

The University of Oklahoma
Honors College proudly presents:

*Undergraduate
Research Day*



Saturday,
April 05, 2003

Corridors A, B, & C
Thurman White Forum Building

Participants are listed alphabetically within panels, but may choose the order of presentations among themselves

Session I, 8:30-10:00

Room A2, Business
Chaired by Dr. Carolyn Morgan

- Levi Heard, with Dr. Stan Greil, "Creating Marketing Solutions Through an Improved Contact Management System for Mobile Technology"
- Amy Johnston, with Dr. Pamela Carter, "Electronic Monitoring Policy and Practice: What is Appropriate?"
- Ann Myatt, with Dr. Traci Carte, "The Impact of Red Tape on EIS Implementation Success in the Public and Private Sectors"

Room A3, Health Issues and Policy
Chaired by Dr. Laurette Taylor

- David Antosh, with Dr. Robert Reed, "The Effect of Wages on Nursing Applicants: A "Hands Off" Solution to the Nursing Shortage?"
- Katherine Kalmanek, with Dr. Andrew Gardner, "The Effects of Physical Activity on Functional Performance in Adult Women"
- Kellie Moss, with Ambassador Tibor Nagy, Jr., "HIV/AIDS in Africa: The US Strategy and Possible Implications"
- Alyssa Tinley, with Dr. Ron Duncan, "Traditional Mexican-American Views on Health"

Room A4, Mechanical Engineering
Chaired by Dr. Ajay Agrawal

- Tyler Akagi, with Dr. David Baldwin, "Learning from Failure in Engineering"
- Brian Balcer, with Dr. Feng Lai, "EHD- Enhanced Drying with Multiple Electrodes"
- Andrew Sloan, with Dr. Robert Rennaker II, "Cortical Habituation Responses to Repetitive Sound Stimuli in the Awake Rat"
- Nam Hoang Vu, with Dr. Feng Lai, "Measurement of Thermal Conductivity of Artificial Tissue"

Room A5, Computers
Chaired by Dr. S. Lakshminarayanan

- Scott Coldwell, with Dr. Mark Yeary, "Digital Beamforming"
- Luke Loeffler, with Dr. Mark Yeary, "Particle Filters as a Robust Method for Target"
- Roy Roring, with Dr. Dean Hougen, "An Investigation of the Human-Like Qualities of a Chess Playing Algorithm Based on Reinforcement Learning Methods"
- Jeffrey Starr, with Dr. Qi Cheng, "TeX2Star: A System for Converting TeX documents Into Open Office Format"

Room A6, Art History
Chaired by Dr. Pamela Bradford

- Megan Brown, with Dr. Susan Havens-Caldwell, "Feminist Imagery in Judy Chicago's "The Dinner Party""
- Lacy Jo Burgess, with Dr. Mary Jo Watson, "The Depiction of Women in West Mexican Pre-Colombian Art"
- Bryan Dolin, with Dr. Thomas Mical, "The Apostle of Automatism: Drawings by Roberto Matta 1935-1938"
- Bryan Kendrick, with Dr. Allison Palmer, "Jean Baptist Chardin's Style"

Room B1, Sociology
Chaired by Dr. Trina Hope

- Marc Carns, with Dr. Susan Sharp, "Handgun Control in the United States"
- Miyuki Fukushima, with Dr. Susan Sharp, "'War on Drugs' or 'Unannounced War against Women'?"
- Sarah Hoadley, with Dr. Susan Sharp, "Focus on gender differences as well as the hardships faced by the homeless population both locally and nationwide"
- Cassandra Osteen, with Dr. Susan Sharp, "The Death Penalty in Oklahoma in Relation to the Race of Victims and Perpetrators, 1990-2000"

Room B2, Literary Analysis
Chaired by Dr. Julia Ehrhardt

- Necia Chronister, with Dr. Hester Baer, "Irmgard Keun's New Women: Modernity, Sex, and the Female Workforce"
- Lauren Clodi, with Dr. Lawrence Frank, "The Double Image and the Feminine Role"
- Joshua Edwards, with Dr. Joanna Rapf, "'The Centre and the Circumference': Percy Bysshe Shelley's Response to Thomas Love Peacock"
- Josh Paxton, with Dr. Joanna Rapf, "Blake's Homosexual Inauguration of Heterosexual Love in *The Visions of the Daughters of Albion*"

Room B3, Zoology I
Chaired by Dr. David Durica

- Adrienne Emel, with Dr. Randall Hewes, "Genetic Manipulation of *Drosophila melanogaster*"
- Rahul (Ryan) Patel, with Dr. Randall Hewes, "A modifier screen to identify genes in the dimmed molecular pathway"
- Kathleen Reagan and Ryan Wilkes, with Dr. Randall Hewes, "An exploration into genes that control the levels of neuropeptides in *Drosophila melanogaster*"
- Edward Spencer, with Dr. Randall Hewes, "A gain-of-function screen for neuroendocrine defects in *Drosophila melanogaster*"

Room B4, Zoology II
Chaired by Dr. Regina Sullivan

- Lina Ea, with Dr. Han Wang, "Rhythmic Expression of *clock* during Zebrafish Embryogenesis"
- John Larson Glomset, with Dr. James Thompson, Jr., "Stress Effects on Developmental Stability in *Drosophila*"
- Jason Kesinger, with Dr. Han Wang, "Microarray Analysis of Zebrafish Embryonic Circadian Clocks"
- Matthew Potthoff, with Dr. James Thompson, "Patterns of Locomotion Activity During Hypergravity in Larval *Drosophila melanogaster*"
- Kenneth Reed, with Dr. Don Wilson, "Di I labeling of rat olfactory system neurons during development"

Room B5, International Issues

Chaired by Dr. Mitchell Smith

- Jared Vahe Melkisetian, with Dr. Joshua Landis, "The Rise of the Ba'th in Syria"
- Raven Sealy, with Dr. Robert Cox, "The Phenomenal Lurch of Jean-Marie Le Pen into The 2002 French Presidential Election"
- Jeffrey Smith, with Dr. Robert Cox, "The Future of European Agriculture"
- Samuel Stalcup, with Dr. Joshua Landis, "The Kurdish Republic of Mahabad"

Room C1, Chemistry

Chaired by Dr. Gordon Atkinson

- Shaun Grewal, with Dr. Richard Taylor, "Synthesis of Macrocyclic Complexing Agents Containing Oxygen, Nitrogen, and Sulfur Donor Atoms"
- Rachna Rai, with Dr. Valentin Rybenkov, "Mechanism of Chromosome Condensation Motor, MukBEF"
- Christal Sohl, with Dr. George Richter-Addo, "Nitrosoalkane Binding to Heme Models"

Room C3, Mathematics and Engineering

Chaired by Dr. John Albert

- Mark Branson, with Dr. Andy Miller, "Tabulation of Legendrian Knots by Ambient Isotopy"
- Caroline Cochran, with Dr. K. Muraleetharan, "Development of a Geo-Material Visualization Tool"
- Kathleen Hernandez, with Dr. Alfred Striz, "Finite Element Analysis using ANSYS and FORTRAN codes"
- Justin Thomas, with Dr. Andy Miller, "Reading Continued Fractions from Quadratic Forms"
- Justin Vandy, with Dr. David Miller, "Design and Construction of an Animatronic Puppet"

Room C4, Microbiology

Chaired by Dr. William Ortiz Leduc

- Lauren Hromas, with Dr. John Downard, "Mutational analysis of glycosyl transferase genes in *Myxococcus xanthus*"
- Deepu Madduri, with Dr. Michael McInerney, "Fermentation of inorganic sulfur compounds by thermophilic microorganisms"
- Kassi Martens, with Dr. Marielle Hoefnagels, "Effects of Soil Warming on Mycorrhizal Fungi"
- Julius Dee Odom, with Dr. Michael McInerney, "MEOR: Microbially Enhanced Oil Recovery"
- Amy Ramsey, with Dr. Wayne Elisens, "The Lichen and Bryophyte Collections in the Robert Bebb Herbarium"
- Gary Schooler, with Dr. John Fletcher, "Identification and toxicity testing of a possible breakdown product of PCB degradation"

Session II, 10:15-11:45

Room A1, Zoology III

Chaired by Dr. James Thompson

- Ellen Bolen, with Dr. Doug Mock, "Are nestlings honest?"
- Branda Cannon Gilpin, with Dr. Penny Hopkins, "Retinoid content of Blastemas from Regenerating Limp Buds in the Fiddler Crab, *uca pugilator*"
- Lawrence Oresanya, with Dr. David Durica, "Mapping the genomic structure of the EcR gene"
- Akinkunle Owoso, with Dr. David Durica, "Characterization of A/B EcR isoforms in early limb bud tissues in the fiddler crab, *Uca pugilator*"
- Andrea Parker, with Dr. David Durica, "Monitoring Temporal and Spatial Expression of Four Variants of the RXR Homolog in *Celuca Pugilator*"

Room A2, Zoology IV

Chaired by Dr. Randall Hewes

- Ashley Hollingsworth, with Dr. Regina Sullivan, "Endogenous Opioids & Learned Odor Aversions In Infant Rats: A Behavioral & Chemical Analysis"
- David Wong Lam, with Dr. Richard Broughton, "Population genetics study on a large spring fish, *Gambusia geiseri*"
- Caroline Meston, with Dr. Rosemary Knapp, "The effects of an androgen on female Siamese fighting fish *Betta splendens* behavior and morphology"
- Terri Okotoghaide, with Dr. Regina Sullivan, "Emergence of Fear in Neonatal Rat Pups"
- Courtney Wallace, with Dr. Edith Marsh-Matthews, "The effects of neonate size on mature size in *Gambusia affinis*"

Room A3, Fine Arts I

Chaired by Dr. Melanie Wright

- Molly Baugh, with Dr. Michael Raiber, "An Investigation of the Effects of Guided Self-Evaluation of Video on the Performance of Second-Year String Students"
- Gates Colbert, with Dr. Sally Faulconer, "The Influence of Shape and Gouge on the Pitch, Response and Tone Color of an Oboe Reed"
- Jacob Gerber, with Dr. Abimbola Asojo, "Museum Lighting Design and Lighting Design Research Methodology"
- Megan Phelan, with Dr. Jack Jordan, "Exploring the Combination of Word and Image Through Use of the Letterpress and other Forms of Printmaking"

Room A4, The Novel

Chaired by Dr. Alan Velie

- La Tonya Bradford, with Dr. Daniel Cottom, "Sex, Duty, Guilt, and the Victorian Vampire: A study on Victorian society as represented through the figure of the vampire in literature."
- Craig Eplin, with Dr. Mary Davis, "El Bolivar de Garcia Marquez"
- Lindsey King, with Dr. Doug Watson, "The Autobiographical Aspect of Betty Smith's Novels"
- Adam Lowber, with Dr. Doug Watson, "Don DeLillo and History: A Study on the Concept of History in the Novels of Don DeLillo from *White Noise* the *Body Artist*"
- Brian Whitehead, with Dr. Timothy Murphy, "A Critical Examination of the Relationship Between Culture and Consumption in Utopian Texts"

Room A5, Fine Arts II
Chaired by Dr. Mary Jo Watson

Eileen Chaves, with Dr. Randy Lewis, "First Comes Love"
Laurie Guerra, with Dr. Jeremy Lindberg, "A Choreographic Collaboration"
Hitomi Okumura, with Mr. Chad Smith, "American Puzzle"
Lindy Schmedt, with Mr. Austin Hartel, "Reverb"

Room A6, Anthropology
Chaired by Dr. Paul Minnis

Yuri Kaneko, with Dr. Patricia Gilman, "Pottery and Ethnicity in the Ancient Southern Southwest"
Jennifer Kirkpatrick, with Dr. Lesley Rankin-Hill, "Battling Bioko Bushmeat: The Bushmeat Impact in West Africa"
Robby Robinette, with Dr. Patricia Gilman, "The Use of Projectile Points to Infer Site Function of the Florida Mountain Site in Luna County, New Mexico"
Jeremy Williams, with Dr. Don Wyckoff, "An Analysis of the Lithic and Botanical remains of Site MP7 in Colfax County, New Mexico"

Room B1, Communication and Linguistics
Chaired by Dr. Sandra Ragan

Johanna Best, with Dr. Claude Miller, "The Theory of Image Restoration and the Use of Persuasive Messages"
Andrew McKenzie, with Dr. Ning Yu, "Improving translation with cognitive linguistics"
Michael Sheyahshe-Lell, with Mr. Rob Reynolds, "The *Hasinai* E-Project: An Electronic Interactive Learning Interface for Caddo Language"
Keely Womack, with Dr. Ning Yu, "Metaphor in Popular Music"

Room B2, Political Issues
Chaired by Dr. Margaret Ellis

Bridger Cox, with Dr. Allen Hertzke, "Faith-based initiatives in Oklahoma"
Michael E. Jackson, with Dr. Kenneth Wedel, "Policy Governing Children of Incarcerated parents"
Andrew Patrick LeGrand, with Dr. Catherine John, "Affirmative Action: Are the Implications of Reverse Discrimination Valid?"
Carolyn Lee Pickthorn, with Dr. Gary Copeland, "Seniority in the House: Political Savvy or Career Suicide?"
Dean Spears, "Understanding World Hunger"

Room B4, Chemical Engineering
Chaired by Dr. Lance Lobban

Sarah Clawson, with Dr. Daniel Resasco, "TPO as a method of characterization for single-walled nanotubes and coke on catalysts"
Collin Martin, with Dr. Vadym Soloshonok, "Alkylations of Nickel Complexes: An Approach to the Synthesis of Unnatural Amino Acids"
David Splinter, with Dr. Miguel Bagajewicz, "Energy Efficient Operation of a Crude Distillation Unit"

Room B5, Psychology
Chaired by Dr. Nancy Mergler

Leslie Allison, with Dr. Shane Connelly, "How cognitive and personality attributes might contribute to learning from cases"
Lanitra Berry, with Dr. Carmela Gottesman, "An Inquiry into the Effects of Attention on Spatial Knowledge"
Asher Killian, with Dr. Nicole Campbell, "Sense of Entitlement: Attitudes Towards Education"
Jennifer Seigler, with Dr. Shane Connelly, "Detection of deception in verbal analysis"

Room C1, Environmental Issues
Chaired by Dr. Keith Strevett

Jennifer Coffey, with Dr. Robert Nairn, "Changes in Discharge Water Quality in a Historical Hard Rock Mining Watershed"
Casey Dietrich, with Dr. Randall Kolar, "Optimization of the ADCIRC Hydrodynamic Model on Workstation Clusters"
Marshall McDaniel, with Dr. David Sabatini, "Polymeric Surfactant Modified Mineral Surfaces for Enhanced Absorption of Polar Organic Molecules"
Luke McSpadden, with Dr. Patrick McCann, "Lowering the minimum detection limit of benzene using tunable laser absorption spectroscopy"
Justin Monroe, with Dr. Jeffrey Basara, "Calculation of Land-Surface Albedo for Oklahoma Atmospheric Surface-layer Instrumentation System Super Sites"

Room C3, Electrical and Industrial Engineering
Chaired by Dr. Joseph Havlicek

Teryn Bray, with Dr. Randa Shehab, "Effectiveness of 2-D Views for 6-D Robotics Simulation Maneuvers"
Jun-hyouk Heo and Rudi Ngnepi, with Dr. Philip Yoon, "Design of Household Electricity Consumption Manager Unit"
Jennifer Pittman, with Dr. Randa Shehab, "A Comparison of the Situational Awareness of Air Force E-3 Sentry Pilots and Air Force Security Police"
James Tipton and Esteban Tirado, with Dr. Linda DeBrunner, "Implementation of the Control System for the Semi-Active Vibration Absorber System"
Daniel Walker, with Dr. Robert Schlegel, "Training Schedules for NASA Robotic Systems Operators"

Room C4, American Experiences
Chaired by Dr. Catherine Gudis

Anna Bostwick, with Dr. Benjamin Alpers, "The "Intellectual Diversion" Program: De-Nazification in Oklahoma PW Camps"
Matthew Cox, with Dr. Danney Goble, "Congressman Will Rogers and the Oklahoma Indian Welfare Act"
Trisha Dean, with Dr. Julia Ehrhardt, "Americans: We're All Immigrants Preserving the Legacy"
Keegan Drake, with Dr. David Levy, "Henry Adams and Mark Twain: Opinions of Ulysses Grant"
Kyle Felty, with Dr. Julia Ehrhardt, "Youth of the Nation"
Kellie Moss, with Dr. David Levy, "Fireflies: Mark Twain's Women"

University of Oklahoma Honors College *UNDERGRADUATE RESEARCH DAY*

	<p style="margin: 0;">- Registration -</p> <p style="margin: 0;">Participants and Session Chairs may pick up their registration packets at the registration table.</p> <p style="margin: 0;">Please register at least 10 minutes prior to the beginning of your session.</p>						
ROOM	A2	A3	A4	A5	A6	B1	
Session 1 8:30 am - 10:00 am	Business <i>Chaired By</i> <i>Dr. Carolyn Morgan</i> <i>Associate Dean,</i> <i>Honors College</i>	Health Issues and Policy <i>Chaired By</i> <i>Dr. Laurette Taylor</i> <i>Academic Chair,</i> <i>Health and Sport Sciences</i>	Mechanical Engineering <i>Chaired By</i> <i>Dr. Ajay Agrawal</i> <i>Associate Professor,</i> <i>AME</i>	Computers <i>Chaired By</i> <i>Dr. S.</i> <i>Lakshmivaranan</i> <i>Professor, Computer Science</i>	Art History <i>Chaired by</i> <i>Dr. Pamela Bradford</i> <i>Assitant Professor,</i> <i>Art</i>	Sociology <i>Chaired By</i> <i>Dr. Trina Hope</i> <i>Assistant Professor,</i> <i>Sociology</i>	
	B2	B3	B4	B5	C1	C3	C4
	Literary Analysis <i>Chaired By</i> <i>Dr. Julia Ehrhardt</i> <i>Assistant Professor,</i> <i>Honors</i>	Zoology I <i>Chaired By</i> <i>Dr. David Durica</i> <i>Associate Professor,</i> <i>Zoology</i>	Zoology II <i>Chaired By</i> <i>Dr. Regina Sullivan</i> <i>Professor, Zoology</i>	International Issues <i>Chaired By</i> <i>Dr. Mitchell Smith</i> <i>Assistant Professor,</i> <i>Political Science</i>	Chemistry <i>Chaired By</i> <i>Dr. Gordon Atkinson</i> <i>Professor,</i> <i>Chemistry/Biochem</i>	Mathematics and Engineering <i>Chaired By</i> <i>Dr. John Albert</i> <i>Professor,</i> <i>Mathematics</i>	Microbiology <i>Chaired By</i> <i>Dr. William Ortiz</i> <i>Leduc</i> <i>Associate Professor,</i> <i>Botany/Microbioloty</i>
ROOM	A1	A2	A3	A4	A5	A6	B1
Session 2 10:15 am - 11:45 pm	Zoology III <i>Chaired By</i> <i>Dr. James Thompson</i> <i>Professor, Zoology</i>	Zoology IV <i>Chaired By</i> <i>Dr. Randall Hewes</i> <i>Assistant Professor,</i> <i>Zoology</i>	Fine Arts I <i>Chaired By</i> <i>Dr. Melanie Wright</i> <i>Director, Honors Curriculum</i>	The Novel <i>Chaired By</i> <i>Dr. Alan Velie</i> <i>Professor, English</i>	Fine Arts II <i>Chaired By</i> <i>Dr. Mary Jo Watson</i> <i>Associate Dean,</i> <i>Art</i>	Anthropology <i>Chaired By</i> <i>Dr. Paul Minnis</i> <i>Professor,</i> <i>Anthropology</i>	Communication and Linguistics <i>Chaired By</i> <i>Dr. Sandra Ragan</i> <i>Professor,</i> <i>Communication</i>
	B2	B4	B5	C1	C3	C4	
	Political Issues <i>Chaired By</i> <i>Dr. Margaret Ellis</i> <i>Assistant Professor,</i> <i>Political Science</i>	Chemical Engineering <i>Chaired By</i> <i>Dr. Lance Lobban</i> <i>Professor, Chemical Engineering and Material Science</i>	Psychology <i>Chaired By</i> <i>Nancy Mergler</i> <i>Sr Vice President and Provost</i>	Environmental Issues <i>Chaired By</i> <i>Dr. Keith Strevett</i> <i>Associate Professor,</i> <i>CEES</i>	Electrical and Industrial Engineering <i>Chaired By</i> <i>Dr. Joseph Havlicek</i> <i>Associate Professor,</i> <i>ECE</i>	American Experiences <i>Chaired By</i> <i>Dr. Catherine Gudis</i> <i>Assistant Professor,</i> <i>Honors</i>	

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