ROSTER OF STUDENT RESEARCHERS

#	STUDENT RESEARCHER	PROJECT TITLE	ADVISOR	DEPARTMENT
69	**Angela Abarca Perez**	Investigation of the sorption behavior of organic acids onto catalytic- and food-grade titanium dioxide nanoparticles	Dr. Kyle Doudrick	Civil and Environmental Engineering and Earth Sciences
24	**Hunter Allen**	VASP Calculations and Reactor Design for Ethylene Oligomerization	Dr. Jason Hicks, Dr. William Schneider	Chemical and Biomolecular Engineering
47	**Maria Amenabar Farias**	Stay the Course™ Improves Community College Persistence and Completion	Dr. James Sullivan	Economics
1	**Apple J. Amos**	Lab on a Chip: Early Cancer Detection Using Anion Exchange Membranes in Microfluidic Devices	Dr. Satyajyoti Senapati	Chemical and Biomolecular Engineering
61	**Gabriela Aquino**	"Use Your Words": The Role of Emotional Security on Interparental Conflict	Dr. E. Mark Cummings	Psychology
2	**Bowen Ashenfelter**	Mapping of Lead Levels within the South Bend Community	Dr. Marya Lieberman	Chemistry and Biochemistry
66	**Corey Atwell**	Influence of Annealing on the Controlled Growth of CsPbBr3 Nanocrystals	Dr. Prashant V. Kamat	Chemical and Biomolecular Engineering
23	**Jonathan Austin, Breanna Belz, Angel Rodriguez**	Feasibility of Vehicle-Wake Energy Extraction by Roadside Wind Turbines	Dr. Eric Matlis	Aerospace and Mechanical Engineering
7	**Kyle Barrentine**	Can personality influence how you manage a social network?	Dr. David Hachen	Sociology
35	**Stephen Bauer, Mark Etzelmueller**	Development of Microimplants for Deep Tissue Optical Sensing	Dr. Thomas O'Sullivan	Electrical Engineering
25	**Tyler Bear**	Synthesis and characterization of iptycene-based polyimides with tunable chain rigidity for gas separation membranes	Dr. Ruilan Guo	Chemical and Biomolecular Engineering
48	**Kendrea Beers**	Exhaustive Heterogeneous Graphlet Counting for Network Alignment	Dr. Tijana Milenkovic	Computer Science and Engineering
44	**Margaret Bielski**	An Analysis of Lead in Local Roads, Homes and Historical Industries: How South Bend's History is Poisoning its Children	Dr. Marya Lieberman	Chemistry and Biochemistry
8	**Abigail Boatwright**	An Analysis of Intellectual Property Diffusion in Global Markets	Dr. Paul Brenner	Economics
26	**Gabriel Brown**	Development and Characterization of Plasma Catalytic Reactors	Dr. David B. Go	Aerospace and Mechanical Engineering
67	**David Brown**	Designing Energy Efficient Diafiltration Units around Membranes that Separate Molecules of Comparable Size	Dr. William Phillip	Chemical and Biomolecular Engineering
70	**Mariana Calderon**	Casting polyvinylidene fluoride (PVDF) using the vapor-induced phase separation (VIPS) method	Dr. William Phillip	Chemical and Biomolecular Engineering

32	**Santiago Calderon Novoa**	Synthesis and performance testing of pentiptycene-based polymeric membranes for mixed gas separation	Dr. Ruilan Guo	Chemical and Biomolecular Engineering
49	**Kevin Choy**	A Web-Based Tool for Flexible Learning-Free Segmentation And Reconstruction for Sparse Neuronal Circuit Tracing	Dr. Walter Scheirer	Computer Science and Engineering
9	**Carl Colglazier**	Advancing the Tools for Global-Scale Computational Social Science.	Dr. Paul Brenner	Computer Science and Engineering
65	**Quentin Colo**	Comprehensive Case Management to Lift Families Out of Poverty	Dr. James Sullivan	Economics
36	**Emma Conroy, Nicole Nemeth**	Extra-pair Parentage in Field Sparrows (Spizella pusilla)	Dr. Joel Ralston	Biology
62	**Daniel Copeland**	Landscape Effects on the Gut Community of Long-Tailed Macaques	Dr. Hope Hollocher	Biological Sciences
40	**Chloe Crusan**	RadioHound: A low cost spectrum sensor	Dr. Bertrand Hochwald	Electrical Engineering
78	**Gabriel Cruz-Ruiz**	New nanocapsules for drug delivery	Dr. Bradley Smith	Chemistry and Biochemistry
27	**Anthony Deziel**	Synthesis and Characterization of Platinum (II) Carbene Complexes	Dr. Vlad Iluc	Chemistry and Biochemistry
45	**Michael Dowd**	Development of a Paper-Based Colorimetric Test to Detect Oxytocin	Dr. Marya Lieberman	Chemistry and Biochemistry
58	**Alison Doxey**	Long-Run Effects of College Openings: Evidence from U.S. Historical Data	Dr. Kasey Buckles	Economics
50	**Aidan James Draper**	Classifying marshland plant species by processing light reflectance in satellite images	Dr. Jason McLachlan	Biological Sciences
18	**Kortni Dubose**	Internal Representations of Interparental Conflict and Withdrawn/Depressed Symptoms: The Moderating Role of Mother-Adolescent Attachment	Dr. E. Mark Cummings	Psychology
59	**Bailee Egan**	Investigating Patterns of the Gut Microbiome in Long-Tailed Macaques	Dr. Hope Hollocher	Biological Sciences
37	**Maria Escobedo**	Modeling Equilibrium Reactions with Origin	Dr. Kristin Kuter	Mathematics and Computer Science
51	**Diego Fernández**	Lobster: Harnessing Opportunistic Clusters with a Workflow Management Tool for CMS Data Analysis	Dr. Kevin Lannon	Physics
10	**Anne Freeman**	Developing Software to Process Malaria Genetic Data for QTL Analysis in a Shared Parent Genetic Cross	Dr. Michael Ferdig	Biological Sciences
34	**Jacob Galden, Paula Murphy**	Stretchable Polymer Composite Film with Extreme Ductility and Toughness	Dr. Tengfei Luo	Aerospace and Mechanical Engineering
52	**Jon Genty**	Classifying Aging- and Non-Aging-Related Genes in Dynamic Protein-Protein Interaction (PPI) Networks	Dr. Tijana Milenkovic	Computer Science and Engineering
11	**Jacob Gersfeld**	SNP Isolation and Primer Design in R. pomonella	Dr. Jeffrey Feder	Biological Sciences
53	**Nicholas Grasley**	Using Crowd-Sourced Genealogy to Analyze the Long-Run Effects of Prohibition	Dr. Kasey Buckles	Economics

12	**Eric Gronda**	Visual Analytics of Student Clickstream Data Using Higher Order Networks	Dr. Chaoli Wang	Computer Science and Engineering
71	**Nishtha Gupta**	Elucidating fundamental processing property relationships for chemically patterned membranes	Dr. William Phillip	Chemical and Biomolecular Engineering
3	**Citlali Gutierrez**	From the Field: Development of a Reliable and Affordable Home Lead Test Kit	Dr. Heidi Beidinger	Biological Sciences
82	**Loren Hahn**	Turbomachinery Sensing: Analysis and Optimization	Dr. Thomas Pratt	Electrical Engineering
39	**Hannah Himes**	Quantifying the Relationship between the Gut Microbiome and Blastocystis in Long-tailed Macaques	Dr. Hope Hollocher	Biological Sciences
63	**Aurora Hurtado Olivas**	Probing the Mechanism of Osmium Mediated Carbon-Sulfur Bond Cleavage Using Unsymmetrically Substituted Ligand	Dr. Seth N. Brown	Chemistry and Biochemistry
13	**Allie Johnston**	Are all Personality Inventories Equal? Assessing the Applicability of the BFI-2 to Adolescents	Dr. Ying (Alison) Cheng	Psychological and Educational Measurement Lab
60	**Elisabeth Kerns**	Perovskite Characterization and Degradation	Dr. Prashant V. Kamat	Chemistry and Biochemistry
14	**Khaya Klanot**	Deep Learning for Particle Physics: Investigating Neural Network Structure and Hyperparameters	Dr. Kevin Lannon	Physics
68	**Anna Kluender**	Understanding Lower Critical Solution Temperature Ionic Liquids in the Development of Revolutionary Absorptive Cooling Fluids	Dr. Brandon Ashfeld	Chemistry and Biochemistry
38	**Kerrie Koller, Kailey Novack**	Creating a Catalog for Albendazole Paper Analytical Devices	Dr. Ian Bentley	Chemistry, Physics
83	**Henadz Krukovich**	Tracking multiple targets using Dual-Polarized Antennas with Software Defined Radios	Dr. Thomas Pratt	Electrical Engineering
41	**Tristen Lewandowski**	Programmable and Reconfigurable Millimeter-Wave Circuits and Antennas	Dr. Jonathan Chisum	Electrical Engineering
75	**Laurel Anne Lown, Mary Green**	Validation of the MicroBio PAD by testing drinking water quality in Nepal	Dr. Don Paetkau	Biology
19	**Lizbeth Lucero**	Infant and Child Mortality Rates and the Role of Female Education: A Meta-Analysis of Statistically Significant and Insignificant Research	Dr. Erin McDonnell	Sociology
84	**Marina Malone**	Integrated Task and Motion Planning for Robotic Systems	Dr. Hai Lin	Electrical Engineering
28	**Ana Martinez**	Coordination Chemistry of the Human Copper Transporter	Dr. Kathryn Haas	Chemistry
54	**Rachel McCarthy**	Predicting Body Image through Self-Esteem and Social Networks	Dr. David Hachen	Sociology
29	**Madison Mettey**	Synthesis of transition metal alumosiloxide complexes as models of zeolite active sites for energy-related catalysis	Dr. Emily Tsui	Chemistry and Biochemistry
76	**Heather Miller**	The Development of a Yeast Biosensor for the Detection of Prednisone	Dr. Don Paetkau	Biology

20	**Christopher Monjaras**	The Effects of Mandatory Retirement on Employee Health Outcomes	Dr. William Evans	Economics
64	**Eduardo Morales-Rivera**	Comparison of Two Dual Spring-Loaded Inverted Pendulum Models of Sloped Walking	Dr. James Schmiedeler	Aerospace and Mechanical Engineering
33	**Brizzia Munoz Robles**	Targeting therapeutics through supramolecular affinity	Dr. Matthew Webber	Chemical and Biomolecular Engineering
30	**Lee Ngochi**	Synthesis of Nickel Phosphide on Aluminum Oxide	Dr. Jason Hicks, Dr. William Schneider	Chemical and Biomolecular Engineering
72	**Erin O'Brien**	Improving Drug Efficacy Through Supramolecular Affinity	Dr. Matthew Webber	Chemical and Biomolecular Engineering
4	**Samantha O'Connor**	Optimization of antimicrobial activity of truncated linear variants of enterocin AS-48	Dr. Shaun Lee	Biological Sciences
79	**Olanrewaju Olafuyi**	Computation Spectroscopic Analysis of Alpha Amyloids of PSMα3	Dr. Arnaldo Serrano	Chemistry and Biochemistry
15	**Luke Onken**	Utilizing a Bayesian Point Process Model to Predict Forest Fires from Charcoal Data	Dr. Jason McLachlan	Biological Sciences
80	**Robert Ornelaz**	Does Cultural Conflict Affect educational Attainment?	Dr. Rory McVeigh	Sociology
5	**Andrew Pendergast**	A low-cost 3D-printed electrophoretic method for proteomics sample preparation	Dr. Matthew Champion	Chemistry and Biochemistry
81	**Carolina Ponce**	Reproductive Health Fears Present in Nahua Indigenous Women: An Analysis of Interactions with Biomedical Personnel	Dr. Vania Smith-Oka	Anthropology
21	**Allen Porterie**	Performing Black Masculinity	Dr. Mark Sanders	English
55	**Nicholas Potteiger**	Archiving Workflows Onto Cloud Based Storage	Dr. Douglas Thain	Computer Science and Engineering
16	**Kang Pu**	Knowledge Diffusion in the Global Automotive Industry	Dr. Paul Brenner	Computer Science and Engineering
73	**Rebecca Radomsky**	Design of Experimentation to Test Faradaic Efficiencies of Plasma-Liquid Systems	Dr. David B. Go	Chemistry and Biochemistry
22	**Victor M. Rey Davila**	Light Activated Synthesis of Au Nanoplates	Dr. Svetlana Neretina	Aerospace and Mechanical Engineering
85	**Daniel Riehm**	Using Augmented Reality to Control a Six-Axis Robot Arm	Dr. Richard Billo	Electrical Engineering
31	**Aaron Roe**	Computational Identification of Anharmonic Vibrational Frequencies for Brønsted Acid Sites in Aluminum Substituted Chabazite	Dr. William Schneider	Chemical and Biomolecular Engineering
86	**Robert Schenck**	Wireless Communications Interface and Services for Drone Swarms	Dr. J Nicholas Laneman	Electrical Engineering
42	**Adrian Siwy**	Optically-Controlled Tunable Microwave and Millimeter-Wave Devices for Adaptive Wireless Communications	Dr. Lei Liu	Electrical Engineering

77	**Erica Slogar**	Copper(I) & Copper(II) binding to the ectodomain of human Ctr1	Dr. Kathryn Haas	Chemistry, Physics
6	**Kyle Smith**	Phosphate Detection Using Yeast Produced CO2	Dr. Holly Goodson	Chemistry and Biochemistry
56	**Jeremy Speth**	Generation and Matching of Bipartite Graphs	Dr. Peter Kogge	Computer Science and Engineering
43	**Spencer Spitz**	Passive, Crowd-Sourced WiFi Characterization	Dr. Aaron Striegel	Computer Science and Engineering
46	**Maxwell G. Tetrick**	Getting High on Science: Surface-Enhanced Raman Spectroscopy for Illicit Drug Detection	Dr. Jon P. Camden	Chemistry and Biochemistry
74	**Margo Waters**	Magneto-Electric Silica Nanoparticles (Mag-E-Si-Ns) for Combinatorial Chemotherapeutics Against Metastatic Cancers	Dr. Prakash Nallathamby, Dr. Paul Helquist	Aerospace and Mechanical Engineering, Chemistry and Biochemistry
87	**Jeremiah Yohannan**	Human-Robot Collaboration	Dr. Hai Lin	Electrical Engineering
17	**Qimin Zhang**	Reduction of Resources Consumption in Parallel Applications Using a Density-based Clustering Model	Dr. Douglas Thain	Computer Science and Engineering
57	**Yuekai Zhang**	Knowledge Diffusion in Global Commerce, Investment and Research	Dr. Paul Brenner	Computer Science and Engineering