



## 2003-2004 Academic Year Undergraduate Research Grants

Each grant list individual student researcher(s) with respective cooperating faculty member(s) in parenthesis.

### School of Business

- Angela Fetzner (Diane Parente and Mary Beth Pinto) - \$700  
"High School Students and Credit Cards: Consumer Socialization and Financial Awareness"
- Barton L. Towell (Randy Brown and Diane Parente) - \$700  
"Adoption of a New Technology: Applying a Model for Analyzing and Assessing Readiness for Change"
- Brian Veshecco (Diane Parente and Mary Beth Pinto) - \$700  
"High School Students and Credit Cards: Consumer Attitudes"
- Jenny Zhang (Diane Parente) - \$700  
"Analyzing Product Characteristic Impact in B2B Reverse Auction Environment"

### School of Engineering and Engineering Technology

- Christopher D. Agosti (John Roth) - \$700  
"Energy Consumption Reduction Through Electrically Assisted Machining"
- Robert Cunningham, Joseph Petrovich, and Ted Yowonske (David Loker) - \$700  
"Non-contact Sensing Using Motorola's MC33794 Electric Field Imaging Device"
- Andrew R. Detar (Oladipo Onipede) - \$700  
"Twisting of Airfoil Sections Using Shape Memory Alloy Wire"
- Kevin M. Fisher (John Roth) - \$700  
"Multiple Sensor Integration"
- Jarred Heigel (John Roth) - \$700  
"Analysis of Electrically Aided Machining Process"
- James Jukkola (Ronald Krahe) - \$700  
"Electronically Controlling the Rolling Motion of a Ball on a Tilting Surface"
- Jeffrey Kirsch and Michael Porter (David Loker) - \$700  
"802.11b Wireless LAN Data Transmission/Reception"
- Shawn Kozen (Ronald Krahe) - \$700  
"Steering for an Electric Vehicle"

- Amy McCullough (William Lasher) - \$700  
"Optimization and Automation of Fluid Flow Simulation Spinnaker Aerodynamics"
- Nathan D. Russell (John Roth) - \$700  
"Effect of Cryogenic Treatment of Carbide Inserts on Tool Wear"
- Robert Walters (Ronald Krahe) - \$700  
"Electric Motor Drive and Driver Circuitry"

**School of Engineering and Engineering Technology and School of Humanities and Social Sciences**

- Eric D. Johnson (Dawn Blasko, Derek Mace, and Kathy Holliday-Darr) - \$700  
"Programming for Cognitive Science: Using Technology to Understand Human Thought"

**School of Humanities and Social Sciences**

- Chrissy Anderson and Dotty Shaffer (Dawn Blasko and Victoria Kazmerski) - \$1,400  
"Metaphor Comprehension in Young Adults and Children"
- Holly Blasko-Drabik and Joshua W. Rowe (Victoria Kazmerski and Dawn Blasko) - \$1,400  
"ERP Evidence of Stroop-Like Interference with Instrument Timbres"
- Jennifer Braithwaite, Elma Dori, and Lauren Sanko (Victoria Kazmerski) - \$700  
"A Comparison of Self-Esteem and Adult Attachment Styles to Body Mass Index"
- Tabitha Chase, Lisa Jacobs, Erin Kuchcinski, and Lisa Miller (Charisse Nixon) - \$700  
"An Evaluation of CASS at Greenhills, Michigan"
- Tabitha Chase, Natasha Chrebet, and Lisa Miller (Victoria Kazmerski) - \$697  
"An Evaluation of Personal Space and Test Scores"
- David Daquelente, Danielle Lombardo, and Jeannie Roos (Victoria Kazmerski) - \$700  
"The Study of Stress Levels of College-Aged Students in Monogamous Relationships vs. Singles"
- Linda Fanning (Victoria Kazmerski) - \$700  
"Hands-on Science Curriculum Evaluation"
- Erin Ferguson and Jessica Sevinsky (Victoria Kazmerski) - \$450  
"Physical vs. Non-Physical Characteristics in Heterosexual Dating Partner Preferences"
- Lindsey Giuliana, Erin Ferguson, Ashley Conrad, and James Rummel Jr. (Charisse Nixon) - \$700  
"CASS: Creating a Safe School in Notre Dame Academy"
- Sarah Hildreth (Clare Porac) - \$700  
"Spatial Frequency Manipulations in the Poggendorff Illusion"

- Megan Horanic and Jennifer Hornaman (Victoria Kazmerski) - \$700  
"Differences in Bereavement at Five Weeks and Nine Weeks"
- Lisa M. Jacobs and Erin E. Troester (Victoria Kazmerski) - \$300  
"Experimentation with Context Dependent Memory"
- Jessica Knapp, David Daquelente, Danielle Lombardo, and Jeannie Roos (Charisse Nixon) - \$901  
"CASS: Creating a Safe Social Climate in Our Schools - Thomas Jefferson Middle School and Benjamin Franklin School, Valparaiso, IN"
- Sarah Lawson, Melissa Donnelly, Joanna Obert, and Jessica Sevinsky (Charisse Nixon) - \$832  
"An Evaluation of CASS at Southwestern Middle School, Jamestown, NY and Solon Middle School, Solon, OH"
- Ann Murosky (Charisse Nixon) - \$700  
"An Evaluation of CASS at Selinsgrove Area Middle School, Selinsgrove, PA"
- Joanna Obert and Mary Flowers (Dawn Blasko) - \$700  
"The Relationship between Psychological Distance from Home and First Year College Student Adjustment"
- Brian J. Pratt, Eldridge J. McNair, and Lindsey M. Giuliana (Victoria Kazmerski) - \$600  
"Relational Aggression and Adjustment in College Students"
- Marvin A. Sanderson and Jason J. Wheeler (Victoria Kazmerski) - \$700  
"The Effect of Aggressive Rap Music on Compassion"
- Kristen Shaffer (Dawn Blasko and Victoria Kazmerski) - \$700  
"Do Individual Differences in Relational Aggression Influence Brain Activity for Sarcastic Language?"
- Jennifer Stanford and Kelly Miller (Charisse Nixon) - \$700  
"An Evaluation of CASS at Saint Mary's Episcopal Day School, Tampa, FL"
- Kathryn Weinschenker and Brittany Yost (Charisse Nixon) - \$700  
"An Introduction of the CASS Program at Tampa Preparatory School, Tampa FL"

### **School of Science**

- Sheldon T. Bailey (Bruce Wittmershaus) - \$700  
"Photodegradation of Quantum Dots"
- Leann Bartomioli and Russell Neuner (Michael Campbell) - \$1,362  
"The Microarray Analysis of an *Arabidopsis thaliana ndp* Mutant"
- Lee Beers (Michael Campbell) - \$698  
"Analysis of RD22 in Dormant and Non-Dormant Potato Meristems"
- Anita L. Brock (James Warren Jr.) - \$700  
"A Functional Analysis of the Three Zebrafish Fragile X Related Genes"

- Jason Creps (James Warren Jr.) - \$700  
"Subcloning of 3 Zebrafish Fragile X Related Protein Genes into Bacterial Expression Vectors for Protein Purification"
- David Duberow (Thomas Spudich) - \$700  
"Trace Elemental Analysis of Snapping Turtles Collected from Erie County, Pennsylvania by Graphite Furnace Atomic Absorption Spectrophotometry"
- Christopher M. Kareis (Alan Jircitano) - \$700  
"Synthesis and Characterization of a Potential Magnetic Resonance Imaging Contrast Agent"
- Adam J. Lanier (Kevin Norton) - \$660  
"GIS Based Analysis of the Chautauqua Drumlin Field, Northwestern Pennsylvania, and Western New York"
- Jared McFarland, Stephanie Benson, and Todd Gregg (Lisa Mangel) - \$2,100  
"Avian Population/Habitat Assessment for Presque Isle State Park"
- Margaret L. Morrison (Mary Chisholm) - \$700  
"The Identification of Major Odorants in Honey Tangerine Oil Using Gas Chromatography-Olfactometry (GCO) and Gas Chromatography-Mass Spectrometry (GC-MS)"
- Emily Morse (Margaret Voss) - \$699  
"The Roles of Predation and Dominance Rank on Optimal Foraging Techniques in Wintering Black-Capped Chickadees"
- Thomas R. Moyer (David Hunnicutt and James Warren Jr.) - \$700  
"Motility as a Requirement for Pathogenesis of *Flavobacterium johnsoniae*"
- Robert J. Mycka (Alan Jircitano) - \$700  
"Synthesis of Potential Photochromic Pt(II) Complexes"
- Brett Myers (Paul Olson) - \$700  
"A Study of Combinatorial Game Theory"
- William T. Parker (Alan Jircitano) - \$700  
"A Novel Photochromic Pt(II) Compound Based on 2-Amino-4-Phenylbenzaldehyde"
- Timothy A. Perkins (Boon Wee Ong) - \$686  
"Number Theory in Cryptography and the Knapsack Problem"
- Jared E. Pierce (Pamela Silver) - \$700  
"An Evaluation of *Odonata* Assemblages in Mitigated and Natural Wetlands"
- Roy Schleicher (Jay Amicangelo) - \$700  
"The Characterization of Silicon Nitride Intermediates Using a Microwave Discharge Source and Matrix-Isolation Infrared Spectroscopy"
- Jolene Schuster (Martin Kociolek) - \$700  
"Development of a Novel Tandem Ring-Opening/Aldol Condensation of 2-Isoxazoles"

- Joshua A. Smith (David Hunnicutt) - \$700  
"Cloning and Sequencing of Disrupted *Flavobacterium johnsoniae* Motility Genes"
- Lee J. Steen (Boon Wee Ong) - \$700  
"Creating an Interactive Interface for Real Analysis"
- Nicholas G. Straub (Martin Kociolek) - \$700  
"The Investigation of Novel Ring-Opening Methods of 2-Isoxazoles"
- Kyle Szklenski (Blair Tuttle) - \$700  
"Analyzing the Route to Chaos Displayed in Non-Linear Systems"
- Erika E. Weissenfluh (David Hunnicutt) - \$700  
"The Construction of *Flavobacterium johnsoniae* Genomic DNA Libraries"
- Shun-Hsiang Yang (Michelle Previte) - \$700  
"The Topological Dimension of Limits of Graph Substitutions with More Than One Replacement Graph"
- Megan E. Zuschlag (Joseph Previte) - \$700  
"Optimizing the Use of Calculus Techniques to Predict Stock Market Fluctuations"

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