell Cycle | Katherine Grillaert | Deanna Koepf | Genetics, Cell Biology and Development-CBS |
| Two-Dimensional Spatial Release from Masking by the Noise of a Chorus | Johanna Henly | Mark Bee | Ecology, Evolution & Behavior |
| Deamination of APOBEC3G through Site-Directed Mutagenesis | Kirsten Hoogenakker | Hiroshi Matsuo | Biochemistry, Molecular Biology & Biophysics-CBS |
| Sex-Specific Regulation of Vitellogenin Expression in <i>Caenorhabditis elegans</i> | Rachel Kylo | David Zarkower | Genetics, Cell Biology and Development-CBS |
| Characterization of a <i>Geobacter Sulfurreducens</i> Mutant Library: Novel Genes Involved in Insoluble Iron Oxide Reduction | Caleb Levar | Daniel Bond | Biotechnology Institute |
| Does Gene Expression Pattern Predict Pathogen Growth? Testing Inferences from Proposed Network Model | Michael Longlet | Jane Glazebrook | Plant Biology |
| Toward a Structural Understanding of the APOBEC3F-HIV1 Vif Interaction | Ben Schurhamer | Reuben Harris | Biochemistry-Med School |
| Biochemical Characterization of the BCOR-L1 Transcriptional Corepressor Complex | Ashley Smith | Vivian Bardwell | Biochemistry-Med School |
| Determining Binding activity of CUGBP-1 RNA Recognition Motifs to GU-rich Elements | Maximilian von Hohenberg | Paul Bohjanen | Microbiology |
| Mercury Concentrations on Aquatic Insect Larvae Among Different Functional Feeding Groups in Minnesota Streams | Stephanie Wolf | Jacques Finlay | Ecology, Evolution & Behavior |
| Effects of Cooked and Uncooked Beef and Soybean Oil on Vascular Function. | Jordan Hinz | Donald Dengel | Kinesiology |
| ATE Data Evaluation | Nicole Schleif | Kenneth Bartlett Thomas | Work and Human Resource Education |
| Microslips in a manual placing task | Melissa Wong | Stoffregen | Kinesiology |

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| How 19th Century Social Dance in America Influenced Society | Bailey Anderson | Diane Aldis | Theatre Arts & Dance |
| Investigation into the Art of Directing and Adapting Ancient Greek Theater as Explored Through Charles L. Mee's "Big Love" | Cody Baldwin | Lisa Channer | Theatre Arts & Dance |
| Science before the "Arts and Sciences": Making Scientific Knowledge in Early Modern Europe, 1400-1800 | Anna Barberio | J Shank | History |
| Finding Ladspace: A perspective from Harlem Renaissance | Jerome Benner | Daniel Mrozowski | English |
| How National Print Media Sources Have Covered U.S. Educational Reforms Since the 1950's: Resolving the Question of Bias. | Aleksandra Brodskaya | Kathleen Hansen | Journalism & Mass Communication |
| Applying Evolutionary Principles to Relationship Phenomena | James Broton | Jeff Simpson | Psychology |
| Daughters of Ophelia: Female Madness in American Literature | Cordova | Charles Sugnet | English |
| On The Portrayal of Multi-Ethnic Couples in Travel Writing From the 1770's to 1850 | Kevin Curran | Donald Ross | Writing Studies |
| Internet Auctions | Dillon Dropik | Itai Sher | Economics |
| Current Issues in Mexico: The Drug Violence Crisis, and How it is Affecting Mexico's Ability to Function as a State. | Tobiah Engel | Patrick McNamara | History |
| Complex Visual-Spatial Reproduction and Recall: Effects of Individual Differences and Information Processing Strategy Instructions | Alana Feijo | Wilma Koutstaal | Psychology |
| Metaphors in Contemporary Education: Finding Ways Forward | Alexander Fink | John Wallace | Philosophy |
| The Matching Law: Matching the Rewarded or the Unrewarded Probability? | Birgit Fink | Yuhong Jiang | Psychology |
| Contemporary Painting and Web-based Visual Culture | Brett Gustafson | Alexis Kuhr | Art |
| Subjectivity in Russian History | Vadim Haanstad | Thomas Wolfe | History |
| Foreign-born Congressmen in a Nation of Immigrants: Magnus Johnson, Andrew R. Kiefer, Knute Nelson and Knud Wefald, 1869-1924 | Michelle Hersh | Donna Gabaccia | History |
| Following the Popular Movement Surrounding HydroAysen's Dam Project in Chile | Baily Jones | Bruce Braun | Geography |
| An Ethnomusicological View of Twin Cities Circuit Bending as Modern Folk Music | Andrew Kishel | Anna Schultz | Music |
| The Effects of Individuals on Social Filtering Systems | Elias Krumholz | Nora Paul | Journalism & Mass Communication |

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| Oro: Green Coffee as Gold A Journalistic Examination of the Coffee Chain's Last Steps | Kelsey Kudak | Kathy Forde | Journalism & Mass Communication |
| Untitled | Chelsey Kueffer Cooper | Donna Gabaccia | History |
| The Archaeology of Fish | Mickelson | John Soderberg | Anthropology |
| Interactive Art Programming Development for Sound and Video | Ryan Murphy | Ali Momeni Patrick | Art |
| The Cosmic Body in Mexico: Disability, Race and Aesthetics | Paige Patchin | McNamara | History |
| Building Community and Bridging Culture to Academics: English Education, Spoken Word, Hip Hop & Theater | Moira Pirsch | Geoffrey Sirc | English |
| International Trade with Heterogeneous Firms | Jack Rossbach | Timothy Kehoe | Economics |
| East India Company and the Private Trade in East and South Asia | Sam Ross- Brown | Christopher Isett | History |
| Practices of Agricultural Biotechnology Firms | Mary Scott | Rachel Schurman | Sociology |
| International Aid and Economic Development in Post Conflict States | Alexander Stephenson | Ben Ansell | Political Science |
| Exploring Innovations in Printmaking | Jessica Tank | Jenny Schmid | Art |
| Effects of Aging on DPOAE Fine Structure Interpreted using the Two-Source Model | Elizabeth Tusler | Peggy Nelson | Speech-Language-Hearing Sciences |
| Dating Fire-Scarred Trees using Increment Borer Methods | Erika Wertz | Kurt Kipfmueller | Geography |
| Identifying the Green Work Behaviors of Green Workers in Green Industries | Brenton Wiernik | Deniz Ones | Psychology |
| The Performance of Politics: The Drama of Leadership Throughout the History of Government | Margaret Williams | Luverne Seifert | Theatre Arts & Dance |
| The Politics of Military Dominance: Weaponizing Orbital Space | Josepn Zimmerman | Raymond Duvall | Political Science |
| Can the ONE Campaign Make Poverty History?: Citizen Actions' Impact in Social Issues | Christine Cira | Colleen Manchester | Human Resources & Industrial Relations |
| Consumption Based Asset Pricing Empirical Examination | Grace Hung | Frederico Belo | Finance |
| The Retirement Security Gap: A Quantative Analysis of the Factors Influencing Retirement Security for Men and Women | Helen Muller | Colleen Manchester | Human Resources & Industrial Relations |
| Valuing Collateralized Mortgage Obligations: Remaking the Market | Ezekiel Thiessen | Robert Goldstein | Finance |

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| Effects of Green Product on Firm Performance | Greg Videen | Alfred Marcus | Strategic Management & Organization |
| The Price of Conversion: An Investigation of the Advantages and Disadvantages of Great Britain Converting its Monetary Unit from the Pound to the Euro | Sarah White | Jeremy Graveline | Finance |
| Old Idea, New Question: Outcomes of Water Birth in Minnesota | Caitlin Cleary | Linda Herrick | Nursing |
| Evaluation of an Adopt-A-Grandparent Program for Residents Residing in a Long-term Facility | Jessica Gomez | Christine Mueller | Nursing |
| Parental Concerns about children's weight and availability and intake of healthy foods in the home | Amir Zadaka | Jayne Fulkerson | Nursing |
| Screening, Design and Optimization of Novel Small-Molecule, Druglike Anthrax Toxin Lethal Factor Inhibitors | Dami Aduayi | Elizabeth Amin | Medicinal Chemistry |
| The Specific Protein - Protein Interaction Between Transcription Factor FOXO1 and the Amino-Terminus Domain of Androgen Receptor | James Angstman | Haojie Huang | Laboratory Medicine & Pathology |
| Investigation of DNA Protein Cross-link Repair in Cells | Infeantirochukwu Anwah | Colin Campbell | Pharmacology |
| Affordance Perception-Action Laboratory | Alisha Baker | Thomas Stoffregen | Kinesiology |
| Identification of geologic Sources of Arsenic to Domestic Wells in West-Central Minnesota | Sara Baldvins | Brandy Toner | Soil, Water, & Climate |
| Virus-specific CD8 T Cells and Dendritic Cell Interactions as Correlates of an Effective Lentivirus Vaccine | Kathleen Bartczak | Pamela Skinner | Veterinary & Biomedical Sciences |
| Comparison of Carbonyl Levels in IFM, SSM, Cytoplasmic and Extracellular Regions of Rat Soleus Muscle Cells | Kiara Brancel | LaDora Thompson | Physical Medicine & Rehabilitation |
| The Use of Blood Outgrowth Endothelial Cells as a Potential Treatment for Brain Tumors on Murine Models | Michael Brandt-Kalinowski | Walter Low | Neurosurgery |
| Resistance of Epstein-Barr Virus (EBV) to Antiviral Drugs | Anna Budde | Henry Balfour | Laboratory Medicine & Pathology |
| "Frequency of Caries in Children Taking Prescribed medications for Attention-Deficit Hyperactivity Disorder" | Heidi Burns | Sandra Myers | Diagnostic and Biological Sciences |
| Anatomical Proximity of a Secondary ACL and PCL Reconstruction in a Primary MCL Reconstruction | Mark Chapman | Robert LaPrade | Orthopaedic Surgery |
| The Neurocognitive Outcomes of the Post-Institutionalized Child with High Risk FSD Facial Features. | Julia Chernyakov | Maria Kroupina | Pediatrics |

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| Effects of Lactic Acid of the Recovery of Skeletal Muscle from an Acute Hypoxic Event | Tristan Dockendorf | Paul Iazzo | Surgery |
| Identification of Aldosterone Sensitive Cells in the R6/2 Mice Cortex | Arif Hamid | Janet Dubinsky | Neuroscience |
| Internal Fixation of Femoral Neck Fractures with Three Cancellous Screws; Biomechanical Evaluation of Maximum Insertion Torque with or without Washers | Chauncy Handran | Robert LaPrade | Orthopaedic Surgery |
| Comparison of Insect Diversity in Different Stages of Prairie Restoration | Michael Hanson | Ian MacRae | Entomology |
| The Kinetic Art of Reuben Margolin | Michelle Hapka | Lee Anderson | Architecture and Landscape Architecture |
| Structural Dynamics of Myosin Light Chain Domain in RLC Exchanged Muscle Fibers | Robert Harris | David Thomas | Biochemistry-Med School |
| Pressurizing DNA in Viruses Available for Delivery of Genome During Infection | Salma Helal | Paul Jardine | Biological Sciences |
| Quantitative Assessment of Clinical Guidelines for Spinal Fusion Surgery | Alex Hendricks | David Nuckley | Physical Medicine & Rehabilitation |
| The Effects of Cocaine Dependence on the Functional Connectivity of the Dorsal Anterior Cingulate Cortex | David Henry | Kelvin Lim | Psychiatry |
| Effects of Low Back Pain on Lumbar Spine Kinematics | Corina Hopkins-Vacca | David Nuckley | Physical Medicine & Rehabilitation |
| Isolation and Characterization of Progenitor Cells Derived from Rat Liver | John Hunter | M. Behnan Sahin | Medicine |
| Motor Skill Learning Measured by Cortical Excitability in the Primary Motor Cortex using Transcranial Magnetic Stimulation (TMS) | Erik Hyland | Teresa Kimberley | Physical Medicine & Rehabilitation |
| Exploring the Mechanism of Copper-Tolerance in Wood-Degrading Fungi | Jacob Inda | Jonathan Schilling | Bioproducts and Biosystems Engineering |
| Effects of Early Iron Deficiency on Adult Neurogenesis in Hippocampus | Halyna Ivashchuk | Michael Georgieff | Pediatrics |
| Magnetic Sourcing of Obsidian Artifacts | Chyanissa Johnson | Joshua Feinberg | Geology & Geophysics |
| Impact of BDNF Genotype and Stress on Learning and Brain Development | Nichole Jonas | Megan Gunnar | Child Development |
| Characterization of the Protein Noxa in Human Hematopoietic Cells | Ashley Kosloske | Ameeta Kelekar | Laboratory Medicine & Pathology |

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| Inverted PCR Analysis of Transgenes in Transgenic Mice | Brandon Krawczyk | Clifford Steer | Medicine |
| Infant Attention and Learning: The Effect of Individual Differences in Temperament and Genotype | Kari Kummer | Kathleen Thomas | Child Development |
| Olive Oil: A Link to the Relationship Between the People of Greece and Turkey, their Food, and the Land | Laura Kwong | Craig Hassel | Food Science & Nutrition - HE |
| Mechanisms of Disease-Causing Missense Mutations in Dystrophin | Ann Lee | James Ervasti | Biochemistry-Med School |
| Pharmacogenomic Investigations in the Hmong | Kahoua Caroline | Robert Straka | Pharmacy Practice |
| Effect of the Wnt Signaling Pathway on Cyclin D1/FOXO1 Interaction during Anoikis | Lochungvu | | |
| Pursuit of the Isolation of the [CuO] ⁺ Species in Copper Dioxigen Activation, and Oxygenation of Exogenous Substrates | Daniel Martig | Haojie Huang | Cancer Center |
| Compensatory Adaptation of Resistance Trained Dystrophic Mouse Muscle | Christopher McGuirk | Lincoln Potter | Biochemistry-Med School |
| | James McKeehen | Dawn Lowe | Physical Medicine & Rehabilitation |
| Secondary Metabolite Analysis in Lythrum Salicaria with LC-MS | Will Menzel | Adrian Hegeman | Horticultural Science |
| Carbohydrate Chain Involvement in Dally-Like Protein Function | Esther Mizrachi | Scott Selleck | Genetics, Cell Biology and Development-CBS |
| Effect of Killed or Harvested Rye on Corn Emergence and Development | Matt Montgomery | John Baker | Soil, Water, & Climate |
| Assessing the Usefulness of Repeated Baseline Treadmill Walking Tests in Patients with Peripheral Arterial Disease | Matthew Moore | Ulf Bronas | Nursing |
| | | LaDora Thompson | |
| Characterizing the EDL Muscle in Diseased Mice | Kelsey Mosser | | Physical Medicine & Rehabilitation |
| Access to Quality Healthcare: A Right or a Privilege? | Neli Mottey | Susan Noakes | French & Italian |
| Dissecting the Role of miRNA-155 in Regulation of Dendritic Cell Function | John Myers | Xianzheng Zhou | Cancer Center |
| Effects on EGFR Regulation by a Preeclamptic Serum | Adam Nelson | Jeffery Gilbert | Physiology and Pharmacology-D |
| The Molecular Basis of Phenotypic Variability in a Mouse Model of Holoprosencephaly | Brandon Ng | Anna Petryk | Pediatrics |
| Investigating the Repair Mechanism and Toxicity of DNA-Protein Cross-Linking | Thuy Duong Nguyen-Tran | Colin Campbell | Pharmacology |

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| Using mtDNA to Infer the Pattern of Gene Flow in the Little Brown Myotis in Central Minnesota | Amanda Nosal | Sharon Jansa | Ecology, Evolution & Behavior |
| Correlating Cryptococcus Biomarkers with HIV Pathogens | Michael Nylund | Kirsten Nielsen | Microbiology |
| Co-Occuring Mental Health Disorders and Alcoholism | Christine O'Connor | Matthew Kushner | Psychiatry |
| Identification of Potential Anthrax Toxin Lethal Factor Inhibitors using Pharmacophore Mapping and High-Throughput Screening | Ajay Patel | Elizabeth Amin | Medicinal Chemistry |
| Effects of Site-Specific Methionine Oxidation on Myosin II Structural Dynamics | Nicole Piechowski | David Thomas | Biochemistry-Med School |
| Microsatellite Marker Analysis in <i>S. Mucronata</i> | Krishna Pundi | Steffen Pauls | Entomology |
| Nutrition and Attention in Infancy | Anne Quinn | Kathleen Thomas | Child Development |
| Functional Outcomes of FCL Reconstruction | Paul Ruckert | Robert LaPrade | Orthopaedic Surgery |
| Pediatric Head and Neck Injury Prevention Through Biomechanics | Claire Rydeen | David Nuckley | Physical Medicine & Rehabilitation |
| Structural Changes of Myosin in the Presence and Absence of Actin and ATP | Joel Sarapas | David Thomas | Biochemistry-Med School |
| An Examination of Summer Foraging Habits of Moose on Isle Royale | William Siemers | Peter Jordan | Fisheries & Wildlife |
| Intimacy and Self-disclosure in Roman Relationships | Ryan Steele | W. Collins | Child Development |
| Detection of Ethnic and Racial Differences in Butadiene-Induced DNA Adducts | Catherine Tsufis | Natalia Tretyakova | Medicinal Chemistry |
| Reinstatement of cocaine-seeking behavior in adolescent and adult rats | Rachael Turner | Marilyn Carroll | Psychiatry |
| Patterns of Adherence and Self-Reparoted Sleep Outcomes, a sub-study of Mindfulness versus Pharmacotherapy for Chronic Insomnia Trial | Sophia Vainrub | Cynthia Gross | Pharmacy Practice |
| Characterization of Muscle Stem Cell Proliferation, Differentiation and Stemness after Treatment with DNA Methylation Inhibitor | Vanessa Wankhede | Atsushi Asakura | Neurology |
| URB597 Attenuate Hyperalgesia in Inflamed Muring Model Indicated by Increase in Intracellular Ca ²⁺ Spike and Degradation of AEA Cannabinoid Neurotransmitter | Yee Xiong | Virginia Seybold | Neuroscience |

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| Synthesis and Characterization of 2'- and 3'- Amino Analogs Cyclic ADP-ribose | Fanny Zhang | Timothy Walseth | Pharmacology |
| Agronomic Management of New Corn Genetics to Increase Yield. | Jamie Bachaus | Jeffrey Coulter | Agronomy & Plant Genetics |
| Birds, Woody Vegetation, and Urbanization Along the Twin Cities Mississippi River Important Bird Area: Does Urbanization Accompany Invasion of Non-Native species? | Esther Balla | Robert Blair | Fisheries & Wildlife |
| Habitat Heterogeneity Shapes Spatial Dynamics of Canis lupus (Gray Wolf) Packs on Southern Montana | Sergey Berg | Todd Arnold | Fisheries & Wildlife |
| Evaluating Rould Bale Feders for Reduced Hay Wastage and Improced House Health | Kristen Cleary | Krishona Martinson | Animal Science |
| Interspecific pre-zygotic Reproductive barriers Between Species of Nicotiana | Sarah Windland | Alan Smith | Horticultural Science |
| University of Minnesota Historic Campus | Jennifer Dens | Nancy Miller | Architecture and Landscape Architecture |
| Cultural Clash in Cyprus | Woody Hanson | Nikolas Bakirtzis | Architecture and Landscape Architecture |
| The University of Livingstonia Website and Research Development | Patrick Hayes | Leslie Van Duzer | Architecture and Landscape Architecture |
| Urban Planning and Public Welfare from the Late Nineteenth Century to the Twentieth Century. | Erin McDonough | Rachel Iannacone | Architecture and Landscape Architecture |
| Reactions to Foreclosures in Minneapolis | Allyn Thorpe | Jeff Crump | Design, Housing, & Apparel |
| Code Switching in Belizean Language | Satty Flaherty-Echeverria | Genevieve Escore | English |
| UMD | | | |
| The Accounting Curriculum Difference in Mid-Sized University between China and United States and its Effects on Students' Employment | Mingyi He | Grace Kang | Accounting-D |
| The impact of Defendant Race on Mock-Juror Decisions: A Meta-Analysis | Dena Baker | Randall Gordon | Psychology-D |
| The Effect of Defendant Facial Features of Mock Juror Judgments | Jessica Johnson | Randall Gordon | Psychology-D |
| Testing Educational Effectiveness of an "Invasive Earthworm Disposal" Message in our North Shore, State Parks | Nicole Vander Heiden | Cindy Hale | Natural Resources Research Institute-D |

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| English Possessive Construction | Katia Watson | Chongwon Park | Writing Studies-D |
| Discovering the Marchall & Yates World War I & II Poster Collection | Michael Cason | Peter Spooner | Art-D |
| Theatrical Properties Digital Inventory | Noah Craft | Curtis Phillips | Theatre-D |
| Theatrical Properties Digital Inventory | Scott Dahl | Curtis Phillips | Theatre-D |
| CATCAM | Jennie Lennick | Gloria Brush | Art-D |
| Obligatory Adjuncts in English and Spanish | Katelyn Karlson | Chongwon Park | Writing Studies-D |
| Discourses of "La Movida:" Views and Trends on Post-Francoist Popular Culture | Nicole Klobuchar | J Caceres-Garcia | Foreign Languages & Literatures-D |
| Community Journalism and Urban Media Studies in Duluth, Minn. | Dayna Landgrebe | John Hatcher | Writing Studies-D |
| The Rehabilitation Juvenile Offenders in Minnesota: A Case Study of Woodland Hills, Duluth, Minnesota | Danae Overby | John Arthur | Sociology/Anthropology-D |
| Hostility in the New Germany: Turks in Search of a Political and Cultural Identity | Dana Paine | Michael Mullins | Foreign Languages & Literatures-D |
| Plataiai: Use of Science Technology Into the Humanities | Joshua Pelovsky | Ronald Marchese | Sociology/Anthropology-D |
| Breton Rural Society of the Early 20th Century, as seen through Le Cheval d'Orgueil by Pierre Jakez-Helias | Jean-Baptiste Quillien | Milan Kovacovic | Foreign Languages & Literatures-D |
| Vera Brittain and the Canon of WWI Literature | Erica Whalen | Alexis Pogorelskin | History-D |
| Determination of the Function of the BACE1C Isoform | Brandy Aman | Joseph Johnson | Chemistry and Biochemistry-D |
| Expression and Purification of MspB from M. xanthus | Bambenek | John Dahl | Biology-D |
| Surfactants Attraction Effects on Small Droplets | Anthony Bauer | Michael Rother | Chemical Engineering-D |
| Designing and Building a Device to Measure Atmospheric Clarity. | Ryan Bezdicek | Howard Mooers | Geological Sciences-D |
| Characterizing Organic Matter in Sediments of a Tropical Rift Lake | Ryan Birkemeier | Thomas Johnson | Geological Sciences-D |
| Characterization of Sleeping Beauty Colorectal Genes | Jerica Burchard | Robert Cormier | Biochemistry & Molecular Biology-D |
| Fly by Feel: Air Actuator System | Nabil Cheikh | Prince | Computer Science-D |
| In-Wheel Induction Motor | Michael Cordle | Hua Tang | Electrical & Computer Engineering-D |

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| Bioassay-guided Fractionation of Bupleurum falcatum for Activity Against Toxoplasma gondii | Nikolas Czerniecki | Peter Grundt | Chemistry and Biochemistry-D |
| Solar Panel Inverter | Brandon Eberle | Hua Tang | Electrical & Computer Engineering-D |
| JAWS II Dendritic Cell Phenotyping and Stimulation with LPS | Mike Fealey | Benjamin Clarke | Biochemistry & Molecular Biology-D |
| Air Flo Measuring Sensor Array for a Sailplane Wing: Software | Sonja Foss | Christopher Prince | Computer Science-D |
| Interaction of Synaptotagmin C2A and C2B Domains in Salt Solution | Emily Frey | Anne Hinderliter | Chemistry and Biochemistry-D |
| Geology of the Margins of the Laramide Orogeny in the Black Hills of South Dakota | Kathleen Grigg | John Swenson | Geological Sciences-D |
| Determination of Tight Junction Formation in RBE4 (Rat Brain Endothelial) Cells | Thomas Haroldson | Lester Drewes | Biochemistry & Molecular Biology-D |
| Preeclampsia: Mechanisms of Endothelial Dysfunction | Alaina Heltemes | Jeffery Gilbert | Physiology and Pharmacology-D |
| Cell Processor Optimization on a Multi-Node Cluster to Study Urban Pollution | Michael Jacobson | Peter Willemsen | Computer Science-D |
| Electrochemistry Analysis on Azurin Protein and Its Derivatives | Fan Jiang | Steven Berry | Chemistry and Biochemistry-D |
| The Rescue of Neural Tube Defects Using Folic Acid | Catherine Johnson | Jennifer Liang | Biology-D |
| Untitled | Grace Johnson | Vicki Hansen | Geological Sciences-D |
| Radio Telescope Design | Derrick Keffeler | Howard Mooers | Geological Sciences-D |
| Identification of Sporulation Genes in M. xanthus | Jesse Klingelhoets | John Dahl | Biology-D |
| Identification of Ploidy Levels of Salidago Altissima by Pollen Grain Size and Determination of Pollen Grain Variability | Chantal Liepold | Julie Etersson | Biology-D |
| Petrographical, Modal, & Mineral Chemical Analysis of the Skaergaard Intrusion | Todd Marks | James Miller | Geological Sciences-D |
| Characterization of Proteins as Fusion Catalyst in the Process of Exocytosis | Katie Miller | Anne Hinderliter | Chemistry and Biochemistry-D |
| Induction of Torpor by FGF21: Heart Rate, Body Temperature, and Physical Activity in the Thirteen-Line Ground Squirrel | Eli Narveson | Matthew Andrews | Biology-D |
| Mixed Valence Tetraferrocenyl Porphyrins in Optimal Stereochemical Oxidation States | Ben Neisen | Viktor Nemykin | Chemistry and Biochemistry-D |

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| Recombinant Protein Expression and Characterization of BACE2 Isoforms | Andrea Newgren | Joseph Johnson | Chemistry and Biochemistry-D |
| Improving the Method of Technology Development Envelope (TDE): A Case in Electronic Cooling Technologies | Yuantao Peng | Hongyi Chen | Mechanical and Industrial Engineering-D |
| Paleoclimate in the East African Rift Valley: a Study of Lake Malawi | Megan Pierce | Erik Brown | Geological Sciences-D |
| Functional Domains Study of Conserved Cysteine Residues of the SPE-42 Protein in <i>Caenorhabditis elegans</i> | Ben Polgreen | Tim Kroft | Biology-D |
| Repeating Patterns Using Euclidean Geometry | Jon Raymer | Douglas Dunham | Computer Science-D |
| Bouyancy Driven Breakup of an Isolated Drop with Surfactant | Zachary Richards | Michael Rother | Chemical Engineering-D |
| Airflow Measuring Sensor Array for a Sailplane Wing: Hardware | Usama Shaikh | Christopher Prince | Computer Science-D |
| Round Gob Range Expansion into Tributary Streams of the Duluth-Superior Harbor and Saint Louis River Estuary | Kyle Stalpes | Allen Mensinger | Biology-D |
| Speciation in a Gall-Inducing Fly | Lee Stokes | Timothy Craig | Biology-D |
| Differential gene expression associated with a shift from carbohydrate-based to lipid-based metabolism in the thirteen-lined ground squirrel | Sarah Timm | Matthew Andrews | Biology-D |
| Development of New Methods for the Synthesis of Biologically Active Lactones | Jared Van Hooser | Robert Carlson | Chemistry and Biochemistry-D |
| Hepcidin Involvement in Iron and Copper Interactions | Krista Wendroth | Joseph Prohaska | Biochemistry & Molecular Biology-D |
| Developing a user-friendly software for Multi-Criteria Decision Analysis Model | Yicong Zhong | Hongyi Chen | Mechanical and Industrial Engineering-D |
| Hitting Time for Taboo Random Walks | Yan Zhuang | Barry James | Mathematics & Statistics-D |
| UMM | | | |
| Tricyanovinyl Dithienylpyrroles for use in Organic Thin-Film Transistors | Zachary Boser | Ted Pappenfus | Science & Mathematics-M |
| Surveillance of Antibiotic Susceptibility of <i>Staphylococcus</i> in Mild Samples from a Dairy Herd while Transitioning to Organic Production | Madelyn Gerber | Timna Wyckoff | Science & Mathematics-M |

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| A Prairie Cantata -A Multi-Movement Choral/Instrumental Musical Composition Using Texts and Imagery Relating to the Unique Environment of West-Central Minnesota. | Mitch Grussing | Kenneth Hodgson | Humanities-M |
| Contemporary-Italian Renaissance Dance: Court Dance in the Modern World | Grace Holthaus | Viktor Berberi | Continuing Education-M |
| Dynamic and Multi-Objective Problems in Genetic Programming | Sara Lahr | Nicholas McPhee | Science & Mathematics-M |
| Investigation of the Role of the PAS/LOV Protein VIVID in the Neurospora Circadian Clock | Jonna Maas | Van Gooch | Science & Mathematics-M |
| Rock Glaciers Activity in Central Colorado | Wyatt Nolan | Keith Brugger | Science & Mathematics-M |
| Women in Committees: Personal or Political Choices? | Adam Olson | Paula O'Loughlin | Social Sciences-M |
| Creating a Uniform Magnetic Field for the Purpose of Studying Magnetoreception in Snakes | Toby Simacek | Heather Waye | Science & Mathematics-M |
| Comparative Environmental Economic Analysis of Advanced Biofuels | Michelle Swenson | Arne Kildegaard | Social Sciences-M |
| Determining the Intrinsic Relationships Between Java Optimizations and Interpreters | Fernando Trinciante | Elena Machkasova | Science & Mathematics-M |
| Energy Systems Analysis: Approaches to Smoothing Power Demand at the University of Minnesota, Morris | Michael Zajicek | Arne Kildegaard | Social Sciences-M |
| UMC | | | |
| Productive and Reproductive Efficiency of Cross-bred Dairy Cattle | Billie Jo Armbrust | Margaretha Rustrom | Agriculture-C |
| Seed Propagation of Rare and Difficult to Propagate Prairie Plants | Jennifer Zoch | Eric Castle | Natural Resource-C |