

TRUMAN

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T O D A Y

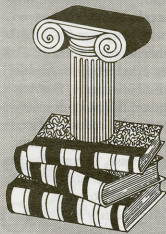
Vol. 2 No. 9

March 10, 1997

1997

UNDERGRADUATE
RESEARCH
SYMPOSIUM

FRIDAY,
MARCH 14
STUDENT UNION



For a complete symposium schedule and a list of abstracts, presenters and faculty mentors, see the special insert in this week's *Truman Today*.

State Ballet, St. Joseph Symphony To Perform on Campus This Thursday

The State Ballet of Missouri and the St. Joseph Symphony will perform March 13, at 7:30 p.m. in Baldwin Auditorium. This Lyceum Series event will mark the first time the Ballet performs with a full, live orchestra at Truman. Financial assistance for the performance has been provided by the Missouri Arts Council, a state agency.

Restructured in 1980 under the artistic direction of Todd Bolender, internationally known dancer and choreographer, the State Ballet has assembled a corps of dancers of exceptional talent and virtuosity. The performance will include the *Scotch Symphony*, *The Scarlatti Dances*, and *Rodeo*.

A George Balanchine classic ballet, the *Scotch Symphony* brings together the music, atmosphere and brilliance of the Highland landscape. The dance is intended as an evocation of the setting and character of Scotland.

The State Ballet's Artistic Director William Whitener conceived the six-movement performance of *The Scarlatti Dances* as an elegant pastiche on the subject of manners and formal greetings. The dances are set to the music by Domenico Scarlatti and the last five dances are the from the 1916 ballet *The Good Humored Ladies*.

Originally subtitled "The Courting at Burnt Ranch," *Rodeo* was first produced at the Metropolitan Opera House in 1942. The Ballet Russe de Monte Carlo commissioned choreographer Agnes de Mille and composer Aaron Copland to collaborate on the creation of a western ballet. Miss de Mille once described *Rodeo* as: "Throughout the American Southwest, the Saturday after-

noon rodeo gets its tradition. On the remote ranches, as well as in the trading towns, the 'hands' get together to show off their skill in roping, riding, branding and throwing.... The theme of the ballet is basic. It deals with the problem that has confronted all American women, from the earliest pioneer times, and which has never ceased to occupy them throughout the building of our country: how to get a suitable man."



Free tickets for the State Ballet of Missouri with the St. Joseph Symphony for students, faculty and staff are available in the Student Activities Board office, lower level Student Union.

Service Recognition Banquet Set For March 26

Faculty and staff celebrating their five-, 10-, 15-, 20-, 25- and 30-year anniversaries with the University, as well as those who are retiring this year, will be honored at the annual Service Recognition Banquet, March 26. Also being honored for the first time at the banquet are part-time faculty and staff with 10 or more consecutive years of service. The banquet will be at 6:30 p.m. in the SUB Georgian Room.

Tickets for the banquet are \$8. For reservations and tickets, call the Human Resources Office at 785-4031 by March 22. To the right is a list of faculty and staff who will be recognized.

Retirees: J. Joyce Hearn, *Family Sciences/ Alumni/Greek Life/ Human Resources, 27 years of service*; Lois Rogers, *Physical Plant, 20 years of service*; Donald L. Smith, *Physical Plant, 29 years of service*.

30 Years of Service: John Bartling, *Math & Computer Science*; Eleanor Ellebracht, *Library*; Marianna Giovannini, *Academic Planning Services*; Nancy Hulen, *Library*; Joan Hunter, *Language & Literature*.

25 Years of Service: Larry Boggs, *Physical Plant*; Clifton E. Brown, *Instructional Technology Center*; Kenneth Fountain, *Science*; Opal Hoerrmann, *Registrar's Office*; James Lyons, *Social Science*; Robert J. Martin, *Education*.

20 Years of Service: Russell Baughman, *Science*; Robert Hoerrmann, *Physical Plant*; Bryce Jones II, *Business & Accountancy*; Joyce McVay, *Business Office*; Sharon McGahan, *Nursing*; Jack Mitchell, *Social Science*; Luann Regagnon, *Science*; Anna Tomich, *Library*.

15 Years of Service: Robert Ashmore, *Physical Plant*; Kathryn Crisp, *Business Office*; John Cochrane, *Athletics*; Debra Kerby, *Business & Accountancy*; Betty L. McLane-Iles, *Language & Literature*; Sandra Schneider, *Social Science*; T. W. Sorrell, *Industrial Science/Services for Individuals with Disabilities/ Science*; Patricia Teter, *Library*; Jim Turner, *Business & Accountancy*; Nancy Weber, *Registrar's Office*; Glenn Wehner, *Science*.

10 Years of Service: Nancy Asher, *Assessment & Testing*; Robert Cacioppo, *Math & Computer Science*; Kenneth Carter, *Science*; Paula Cochran, *Communication Disorders*; Michael Corrick, *Physical Plant*; Melanee Crist, *International Student Office*; Rebecca Daugherty, *Computer Services*; Ruby Hollenbeck, *Physical Plant*; David Gruber, *Social Science*; Kenneth Hahn, *Science*; Rebecca R. Harrison, *Language & Literature*; Ruby Hollenbeck, *Physical Plant*; Barbara Holthaus, *Public Relations*; Alfreda James, *Physical Plant*; Gregory Jones, *Fine Arts*; Shannon Jumper, *Language & Literature*; Michael Kelrick, *Science*; Julie Krutsinger, *Business Office*; Patrick Lecaque, *Language & Literature/Center for International Education Abroad*; Miles Lovelace, *Vice President's Office/ Education*; Nancy Lovelace, *Language & Literature*; Charles (Doug) Marshall, *Physical Plant*; David McCurdy, *Science*; John Neitzke, *Math &*

Computer Science; Vaughan Pultz, *Science*; John Ramsbottom, *Social Science*; Lynne Roberts, *Business & Accountancy*; Tammy Roberts, *Computer Services*; Judith Sapko, *Library*; George Shinn, *Science*; Randall Smith, *Fine Arts*; Chein-Hsing (Jane) Sung, *Social Science*; Dean Van Galen, *Advancement/ Science*; Greg Walter, *University Center for Printing & Publications*; Shingmin Wang, *Math & Computer Science*; Cole Woodcox, *Language & Literature*.

5 Years of Service: Martha Bartter, *Language & Literature*; Chris Buhmeyer, *University Center for Printing & Publications*; Steven Carroll, *Science*; Timothy Cason, *Physical Plant*; Jacqueline Collett, *Fine Arts*; David Conner, *Social Science*; Ralph P. Cupelli, *Vice President's Office*; Adam Brooke Davis, *Language & Literature*; Paul Detweiler, *Physical Plant*; Roy Domenico, *Social Science*; Donna Fisher, *Education*; Robert Fisher, *Physical Plant*; Richard Griffith Freeman, *Science*; Theresa Jones, *Physical Plant*; Susan Hamilton, *Library*; Taj Hargey, *Social Science*; Peter Kendall, *Athletics*; Jennifer Korte, *Admissions /President's Office*; Kathryn Kuhlman, *Language & Literature*; Ian Lindevald, *Science*; Patrick Lobert, *Language & Literature*; Christopher Maglio, *Social Science*; Joan Mather, *Fine Arts*; Judi Misale, *Social Science*; Barbara Newcomer, *Business Office*; Benjamin Ogden, *Language & Literature*; Peggy Orchard, *Graduate Office*; Sherri Palmer, *Social Science*; Terry Palmer, *Social Science*; Melissa Passe, *Communication Disorders*; David Ream, *University Counseling Services*; Marilyn Romine, *Business & Accountancy*; Nancy Sanders, *Science*; Rose Marie Smith, *Computer Services*; Connie Thomas, *Physical Plant*; Ann Weidner, *University Counseling Services*.

Part-Time Faculty and Staff Recognition for 10 or More Years of Service: Mark Appold, *Language & Literature*; Faith Beane, *Language & Literature*; Barbara Bevell, *Computer Services*; Susan Guffey, *Science*; Alberta Harper, *Business Office*; Edward T. Hilgelford, *Justice Systems*; Caroline A. Julian, *Language & Literature*; Ann McEnderfer, *Language & Literature*; Shyn Chyn (Julie) Minn, *Language & Literature*; Deena Mitchell, *Language & Literature*; Mary Macmanus Ramsbottom, *Social Science*; Thomas Reed, *Fine Arts*; Ruth Schutte, *Library*; Steven Seward, *Fine Arts*.

Kirksville Community to Have Rare Opportunity to View AIDS Quilt

Students and surrounding community members will have the opportunity to view a symbol of expression, as well as increase their AIDS education and awareness when a section of the AIDS Memorial Quilt travels to Kirksville on March 20-23.

The quilt is the largest on-going community arts project in the world. It is based upon the American tradition of quilting when neighbors and relatives would join together to make blankets. It is a patchwork of lives made up of 3 feet by 6 feet panels – the size of a human grave. Each section of a panel represents a person lost to AIDS.

More than 400 panels will come to Kirksville and will be located in the Rieger Armory. Quilt display coordinator Les Luis will accompany the quilt.

Co-chair of AIDS Awareness in Adair County Bobbi Hopkins, senior, was inspired to bring the AIDS Memorial Quilt to Kirksville after seeing it at the National Convention for Campus Activities. Senior Mindi Gjertsen, who recently made a panel for a friend, is working on the project with Hopkins. Hopkins believes the quilt is important because it increases education and awareness about AIDS and its effect on others.

"Regardless of what some people think, there are a lot of people in the Kirksville community who have been touched by AIDS and who need the healing process," Hopkins said.

Anyone can make a panel to present to the NAMES Project Foundation. Panels should be on a 3 foot by 6 foot piece of material. They should not be decorated with anything that will break when it is folded or contain hard materials.

The AAAC is seeking additional funding for the project and individuals to help staff the exhibit. Donations can be dropped off at the AAAC mailbox in the CAOC or the Student Health Center; volunteer registration forms are in the CAOC and Student Health Center.

The Student Activities Board and Lifestyle Advocacy program are the organizations bringing the quilt to Kirksville. PRISM and the Funds Allotment Council also donated money.



Scholarship Deadline Nears

Applications for the 1997-98 Endowed Scholarship Program must be turned in to the Financial Aid Office, McClain Hall 103, by 5 p.m., March 14. The Truman State University Foundation is pleased to offer more than \$142,000 in scholarships that are made possible through the generous, private gifts of alumni and friends of Truman State University. Students may apply for multiple scholarships; however, a separate application form must accompany each application. A list of endowed scholarships as well as applications are available in the Financial Aid Office, and the Alumni/Development Office, McClain Hall 100. For more information contact Bob Behnen of the Alumni/Development Office at 785-4133.

New Scholarship Announced

The first Julie Ann Weggesser Memorial Scholarship will be awarded for the 1997-98 academic year and will be presented based on the following criteria: outstanding accounting major entering her/his senior year, financial need, (preference given to student with display of leadership abilities or involvement in extracurricular activities).

The deadline for the Julie Ann Weggesser Memorial Scholarship has been extended to March 28. A story on the establishment of this scholarship will be featured in the March 17 *Truman Today*.

Student Diagnosed With Meningitis

On Feb. 28, the University Hospital and Clinics notified the Truman State University Student Health Center that Jeffrey Damerall, a freshman at the University living in Missouri Hall and a member of Phi Lambda Chi fraternity, had a confirmed case of meningococcal disease (meningitis).

Meningococcal disease – an inflammation of the membranes of the brain and spinal cord – and its accompanying bloodstream infections are rare but potentially dangerous. The risk for contracting this disease is low. Only persons who have had direct contact with oral secretions of an infected person (i.e. shared saliva through shared cigarettes; shared food, drink, or food utensils; toothbrushes; intimate con-

tact, etc.) are considered at risk. Casual contact as might occur in a regular class room or office setting is not usually significant enough to cause concern.

University personnel have notified those believed to have been in close contact with Damerall. However, if any of the following symptoms are detected, an individual should consult their physician immediately. Some common early symptoms of meningococcal disease include fever, severe headache, stiff neck, nausea, vomiting, rash and lethargy. Those who think they may be at risk should contact the Student Health Center at 785-4182.

At press time, Damerall remained in medical intensive care at the University Hospital and Clinics.

Notes

The Volunteer Income Tax Assistance program, sponsored by the Accounting Club, will be March 15 and 22 and April 5 from 9 a.m. to 3 p.m. in Barnett Hall 202C. Participants should bring their W-2s and 1099s and a copy of last year's tax return.

Applications for Funds Allotment Council funding for the fall semester are due March 12. For information, stop by the FAC office, SUB, or call 785-7674.

Omicron Delta Kappa applications are available outside of the CAOC and at the Student Affairs Office March 10-24. An informational meeting will be at 6 p.m. March 11 in the hall of Kirk Building, and applications are due to the Student Affairs Office by March 24. ODK is a national leadership honor society open to both students and faculty. Students should have more than 60 credit hours and represent one or more of the following areas: fine arts, scholastic achievement, athletics, campus involvement or the mass media. The Women's Resource Center is accepting applications for executive staff positions for the 1997-98 academic year. Applications, due March 14, are available at the Center.

Fresh-cut daffodils will be sold in the SUB on March 14 and 17 and at Hy-Vee and Wal-Mart March 14-15. All proceeds will go to the American Cancer Society, most of which will assist the Kirksville community.

During Health Awareness Week, March 17-21, various free screenings will be provided in the Student Union. Screenings include: HIV; blood glucose; height, weight and skinfold; hearing and vision; and blood pressure. The screenings are sponsored by the Nursing Students Association and Pre-Physicians Organization.

The Spring 1997 Art Faculty Research Symposium will be at 6 p.m. March 18 in Baldwin Hall 351. Faculty presenters include: Suanna Breed, Cora Lynn Deibler, Jim Jereb, Sara Ouel and Jim Pauls.

Paul Fees, senior curator of the Buffalo Bill Historical Center in Cody, Wyo., will lecture about "True West, Nationhood and Buffalo Bill" at 5 p.m. March 19 in the SUB Governors' Room. Fees will discuss ways in which the American West served as a focus for American unity after the Civil War and during the period of heavy immigration before 1920.

The Women's Resource Center will host a poetry night, March 19, and a music night, March 20, from 7:30-10 p.m. in the SUB Down Under.

Women are needed to perform either night. For more information, contact Cheryl at 627-5826. The application deadline for the \$1,500 Missouri Student Grant has been moved up for 1997-98. Applications for Federal Student Aid for 1997-98 must be received at the processing center by April 1 to be considered. All students are encouraged to apply.

Student Recreation Center student applications are available for fall 1997: front desk clerks, weight room instructors, aerobics instructors and building supervisors. Applications are at the Dean of Student Affairs Office, Kirk Building 112, or the Intramurals Office, Pershing Building 309.

Applications are available for hired tutoring positions at the Multicultural Affairs Center. For further information, call the Center at 785-4142. A tutor is needed for an individual with disabilities anytime Tuesdays or Thursdays between 8 a.m. and 3:30 p.m. or weekends for approximately 2 hours per week. Tutoring must be done in the home. Interested individuals should contact Karen Leffler at the Kirksville Regional Center at 785-2500.

The Child Development Center is accepting applications for summer workstudy employees. A few institutional pay positions are open for May and August interims, including Freshman Week. Applications are also being accepted for 1997-98. Contact Julie Seeley at 785-4479.

Students wishing to pursue graduate accounting study can receive financial aid through the John L. Carey Scholarship Program. Scholarships are available to all liberal arts undergraduates wishing to pursue a CPA certificate. Awards are given based on academic achievement, leadership and future career interests and are contingent upon acceptance in a graduate program. Recipients will be eligible for renewal for one more year, provided satisfactory scholastic progress is maintained. Applications are due April 1. For more information and application forms, call (212) 596-6221.

AICPA has announced the 1997-98 Scholarships for Minority Accounting Students. This program supports minority accounting students at the undergraduate level and in several specific graduate programs. Applications are due July 1 and can be obtained by contacting Debra Kerby, accounting convener for the Business and Accountancy Division, Brewer Hall 12.

A \$500 scholarship is available for a second-semester junior Missouri resident majoring in education. The Missouri Omicron chapter of Alpha Delta Kappa International Honorary Sorority for Women Educators is awarding it based on both need and GPA. The deadline to apply is March 28. For more information, contact the Financial Aid Office, McClain Hall 103.

The March 15 University League meeting will feature guest speaker Marlow Ediger, professor emeritus of education. Ediger will present a tour of the Holy Lands at 10 a.m. in the SUB Spanish Room. Brunch will be served for \$3.85. For reservations, call Amy Huston, 627-9624. Fall '97: NEW Elementary Russian video-based course. Check it out before fall registration begins: March 24, 7 p.m., Ophelia Parrish 116. For more information, call Faith Beane at 785-4006.

ON CAMPUS

10 MONDAY
6 p.m.- "Is the Church Obsolete?", Ekklesia, SUB 5
8 p.m.-Faculty voice recital featuring Thomas Hueber, associate professor of music, and Nancy Hueber, accompanist, SUB Activities Room

11 TUESDAY
3 p.m.- "The Media and the Damage Done: Substance Abuse, Rock and Roll and the Rise of Celebrity Journalism," presented by Rolling Stone Senior Editor David Fricke, SUB Activities Room

12 WEDNESDAY
noon-1 p.m.- "In Child's Sickness and in Child's Health," a University Wellness Committee event, SUB Governors' Room 12:30-1:30 p.m.- "Do I Need Malpractice Insurance?," a Faculty Development Lunch Series presentation, SUB Spanish Room
-Reception for Yinfu Ma, 1996 Educator of the Year, SUB Conference Room

1 p.m.-Baseball double header vs. Quincy (Ill.) University, baseball field
7 p.m.-Living with Aids by Rae Lewis-Thornton, SUB Activities Room

13 THURSDAY
7:30 a.m.-5:30 p.m.-Discovery Toy presentation, Child Development Center; also March 14, 7:30 p.m.-Lyceum Series presents the State Ballet of Missouri with the St. Joseph Symphony, Baldwin Auditorium

14 FRIDAY
7 p.m.-Reading by Adrian Korpel, applied physicist at the University of Iowa, Used Books and Unicomms

-SAB FilmFest, Baldwin Hall Little Theatre
15 SATURDAY
9 a.m.-3 p.m.-VITA tax assistance program, Barnett Hall 202C; see Notes.

8 p.m.-Distinguished Gentleman, SUB Down Under
16 SUNDAY
noon-Men's tennis vs. University of Indianapolis

1997 UNDERGRADUATE RESEARCH SYMPOSIUM

FRIDAY, MARCH 14 STUDENT UNION 8 A.M.-5:15 P.M.

Truman State University's 10th Annual Undergraduate Research Symposium will be Friday, March 14 in the Student Union. More than 150 presentations will be made from 8 a.m. to 5:15 p.m. during concurrent sessions. Papers include oral presentations, post sessions and demonstrations.

The Undergraduate Research Symposium showcases student involvement and the diversity of research on campus. It is truly an interdisciplinary educational forum.

Students, faculty and staff are invited to attend any of the Symposium presentations.

*Denotes member(s) of the group making the presentation.

SESSION A GOVERNORS' ROOM

8 a.m. Development of a Rapid Assay Technique for Detecting Urinary Pteridine Levels for Monitoring Cancer, **Tim Busenhardt** *Yinfa Ma, mentor*

8:15 a.m. Spectroscopic Studies of Co(acac) in a Room-Temperature Molten Salt, **Molly Delanty*** and **Michael Wyzlic**, *Michael Ortwerth, mentor*

8:30 a.m. Self-Assembled Monolayers of N-alkylthiols on Ag Nanoparticles, **Jordan A. Freie** and **Brian D. Reiss**, *Griff Freeman, mentor*

8:45 a.m. Exploration of the Mechanism of Synthesis of Alkanethiol Coated Ag Nanoparticles, **Brian Reiss**, *Griff Freeman, mentor*

9 a.m. Conception of Ionically Bonded Composite NLO Films and Preliminary Research Results, **Cory A. Geise**, *Dana Delaware and Steven Keller (UMC), mentors*

9:30 a.m. Preparation of Thin Film Deposition System for Experimental Use, **Adrienne Anderson**, *Maria Di Stefano, mentor*

9:45 a.m. Jewels (Joules) of Time, **Anne Beshears*** and **J. Andrew Upchurch**, *Peter Rolnick, mentor*

10 a.m. Using Inexpensive Gamma-Ray Spectrometry for Experimental Verification of Special Relativity, **James L. Bopp**, *Kenneth Hahn, mentor*

10:15 a.m. Investigations of Solutions of the Classical Skyrme Model Which Do Not Have Radial Symmetry, **Gerald J. Good**, *Peter Rolnick, mentor*

10:30 a.m. Applications of the Skyrme Model to the Quantum Hall Effect, **Darren Glosemeyer**, *Peter Rolnick, mentor*

11 a.m. A New Method for the Determination of Zinc in Serum using HPCE, **Aaron Cassely** and **Sheila Meyer***, *Yinfa Ma, mentor*

11:15 a.m. Separation and Detection of Free and Bound Metal Ions Using Capillary Electrophoresis Coupled with Direct Current Plasma, **Jason A. Gruenhagen**, *Yinfa Ma and David McCurdy, mentors*

11:30 a.m. Gravimetric Analysis of Nickel Using Microwave Digestion, **Rachel A. Morgan**, *Griffith Freeman, mentor*

11:45 a.m. Self Assembly and Electrochemistry of 1,1'-Bridged-2,2'-Di-pyridium Amphiphiles, **Janette Powers**, *Dean A. Van Galen, mentor*

1:30 p.m. Solution-Based Electrocalyzed Reduction of Artemisinin Using D3B, **Garrett Slaton**, *Dean A. Van Galen, mentor*

1:45 p.m. Efficient Genetic Algorithms as Methods for Supervised Learning in Artificial Neural Networks, **Adrienne J. Anderson**, *Tane Ray, mentor*

2 p.m. The "Fine Structure" of a Damped, Driven Harmonic Oscillator, **Mark J. Pecaut** and **Jennifer A. Wilcox**, *Kenneth Hahn, mentor*

2:30 p.m. Visualizing the Human Form: Art and Anatomy in Enlightenment England, **Erin M. Loos**, *Philip Wilson, mentor*

3 p.m. Nonlinear Oscillations of Floating Buoys, **Paul Koski**, *Ian M. Lindevald, mentor*

3:15 p.m. The Bell-Kochen-Specker Theorem in Four and Eight Dimensions, **Jonathan Morris**, *Eduardo Velasco, mentor*

3:30 p.m. The Construction of a Laser Diode System, **Mark Pecaut**, *Maria Di Stefano, mentor*

3:45 p.m. Lattice Gas Simulations of Two-Dimensional Flow, **Aleksey Zimin**, *Eduardo Velasco, mentor*

4:15 p.m. Determinants of Health Promotion Behaviors in the Rural Elderly, **Sandra S. Aguillon**, *Ranjita Misra, mentor*

4:30 p.m. Comparison of Stairmaster and Treadmill Exercise at Equivalent Ratings of Perceived Exertion, **Calneet H. Balas**, **Lori M. Cox**, and **Shari Smith**, *James E. Heimdal and Jerry L. Mayhew, mentors*

4:45 p.m. The Role of Social Physique Anxiety and Other Variables in Predicting Eating Behaviors in College Students, **Lori Cox**, *Christopher Lantz and Jerry Mayhew, mentors*

5 p.m. Gender Differences in Eating Disorders and Cognitive Perceptual Variables Among College Students, **Theresa Duffy**, *Ranjita Misra, mentor*

5:15 p.m. Comparison of Softball Bat Swing Speed to Grip Strength and Forearm Cross-Sectional Area, **Drew Giardina**, **Heather Leslie**, and **Leslie Raridon**, *Dan Zimmer, Ian Lindevald and Jerry Mayhew, mentors*

5:30 p.m. Development of a Formula to Predict the Volume of the Pectoralis Major Muscle, **Liz Hopkins**, **Roman Allen**, and **Javier Cargol**, *Fontaine Piper and Jerry Mayhew, mentors*

SESSION F

ACTIVITIES ROOM

POSTER SESSIONS & DEMONSTRATIONS

Assay for Chlamydomonas Phototaxis, **John S. Alexander**, David Howard, mentor

Gender Differences in Perceived Guilt, **Melinda Braband***, **Hope Wallis**, and **Christy Wilson**, Michele Breault, mentor

Effects of MGBG on Mitochondrial Respiration and ATP Levels in Digitonin-Permeabilized PC12 Cells, **Sara E. Brokaw**, Cynthia L. Cooper, mentor

Genomic DNA Analysis Using HPLC, **Jill Butler**, Dana Delaware, mentor

The Synthesis and Characterization of Bis(N-methylbenzohydroxamato-O,O')copper (II) Salts, **Jill Butler**, Pam New, University of Central Oklahoma, mentor

Phosphorylation of Amino Acids in Chlamydomonas dysneim, **Heloise Chenelot**, David Howard, mentor

Understanding Botanical Structure Through Illustration: An Interdisciplinary Approach **Bradford L. Day**, Jeffrey M. Osborn, mentor

A Comparison of Collaborative Practice Arrangements and Prescriptive Authority for Advanced Practice Nurses in the States of Missouri, Iowa, and Kansas, **Heidi Holdeman**, Rebecca Payne McClanahan, mentor

DNA Fingerprint Analysis of Southern Flying Squirrels, Glaucomys volans, **Kenna Johnson*** and **Christy Geiger**, Susan Crowson and Scott Ellis, mentors

Enter the Magic Kingdom: Using Computers in Speech-Language Therapy, **Carrie Kamp**, **Lisa Odorizzi**, **Melissa Schudel**, **Amy Sparks**, and **Jen Walz**, Paula S. Cochran, mentor

SESSION B ALUMNI ROOM

8 a.m. The Competitive Relationship Between the Perennial Cardaria draba and the Annual Lepidium virginicum, **Maria Conley**, Steven Carroll, mentor

8:15 a.m. DNA Fingerprint Analysis of the Southern Flying Squirrel, Glaucomys volans, **Christy Geiger*** and **Kenna Johnson**, Susan Crowson and Scott Ellis, mentors

8:30 a.m. Non-Random Mating in a Population of Soldier Beetles, Chauliognathus pennsylvanicus: Evidence from Field Observations and Mate Choice Experiments, **Daniel Hemmann**, **Joanna Tucker**, and **Shelly Russell**, Patrick Ross, mentor

9 a.m. Comparative Peridium and Spore Morphology in Bird's Nest Fungi (Nidulariaceae) and its Relation to Spore Dispersal Mechanisms, **Betty Jo Jeffers**, Jeffrey M. Osborn, mentor

9:30 a.m. Anther and Pollen Development in the American Lotus (Nelumbo lutea), **Sarah S. Kreunen**, Jeffrey M. Osborn, mentor

9:45 a.m. Aerodynamic Features of Saccate Pollen: Evolutionary Implications for Wind-Pollinated Plants, **Ryan T. McWilliams**, Jeffrey M. Osborn and Ian M. Lindevald, mentors

10 a.m. Pollen Morphology and Development in Water Starworts (Callitricheaceae), **Ranessa L. Cooper**, Jeffrey M. Osborn, mentor

10:15 a.m. Regulation of Calcium Dependent Flagellar Dominance by a Protein Phosphatase in Chlamydomonas, **Michael E. Watson Jr.**, David Howard, mentor

10:30 a.m. Identification of Suppressor Genes in Segregation Distortion (SD) Males of the Species Drosophila melanogaster through P Element Mutagenesis, **Thomas M. Lancaster**, Janna McLean, mentor

11 a.m. Body Condition Score and Backfat Measurement in Cattle, **Lisa Brokaw**, Glenn Wehner, mentor

11:15 a.m. Farmers' Age, Growth and Productivity Relationships: The Case of Northeast Missouri Farmers, **Chris Gibson*** and **Emily Dombek**, Paul W. Armah, mentor

11:30 a.m. Mineral Fluxes from Non-estrus to Estrus in Beef Cows, **Libby Ottiger*** and **Philip Briscoe**, Glenn Wehner, mentor

11:45 a.m. Comparison of Bovine Body Weight Obtained through a Variety of Methods, **Tracy A. Snider**, Glenn R. Wehner, mentor

1:30 p.m. Harry Laughlin's Crusade to Eradicate the Feeble-minded: Eugenics and Sterilization in Early 20th-Century America, **Joshua P. Kesterson**, Philip K. Wilson, mentor

1:45 p.m. Selection of Host Fungal Stromata by a Mycophagous Fly, **Rachel Pawlitz**, Thomas Bultman, mentor

2 p.m. The Use of Cemetery Records to Investigate Historical Trends in Male and Female Survivorship Curves in Adair County, **Tysen Petre**, Patrick Ross, mentor

2:15 p.m. P-element Mutation and mRNA Analysis of Sterile Drosophila melanogaster, **Walter Roensch**, Janna McLean, mentor

2:30 p.m. Mitochondrial Oxygen Consumption in Cold Acclimated Animals, **Kathy K. Smock**, Michael G. Tannenbaum, mentor

3 p.m. Effect of Smoothing on Significance of Activation Foci in fMR Images, **Ellen J. O'Connell**, Terrence S. Early (University of Texas Medical Branch at Galveston) and Jeffrey M. Osborn, mentors

3:15 p.m. One World Government, Under Laughlin, with Liberty and Justice for Some: Exploring the Link Between Eugenics and the Internationalist Movement of the 1920's, **Jerritt Farrar**, Philip Wilson, mentor

3:30 p.m. Genetic Diversity in the Resurrection Fern (Pleopeltis polypodioides) in the Southeastern United States, **Andrew Lutz**, Elisabeth A. Hooper, mentor

3:45 p.m. Genetically Manipulating the Population: The Common Goal of Margaret Sanger and Harry Laughlin, **Gretchen Krueger**, Philip Wilson, mentor

4:15 p.m. American Foundations Class: Correlation Papers in American Literature, Art, Music, and History, **Robert Mielke**, mentor

SESSION C ROOMS 2/3

8 a.m. The Effects of Stereotyped Occupations and Gender on Estimates of Wage and Competence, **Jamie Morgan** and **Sara Hill**, Judi Misale, mentor

8:15 a.m. The Effects of Prosecutor Characteristics on Assessment of Reward, Competence and Likability, **Julie Lindstrom** and **Susan Vehige**, Judi Misale, mentor

8:30 a.m. Relationships Between Family Structure, Parental Attachment, and Gender Role Stereotyping, **Kimberly Kerlin**, **Rebekah Oehring**, and **Lisa Roberts**, David Conner, mentor

8:45 a.m. The Effect of Diaphragmatic Training on Respiratory Homeostasis, **Shawn Bergman**, **Linda Gannon**, **Bobbi Hopkins***, and **Brian Yochim***, Fred Shaffer and Jerry Mayhew, mentors

9 a.m. Breathing Effort Disrupts Diaphragmatic Breathing, **Shawn Bergman**, **Bobbi Hopkins**,

Jason Squires*, and **Denise Irwin***, *Fred Shaffer, mentor*

9:30 a.m. Does Inhalation-to-Exhalation Ratio Affect Diaphragmatic Training Outcome?, **Shawn Bergman, Jennifer Wheelehon, Staci Johnson***, and **Brian Yochim***, *Fred Shaffer and Jerry Mayhew, mentors*

9:45 a.m. Indicators of Diaphragmatic Breathing Effort, **Shawn Bergman, Kayla White, Jennifer Carter***, and **Juanita Myles***, *Fred Shaffer, mentor*

10 a.m. Analysis of Search Behavior in a Performance Appraisal Situation, **Danielle Smith***, **Gwen Farrow***, **Aaron Hannah***, **Debbie Drenth, Scott Castro**, and **Jennifer Curtner, Teresa Heckert, mentor**

10:15 a.m. Career Expectations of Freshmen and Seniors, **Hope Wallis, Teresa Heckert, mentor**

10:30 a.m. An Experimental Comparison of African-Americans' and Caucasians' Racist and Sexist Beliefs, **Henrietta A. Vaughn, Judi Misale, mentor**

11 a.m. Psychophysiological Assessment of Overtraining in Division II Collegiate Swimmers: A Season-Long Investigation, **Jennifer D. Frankenberg, Christopher D. Lantz and Jerry L. Mayhew, mentors**

11:15 a.m. Ideal Female Body Build: A Study of Gender Perception, **Kristin Mathews, Holly Jones**, and **Trisha Okuna**, *Jerry Mayhew and Christopher Lantz, mentors*

11:30 a.m. Validation of Equations to Predict Bench Press Strength from Anthropometric Dimensions in Male College Athletes, **Kristin McGuire, Kristin McGinness, Scott Graham**, and **Chris Amick, John Ware and Jerry Mayhew, mentors**

11:45 a.m. Effects of Selected Parameters on Exercise Adherence in Cardiac Rehabilitation Patients, **Sally Skelton and Stephanie Smith, Jerry L. Mayhew and Christopher Lantz, mentors**

1:30 p.m. International Advertising Campaigns, **Michelle Thevil, Debra Cartwright, mentor**

1:45 p.m. Global Information Systems Effect on Marketing, **Holly Venvertloh, Nabil Alghalith, mentor**

2 p.m. Option's Implied Volatility as Indicator of Spot Index, **Paul Lundstrom, Andrew Mun, mentor**

2:15 p.m. Intercultural Communication: The Nonverbal Aspect, **Elaine King, Pyung Han, mentor**

2:45 p.m. Does the Acceptable Level of Saturation in a Suit Vary Across Genders and How Does this Impact an Employer's

First Impression?, **Thomas Bernatow, Mike Shine**, and **Amy Street, Val Larsen, mentor**

3:15 p.m. Is the Degree of Fashionableness Affected by Accessorization?, **Jill Baldwin, Michelle Reynolds**, and **Talia Teer, Val Larsen, mentor**

3:30 p.m. The Tough Business of Money Making, **Jolie Gegg***, **Melissa Johnson**, and **Kim Link***, *Jason Lin, mentor*

3:45 p.m. How do Presidents and Presidential Elections Effect the Stock Market?, **Nate Landsbaum***, **Craig Clark, Jeff Barnum, Brad Busch, Jason Lin, mentor**

4 p.m. Strategic Advantage Through Expert Systems: Japan vs. United States, **Tyrone Fernando** and **Kristi Doyle, Pyung Han, mentor**

4:30 p.m. A Study of the Link Between Odor, Memory, and Emotion, **Daniel Baack, Mark Hatala, mentor**

4:45 p.m. Relations Between Personality and Roommate Conflict, **Aaron Hannah, Mike Mueller, Shauna Masters, Matt Jones, Shari Bibbs**, and **Shawn Bergman, Teresa Heckert, mentor**

5 p.m. Are Female Faculty Treated Differently by Students than Male Faculty?, **Rebecca Schnarre***, **Amy Gulinson***, **Kayla White, Linda Gannon**, and **Sandra Schneider***, *Teresa Heckert, mentor*

5:15 p.m. Creation of a Needs Assessment Questionnaire, **Aaron Hannah***, **Danielle Smith***, **Gwen Farrow***, **Jennifer Curtner, Debbie Drenth**, and **Scott Castro, Teresa Heckert, mentor**

SESSION D CONFERENCE ROOM

8 a.m. The Republic, Brave New World and A Modern Look at Eugenics, **Amy M. DeBaets, Keith Doubt, mentor**

8:15 a.m. The Manifest and Latent Functions of Fraternity Hazing and Ethnic Cleansing: A Comparative Analysis, **Chris Barreca, Keith Doubt, mentor**

8:30 a.m. Maximizing Milosevic: Rational Choice and the Yugoslav Crisis, **Ann Price, Keith Doubt, mentor**

8:45 a.m. Schizophrenia: A Double-voiced Discourse, **Heather Droste, Keith Doubt, mentor**

9 a.m. The Pluses and Minuses of Grades: Playing the Game at Truman State University, **Jay Lins, Robert Graber, mentor**

9:30 a.m. UFO Panel, **Comp. II Class: UFO's, Robert Mielke, mentor**

Effects of Gender Stereotypes on the Rating of Mental Disorder Severity, **Matthew Kliethermes, Terry Palmer, mentor**

Sperm Development in *Drosophila melanogaster*: A Comparative Study, **Gretchen Krueger, Janna McLean, mentor**

Direct Determination of Copper and Lead in Coal Using Electrothermal Vaporization - Direct Current Plasma - AES, **A. R. Mahon and S. C. Ringwald, David L. McCurdy, mentor**

Experiment on *Daphnia magna*, **Megan Malcolm, Nancy Sanders, mentor**

Exploring the Scientific Method with *Daphnia magna*, **Sarah McNeely, Nancy Sanders, mentor**

Analysis of SDS and NaOH on the Bio-Rad Protein Assay, **David Meyer and Heather Morgan, Cynthia Cooper, mentor**

Comparison of Voter Turnouts in the 20th Century, **Tom Moody and Michele Chandler, Donna Cooper Graves, mentor**

A Mathematical Model of M. C. Escher's Snakes, **James Nolan, Todd Hammond, mentor**

Daphnia, An Experimenter's Friend, **Jennifer Payne, Nancy Sanders, mentor**

Computer Modeling of Laser Systems, **Mark Pecaut, David Chyba, mentor**

The Effects of Active Recovery on Clearance Rate of Blood Lactate, **Danielle D. Peterson and Carin Hunt, James Heimdal, mentor**

The Effect of Foot Position on Work and Power Output of a Maximal Power Squat, **Danielle Peterson and Sandra Sumpter, Michael Bird, mentor**

X-ray Crystallographic Studies of Naphthoquinone Anti-Fungal Agents, **Mindy M. Steinger, Anne E. Moody, mentor**

The Formation of α , β -Unsaturated Carbonyl Compounds by Using Anodic Organic Electrochemistry, **Michael Zahra, Dallas New, U of Central Oklahoma, mentor**

PHI ALPHA THETA HISTORY SYMPOSIUM

11 a.m. The Accomplishments of Timbuktu, a Legendary City of Sixteenth Century Africa, **Ryan Christopher Totten**, *Taj Hargey*, mentor

11:15 a.m. British Economic Policy in the Gold Coast, 1884-1914, **T. Kyle Plackemeier**, *John Ramsbottom*, mentor

11:30 a.m. Greed and Goodwill: Portuguese Intervention on the Gold Coast of Africa, **Rena L. Vannoy**, *Taj Hargey*, mentor

11:45 a.m. Words and Worlds, the European Synthesis of the New World in Cartography, **Warren Kasper**, *Robert Cummings*, mentor

1:30 p.m. Argula von Grumbach and Her Use of the Doctrine of the Priesthood of All Believers as a Justification for Her Public Discussion of Religion, **Angela Ellis**, *R. V. Schnucker*, mentor

1:45 p.m. Southern Romanticism: Tying Popular Literature to Cultural Ideals in the Old South, **Jennifer J. Orey**, *Mark Hanley*, mentor

2 p.m. The Many Faces of Lincoln, **Jeffrey Lee Hartnett**, *Mark Hanley*, mentor

2:15 p.m. The Evolution of the Argentine Right, 1900-1946, **Matthew J. Goyer**, *Thomas Zoumaras*, mentor

2:30 p.m. The Fall of Ngo Dinh Diem: The Role of United States Foreign Policy Makers in the Coup of November 1, 1963, **Sean M. Carney**, *Thomas Zoumaras*, mentor

2:45 p.m. Consolidating the Revolution in the North: Republican Response to the New York City Draft Riots of 1863, **Ben Jewell**, *Mark Hanley*, mentor

3:15 p.m. Problems of the Welfare Reform Bill, **Ian Lange**, *Mustafa Sawani*, mentor

3:30 p.m. Quesnay With a Twist, **Adam McKinnie**, *Charles Murray*, mentor

3:45 p.m. Media's Use of Economic Indicators, **Angie Green**, *David Gillette*, mentor

4 p.m. The Ethical Implications of Fetal Tissue Research and Transplantation, **Kelly Barbour**, *David Gruber*, mentor

4:30 p.m. Reasoning Styles and Undergraduate Education, **Keri Wingo**, *Caroline Hernandez*, and **Shirley Arteaga**, *John Ishiyama*, mentor

4:45 p.m. The Effects of Political Culture and Parties on Environmental Policy, **Jacy F. Whitaker**, *Marijke Breuning*, mentor

5 p.m. Causes of Party Fractionalization in Newly Developing Democracies, **C. Michael Arnold**, *John Ishiyama*, mentor

5:15 p.m. Gracchan Initiatives and Their Effect Upon the Equites, **Christopher J. Palo**, *David Christiansen* and *Martha Edwards*, mentors

SESSION E SPANISH ROOM

WORLD CINEMA SYMPOSIUM

8 a.m. Culpability and Truffaut's *Femme Fatale*, **Dawn Citrin**, *Cole Woodcox*, mentor

8:20 a.m. Pain and Joy: Communication and Class in the Films of Mike Leigh, **Jason Clampet**, *Cole Woodcox*, mentor

8:40 a.m. Gender Portrayals in Wim Wender's *Wings of Desire*, **Lisa Kays**, *Cole Woodcox*, mentor

9:15 a.m. Spike Lee's Portrayal of Women: From "Pass the Pussy" to Educated Girl Talk, **Jill Goodheart**, *Cole Woodcox*, mentor

9:35 a.m. Yasujiro Ozu and Time, **Sarah Lucas**, *Cole Woodcox*, mentor

9:55 a.m. The Object to Character Transformation, **Brenda M. Helmbrecht**, *Cole Woodcox*, mentor

10:30 a.m. "Our Town" Lies in New Hampshire, **Suzanne Easley**, *Martha Bartter*, mentor

10:45 a.m. Orality and Textuality in Beowulf, Le Chanson de Roland, and the Cantar de Mio Cid, **Erik Carlson**, *Adam Davis*, mentor

11 a.m. The Effects of the Overcommunicated Society, **Ken Crumpler**, *Closepet Ramesh*, mentor

11:15 a.m. The Generative Morphology of Dr. Seuss, **Jason Davey**, *Adam Davis*, mentor

11:30 a.m. "Whose Text is This?": The Impossibility of Translation, **Rachel E. Herring**, *Jose F. Martin*, mentor

11:45 a.m. The Christianization of England and the Anglo-Saxon Oral Tradition, **Leslie Graff**, *Adam Davis*, mentor

1:30 p.m. A Cry to the Goddess, **Carolina Gonzalez**, *Jose F. Martin*, mentor

1:45 p.m. Adultery in the Classical World, **Heather Tylock**, *David Christiansen*, mentor

2 p.m. "Ready for the Grave Nationally": Harry Laughlin and the House Committee on Immigration and Naturalization, 1920-1928, **Michael Roth**, *Phillip Wilson*, mentor

2:15 p.m. Hurlyburly: Play as Cultural Artifact, **Jason Beckfield**, *John B. Schmor*, mentor

2:30 p.m. Creating Music with Music Technology, **Trisha Audrain**, **Matt Cole**, and **Bridget Munsterman**, *Janice Saffir*, mentor

2:45 p.m. Making Connections Between the Arts: An Interdisciplinary Project, **Matthew Cole**, **Matthew Groves**, **Christina Landers**, **Robert Loseman**, **Allen Posz**, **Joseph Turner**, *John Bohac* and *Warren Gooch*, mentors

ART HISTORY SYMPOSIUM

SPANISH ROOM

3:15 p.m. Observations of Garstang's Categorization, **James Nolan**, *Sara Orel*, *Todd Hammond*, and *Joe Hemmeter*, mentors

3:30 p.m. Walter Gropius and the Bauhaus Design School, **Sara Chabino**, *Julia Delancey*, *Garry Gordon*, and *Sara Orel*, mentors

3:45 p.m. Venetian Architecture in the Paintings of Paolo Veronese, **John Garton**, *Julia Delancey* and *Sara Orel*, mentors

4 p.m. Auguste Rodin: The Essential Antecedent to Modern Sculpture, **Amanda Gibson**, *Sara Orel*, *Julia Delancey*, and *Garry Gordon*, mentors

4:30 p.m. The Portraiture of Vincent van Gogh While in Arles and Saint Remy, **Melanie Hare**, *Sara Orel*, *Julia Delancey*, and *Garry Gordon*, mentors

4:45 p.m. The Vapheio Cups, **Scottie Lynn Shadden**, *Sara Orel*, mentor

5 p.m. (Post)Modernism: An Investigation into Vacuums and Inflatable Bunnies, **Amy L. Venturella**, *Garry Gordon*, *Julia Delancey*, and *Sara Orel*, mentors

5:15 p.m. The Influence of Wassily Kandinsky on the Development of the Russian Avante-Garde, **Lauren C. Weinhold**, *Sara Orel*, *Julia Delancey*, and *Garry Gordon*, mentors

*Denotes member(s) of the group making the presentation.