PENNSTATE

Erie The Behrend College

**2006-2007 Academic Year Undergraduate Research Grants**

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

**SCHOOL OF BUSINESS**

- John Crane (Mary Beth Pinto) - $700
  "Psychographic and Lifestyle Segmentation of Teen Market Mavens"

- Alexander Kazmierczak (James Kurre) - $700
  "New Data Series to Improve the Erie Index of Leading Indicators"

- Charles Nelatury (Ashutosh Deshmukh) - $700
  "The Effect of Environmental Influences on XBRL Adoption"

**SCHOOL OF ENGINEERING**

- Jason Cecchetti (Elisa Wu) - $700
  "Design of a Graphical User Interface for a Complex Human Circulatory System Model in Matlab"

- Logan Flaherty (William Lasher) - $700
  "An Analysis of the Survivability of the U. S. Brig Niagara under Storm Conditions"

- Joshua Green (James Sonnenmeier) - $700
  "Measurements of the Aerodynamic Performance of Twisted Wings III"

- Marc Hoffman (John Roth) - $700
  "Analyzing Temperature and Electrical Current Flow Fields through a Variety of Dome Height Test Specimens"

- David Irvin (John Roth) - $700
  "The Effects that Cryogenic Treatments Have on Tool Acceleration as Related to Workpiece Surface Finish and Tool Wear"

- Daniel Jageman (Amir Khalilollahi and John Roth) - $700
  "Using Finite Element Analysis to Analyze the Effects of Temperature and Electrode Placement on Plastic Deformation"

- Ashraf Khalifa (John Roth) - $700
  "Improving Sheet Metal Manufacturing Processes for Automotive Body Parts through Electrically Enhancing Formability"

- Thomas Kronenberger (John Roth) - $700
  "Monitoring Microstructural Changes and How They Relate to Tool Life of Turning Inserts"

- Ivan Loker (Elisa Wu) - $700
  "Design and Construction of Mock Human Circulatory System for Left Ventricle Assist Device"

- Jeffrey Painter (Robert Edwards) - $700
  "Develop a Data Collection Program for a Thermal Conductivity Device Using Labview"

- Jason Papucci (John Roth) - $700
  "Using Direct Electric Current to Investigate the Effects on Glass and Ceramics"

- David Ross and Ryan Alleman (Robert Michael) - $720
  "Finite Element Analysis for Undergraduate Plastics Engineering Technology Students of Penn State Behrend"

- Joseph Shaffer (Elisa Wu) - $700
  "A Human Circulatory Model for a Pediatric Patient with Heart Defects"

- Kevin Sunealitis (Oladipo Onipede) - $700
  "Vibration Analysis of Electrostatically Driven Micro-Beams and Plates"

- Matthew Warner (John Roth) - $700
  "Using DC Electrical Current to Investigate the Enhanced Ductility of Various Aluminum Alloys"

- Alexander Winter (Robert Weissbach) - $700
  "Case Study and Parametric Analysis for a Wind Energy Protocol"

**SCHOOL OF ENGINEERING AND SCHOOL OF HUMANITIES AND SOCIAL SCIENCES**

- Megan Miller, Elizabeth Sansone, Jimmie Hodge, Crystal Willis, Matt Lewis, and Michael Horning (Kathy Holliday-Darr, Jennifer Trich Kremer, and Dawn Blasko) - $4,200
  "Refine Training Activities Developed Spring 2006 to Enhance Spatial Visualization"

**SCHOOL OF ENGINEERING AND SCHOOL OF SCIENCE**

- Christopher Suprock (John Roth and Larry Downey) - $700
  "Identifying the Validity and Potency of Multi-Univariate Autoregressive Models as Compared to True Multivariate Autoregressive Techniques"

**SCHOOL OF HUMANITIES AND SOCIAL SCIENCES**

- Anthony Bango, Claire Barber, Kevin Belknap, Christine Giuliano, Leslie Sargent, Bethany Slomski, Brett Watson, and Ryan Watson (John Gamble) - $2,833
  "Comprehensive Statistical Database of Multilateral Treaties (CSDMT)"

- Erin Daquelente, Mara Huber, and Jessica Roman (Jennifer Trich Kremer) - $535
  "Parent-Child Attachment in Divorced Families"

- Shelby Deutsch and Chelsea Fenush (Victoria Kazmerski) - $700
  "The Effects of Background Music on Cognitive Performance"

- Alicia Dunbar (Clare Porac) - $700
  "An Exploration of the Centroid Theory of Mueller-Lyer (ML) Illusion Formation: The Effect of Form and Color Variations on Illusion Magnitude"

- Chris Engelhardt (Dawn Blasko) - $700
  "Personality and Its Impact on Forming Leadership Impressions"

- Sandra Grgic, Lauren Gilmore, and Melissa Shrout (Jennifer Trich Kremer and Eric Corty) - $1,021
  "The Relationship between Thought Suppression and Emotional Intelligence"

- Briana Grimes and Kerry Lope (Victoria Kazmerski) - $750
  "Individual Attitudes Related to Actors in Love Scenes"

- Bethany Hanus (Jennifer Trich Kremer) - $693
  "The Effects of Background Music on Studying"

- Elizabeth Kiefer and Megan Hoffman (Charisse Nixon) - $1,398
  "Relational Aggression among Middle School Students in Ithaca, New York"

- Carrie McNeal and Nicholas Goff (Victoria Kazmerski) - $500
  "Analyzing the Relationship among Sarcasm Use, Peer Interpersonal Communication, and Situational Context"

- Christy Miller and Lindsay Chatmon (Victoria Kazmerski) - $150
  "Appropriate Study Skill Usage in College Freshmen at Penn State Behrend"

- Sara Nielsen and Steve Buesink (Victoria Kazmerski) - $640
  "Gender Stereotypes in Animated Films"

- Andrew Rainbow (Clare Porac) - $700
  "The Poggendorff Illusion: Is a Vertical Fill Pattern the Major Determinant of Illusion Magnitude?"

- Elizabeth Sansone, Christopher Engelhardt, and Kimberly Shell (Charisse Nixon) - $1,373
  "Evaluating the Effectiveness of Middle School Mentoring Programs"

- Andrew Scheller, Matt Ogden, and Allison Palermo (Victoria Kazmerski) - $630
  "Exposure to Violence and Social Information Processing among College Students"

- Bethany Slomski and Kyle Johnston (Jennifer Trich Kremer) - $475
  "Stress and Perceived Authority in the Milgram Paradigm"

- Angela Speck, Jenay Guardiani, and Lori Szymanik (Jennifer Trich Kremer) - $360
  "Looking Beyond the Stereotype: Defining Sexual Harassment in a College Setting"

- Andrew Walker and Zack Goncz (Dawn Blasko and Victoria Kazmerski) - $1,400
  "Analyzing the Influence of Directionality and Similarity on Meaningful Judgments of Metaphors Using ERP"

- Jessie Westrick, Mandy Canzano, and Erica Zinsser (Jennifer Trich Kremer and Dawn Blasko) - $830
  "The Effects of Service Learning on Awareness Development"

**SCHOOL OF SCIENCE**

- Dewey Black, Greg Lutz, and Zack Marrapese (Charles Burchard and Gary Walker) - $2,100
  "Robotic Mapping and Path Finding"

- Robert C. Blanner (Martin Kociolek) - $700
  "Investigating the Synthesis and Reactivity of Brominated Isoxazoles"

- Michelle Borkovec (Michael Justik) - $700
  "*α*-Hydroxylation of Aryl Ketones with 1*H*-1-hydroxy-5-methyl-1,2,3-benziodoxathiole 3,3-Dioxide, a Green Alternative to Hypervalent Iodine Reagents"

- Ryan Buzzanca, Jonathan Grier, and Aaron Thomas (Mehmet Malcok and Gary Walker) $2,100
  "Behrend Optimized Scheduling System"

- William Campbell (Michael Campbell) - $700
  "The Development of Antisense NDP1 Mutants of *Arabidopsis thaliana* for the Determination of NDP1 Gene Function and Regulation"

- Paul Casillo, Michael Snyder, and Tom Workman (Gary Walker) - $2,100
  "The Electronic Voting System"

- Andrew Collins-Hed (Michael Campbell and Yi-Hong Wang) - $700
  "Characterization of a Putative Acetolactate Synthase Knockout Mutant in Tomato and Its Effects on Branched-Chain Amino Acid Composition"

- Daniel Irwin (Jay Amicangelo) - $700
  "Characterization of an Acetonitrile Hexafluorobenzene Complex in Nitrogen and Argon Matrices Using Matrix-Isolated Infrared Spectroscopy"

- Andrew Law (Alan Jircitano) - $700
  "Synthesis and Characterization of Potential Photochromic Platinum(II) Complexes"

- Cyndi Lee (Jay Amicangelo) - $700
  "The Characterization of Silicon Nitride Intermediates Using a Hydrogen Lamp Photolysis Source and Matrix-Isolation Infrared Spectroscopy"

- Joshua Meyer (Michael Campbell) - $700
  "Comparison of ndp-in1 Mutant to ndp-sy Mutant"

- Dara Nielsen, Jacob Gariepy, and Paul Miller (Gary Walker and Mehmet Malcok) - $2,100
  "Biometric Identification for Prescription Drug Dispensing Control"

- Stacey Olechowicz (James Warren Jr.) - $700
  "Characterization of FMR1 Gene Knockdowns in Zebrafish (*Danio rerio*)"

- Sarah Orris (Boon Wee Ong) - $700
  "Summing an Infinite Series Using Residue Theorem"

- Joe Pleso (Paul Olson and Paul Becker) - $700
  "Surreal Analysis of Go"

- Casandra Sheldon (Jennifer Holt) - $700
  "Investigations of the Orientations of Merocyanine Dyes in Zeolite Host Materials"

- Jeremy Sopko (Joseph Previte) - $700
  "A Coupled Oscillator Model Applied to the Spinal Cord of a Sea Lamprey"

- Kaile Taylor, Daryl Nowacki, and Adam Rhodes (Yi-Hong Wang) - $2,100
  "Identification of Genes that Cause Floral Structural Changes in Tomato Plants"

- Kala Wolfe (Margaret Voss) - $700
  “The Effect of Clutch Volume on Incubation in Black Brant (*Branta Bernicula nigricans*): Tradeoffs between Decreased Cooling Rates and Increased Incubation Period”

**Research & Outreach**

**Undergraduate Research**