

Student & Faculty Mentor List
 2008 Summer Undergraduate Research Program
 Science and Mathematics & Computer Science

STEP		
Participant	Topic	Mentor(s)
Diana Acevedo	Determining genetic variation for starch content among experimental amylo maize hybrids	Dr. Mark Campbell
Marcy Anderson	The role of dark septate endophytes in water stress responses of the forage grass "Blue Grama"	Dr. John Ma
James Brown	The Crystal and 3-Dimensional Molecular Structures of Compounds as Determined by X-Ray Diffraction	Dr. Russell Baughman
Augustus Caine	Fecal contamination of local bodies of water	Dr. Michael Lockhart
Johnathan Cobb	Monte Carlo Simulation of the Critical Properties of a Mixture Ising-XY Model	Dr. Eduardo Velasco
Amanda DeBrot	Effect of Food Quality on the Digestion Efficiency of a Generalist Predator	Dr. Chad Montgomery
Bandon Decker	Variable Star Spectroscopy	Dr. Matthew Beaky
Kosi Ekpoh	Embryogenesis and cell migration in nematode worms	Dr. Timothy Walston
Anna Esfeld	The role of dark septate endophytes in water stress responses of the forage grass "Blue Grama"	Dr. John Ma
Phillip Hewitt	Quantitative Determination of Chromium(VI) Using Sol-Gel Encapsulated Redox Chemistry	Dr. Dave McCurdy
Sarahann Hutchinson	Fecal contamination of local bodies of water	Dr. Michael Lockhart
Kynam Le	Thinking Small: Building Sensor Interfaces by Controlling Chemistry in Small Dimensions	Dr. Brian Lamp
Margaret Mudd	Lead Distribution and Speciation in Plants	Dr. James McCormick
Christopher Owens	Effect of Food Quality on the Digestion Efficiency of a Generalist Predator	Dr. Chad Montgomery
Jeffery Pierce	Data Mining the Transcendentals	Dr. Bob Matthews
Suzanne Pitts	Comparison of visual methods of estrus detection in beef cattle	Dr. Glenn Wehner
Ashley Ray	Variable Star Spectroscopy	Dr. Matthew Beaky
Eric Stefensmeier	Quantitative Determination of Chromium(VI) Using Sol-Gel Encapsulated Redox Chemistry	Dr. Dave McCurdy
Amanda Tougas	Variable Star Spectroscopy	Dr. Matthew Beaky
Nicholas Wilsey	Variable Star Spectroscopy	Dr. Matthew Beaky
Mathematical Biology		
Participant	Topic	Mentor(s)
Tad Dallas	Encounter filters that determine host preference in ticks	Dr. Laura Fielden/ Dr. Stephanie Fore/ Dr. Hyun-Joo Kim
Bo Forrester	Determining gravitropic sensitivity: a mathematical approach	Dr. John Ma/ Dr. Todd Hammond
Josh Kangas	Gene Expression and Visualization Application (GENEVA)	Dr. Jon Beck/ Dr. Dianne Janick-Buckner/ Dr. Brent Buckner
Dianne Kopp	Unveiling the Past: Analysis of Evolutionary and Demographic History	Dr. Tony Weisstein/ Dr. Pam Ryan
Georgia Mueller	Encounter filters that determine host preference in ticks	Dr. Laura Fielden/ Dr. Stephanie Fore/ Dr. Hyun-Joo Kim
Karen O'Connell	Unveiling the Past: Analysis of Evolutionary and Demographic History	Dr. Tony Weisstein/ Dr. Pam Ryan
William Petry	Encounter filters that determine host preference in ticks	Dr. Laura Fielden/ Dr. Stephanie Fore/ Dr. Hyun-Joo Kim
Yu-yu Ren	Determining gravitropic sensitivity: a mathematical approach	Dr. John Ma/ Dr. Todd Hammond
Molly Smith	Image Analytic and Mathematical Modeling of the Structure and Dynamics of Biological Tissues	Dr. Alan Garvey/Dr. Jon Beck & Brian Degenhardt
Spencer Tipping	Unveiling the Past: Analysis of Evolutionary and Demographic History	Dr. Tony Weisstein/ Dr. Pam Ryan
Jonathan Vollmer	Graph theoretic modeling of the population dynamics of Missouri bladderpod (<i>Lesquerella filiformis</i>)	Dr. Michael Kelrick/ Dr. Michael Adams
Kurt Warnhoff	Measuring and Modeling the Role of Cell Adhesion on Cell Shape During Early Embryogenesis in <i>C. Elegans</i>	Dr. Tim Walston/ Dr. Scott Thatcher
Alexandra Wehrman	Measuring and Modeling the Role of Cell Adhesion on Cell Shape During Early Embryogenesis in <i>C. Elegans</i>	Dr. Tim Walston/ Dr. Scott Thatcher
Brett Wiley	Graph theoretic modeling of the population dynamics of Missouri bladderpod (<i>Lesquerella filiformis</i>)	Dr. Michael Kelrick/ Dr. Michael Adams

Truman & Alumni Stipends		
Participant	Topic	Mentor(s)
Joshua Blechle	Computational Studies on the Reduction of Chemical Warfare Agent Simulants	Dr. Eric Patterson
Dmitriy Chernookiy	Fabrication and Characterization of Surfaces with Heterogeneous Activity Using Scanning Electrochemical Microcopy	Dr. Brian Lamp
Douglas Elliott	Digestive Physiology of a Generalist Snake Predator	Dr. Chad Montgomery
James Franklin	Missouri Bladderpod	Dr. Michael Kelrick
Jesse Lavin	The Effect of 5-Aminosalicylic Acid and Sulfasalazine...	Dr. Laura Fielden
Peter Muelleman	Trailing of maternal chemical cues by neonate Timber Rattlesnakes	Dr. Chad Montgomery
Suman Phuyal	Bagchal Game Program	Dr. Alan Garvey
Molly Smith	Medical Data Analysis	Dr. Alan Garvey/ Dr. Jon Beck
Dinghao Joyce Tipping	Unveiling the Past: Analysis of Evolutionary and Demographic History	Dr. Pam Ryan
Tyler Winders	Effect of Sulfasalazine, 5-Aminosalicylic Acid, and 5-Acetylsalicylic acid on nucleus of the MDX mouse	Dr. Anton Weisstein
Faculty & Student Grants		
Participant	Topic	Mentor(s)
Joe Bell	Establishment of an amylo maize experimental hybrid yield trail	Dr. Mark Campbell
Joshua Blechle	Molecular dynamic simulations of chemical weapon simulants	Dr. Eric Patterson
Kelly Daniel	Molecular dynamic simulations of chemical weapon simulants	Dr. Eric Patterson
Christopher Dove	Analysis of Genes involved in Maize Shoot Apical Meristem Function	Dr. Brent Buckner/ Dr. Diane Janick-Buckner
Douglas Eudy	Molecular Ecology	Dr. José Herrera
Sara Goehl	Watershed quality at Forest Hazel Creek Lakes	Dr. Barbara Kramer/ Dr. David McCurdy
Emily Hopson	Base Stacking in tRNA	Dr. Maria Nagan/ Dr. Eric Patterson
Hana Khidir	Molecular Ecology	Dr. José Herrera
Rick Knopik	Watershed quality at Forest Hazel Creek Lakes	Dr. Barbara Kramer/ Dr. David McCurdy
Elizabeth Koballa	Base Stacking in tRNA	Dr. Maria Nagan/ Dr. Eric Patterson
Christa Manton	Analysis of Genes involved in Maize Shoot Apical Meristem Function	Dr. Brent Buckner/ Dr. Diane Janick-Buckner
Rebecca O'Connell	Analysis of Genes involved in Maize Shoot Apical Meristem Function	Dr. Brent Buckner/ Dr. Diane Janick-Buckner
Jacob Schrum	Watershed quality at Forest Hazel Creek Lakes	Dr. Cynthia Cooper/ Dr. Michael Lockhart
Kelsey Vaughn	Molecular Ecology	Dr. José Herrera
Ashley Winkler	Watershed quality at Forest Hazel Creek Lakes	Dr. Cynthia Cooper/ Dr. Michael Lockhart

Summary Information

Participants

48 Truman students

9 community college students

- 7 currently enrolled at community colleges
- 2 already transferred to Truman

Research Mentors

31 Truman faculty