

**Wichita State University**  
**11<sup>th</sup> Annual Forum**  
**Undergraduate Research and Creative Activity Forum—URCAF**

*Note: All presentations are in RSC 223*

<b>URCAF - RSC</b>	
9:30 – 12:30	<b>Natural Sci./Eng. Room 223</b>
11:30 – 1:15	<b>Performance/Creative Activity, RSC Shocker Square</b>
1:00 – 3:45	<b>Social Sciences, Room 223</b>
10:00 – 12:00	<b>Viewing Posters (RSC Hallway)</b>
4:00 – 4:30	<b>Awards Room 223</b>

# URCAF ORAL PRESENTATIONS

## URCAF Natural Sciences Session, Moderator – Atul Rai, Business, RSC 223

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9:30	<b>Ryan Brown</b>	Maximizing the Network Lifetime of an NxN Sensor Network Grid
9:45	<b>Lucas Burson</b>	Breadth-First Search Based Data Preservation in Sensor Networks
10:00	<b>Paige Feikert</b>	A Detailed Study of the Nano-Porous Membranes with Applications in the Enhanced Detection of Cardiovascular Biomarker Proteins
10:15	<b>Ziqian Gao</b>	Chemokine Gene Expression Profile in Human Perprosthetic Tissues
10:30	<b>Adon Harris</b>	Apoptosis in Chronic Sinusitis Bone Tissue
10:45	<b>Andrew Hart</b>	Charged Pion Multiplicity Below 1.0 GeV/c from the MIPP Experiment
11:00	<b>Rachel Jacobs</b>	Supramolecular Ruthenium Phthalocynine - Porphyrin and Ruthenium Naphthalocyanine - Porphyrin Complexes as Photosynthetic Energy Harvesting Antenna
11:15	<b>Mary Kellerman</b>	Polymer-Coated Carbon Nanotubes for Enhanced Detection of Biomarkers
11:30	<b>Cierra King</b>	A Case Study on how Structured Exercise Effects Multiple Sclerosis
11:45	<b>Sarah Stallard</b>	Cessna Metal Bond: Flow Improvement Analysis
12:00	<b>Ramon Nola</b>	Synthesis of Donor-Acceptor Thiophene-C60 Derivatives for Organic Solar Cells
12:15	<b>Jarrett Perry</b>	Production of Recombinant Mouse Follicle Stimulating Hormone in Gh3 Cells

## URCAF Exhibition/Performance Session, Moderator, Robert Bulp, Fine Arts Shocker Square (RSC)

11:30	<b>Justin Hall</b>	한국어수집노래, Korean Collection: A Medley Of Korean Pop Songs for Marimba
11:45	<b>Chiyoko Myose</b>	Sojourning
12:00	<b>Nam Le</b>	Another moment to live
12:15	<b>Tim Stone</b>	Colorful Fiction: Exploration the Space Between the Abstraction and Recognition

12:30	<b>Hannah Scott</b>	Wanderlust: Illustrations of the Internal
12:45	<b>Heidi Cruz</b>	Puppets
1:00	<b>Amber Creasser</b>	Tartuffified
1:15	<b>Hannah Carter</b>	Costume and Make-Up Design for Eugene Ionesco's Absurdist Play, The Chairs

**URCAF Social Sciences Session, Moderator William Vanderburgh, Executive Director,  
Office for Faculty Development and Student Success, RSC223**

1:00	<b>Malcolm Johnson</b>	Threats, socialization and attitudes as factors of motivation
1:15	<b>Stevie St.Clair</b>	Alive, but Not Living
1:30	<b>Baylee Cunningham</b>	Democracy, Development, Capitalism and the Ecological Footprint: an Analysis of Indicators, A Global Perspective
1:45	<b>Veronica Ealey Pyles</b>	Eye Movement Desensitization and Reprocessing: An Eye Moving Exploration
2:00	<b>Robert Freeman</b>	Will Depreciation of the Dollar Decrease the US Trade Deficit with China?
2:15	<b>Carolyn Hekele</b>	The Relationship Between Spirituality and Well-Being of Older Adults
2:30	<b>Nicole Lowery</b>	Relationship Between Social Support and Well-Being of Older Adults
2:45	<b>Megan Pauly</b>	Greensburg & Sustainable Corporate Partnerships
3:00	<b>Jennifer Rafter</b>	The Effect of Poverty on Older Adults
3:15	<b>Shelby Batt</b>	Racial Difference: Spirituality and Social Support Among Elderly White and African Americans
3:30	<b>Vincent Tafolla</b>	Cognitive Performance and Physical Activity Among Older Adults in Kansas

**URCAF Poster Presentations (First Floor RSC Hallways)**

UPSE1	<b>Timothy Eberl</b>	Isolation and Characterization of Microbes from Hot Lake, WA
UPSE2	<b>Caitlin Farrington</b>	Development of Quantitative PCR Analysis for pGC LH-receptor mRNA
UPSE3	<b>Tyler Foster</b>	Lithofacies, Stratigraphic Architecture, and Controls on Alluvial Fan

## Deposits

UPSE4	<b>Shina Hutchinson</b>	Studies on the Outer Membrane Usher Cooc from Enterotoxigenic E. Coli.
UPSE5	<b>Benjamin Knoblauch</b>	Common Firewall Approach to Aviation Network Architecture
UPSE6	<b>Ashley Lida-Venegas</b>	Toward Understanding the Physical Basis of Interactions Between Cmg2 And Collage
UPSE7	<b>Daniel Mettman</b>	Optical and Singlet Oxygen Studies on Dipyrromethane and Azadipyrromethane Photosensitizers as Potential Photodynamic Therapy Agents
UPSE8	<b>Aditi Pasupulati</b>	Header Compression with Nat and Packet Inspection
UPSE9	<b>Nguyen Pham</b>	Model Complexes for Nickel Superoxide Dismutase
UPSE10	<b>Pie Pichetsurnthorn</b>	Nanosensor for Detecting Trace Pesticides in Water
UPSE11	<b>Zachary Quick</b>	Herbivore Diversity Alters Different Fitness Components of Helianthus Maximilia
UPSE12	<b>Teal Scott</b>	Designing New Class of Ultra Sensitive Biosensors with Polymer Vesicles
UPSE13	<b>Roxanne Adeline Uy</b>	OXP and OXC: Spectral, Computational, And ITC Studies Of Anion Binding
UPSE14	<b>Rana Zayed</b>	Aligned Heterogeneous Polymer/Carbon Nanofibers for Biomolecule Detection
UPSS1	<b>KymberlyBirkner</b>	Loneliness In Old Age: How It Affects The Well-Being Of Elderly Adults
UPSS2	<b>Erin Haag</b>	An Examination of a Positive Support System for Older Adults
UPSS3	<b>Sean Hess</b>	Quality of Life, Nutrition, and Respiratory Health in Older Adults
UPSS4	<b>Jennifer Lasley</b>	Different Health Status Between Caucasian and African American Older Adults
UPSS5	<b>Hollie Reinhart</b>	Incentive Programs and Employee Behavior
UPSS6	<b>Brooke Simms Roberson</b>	Relationship Between Financial Problems and Well-Being of Older Adults
UPSS7	<b>Sarah Smart</b>	Different Spirituality and Social Support Between White and African American Older Adults
UPSS8	<b>Meagan Waltner</b>	Spirituality, Physical Functioning, and Depression Among Older Adults in Kansas