



2013 UURAF Award Winners

Congratulations to the 2013 UURAF Award Winners. Approximately 545 undergraduate students participated in this year's Forum. First Place Award recipients receive \$100 each. Grand Prize recipients receive \$500 each.

Grand Prize Winners:

- **Humanities, Social Sciences, & Communication Arts & Sciences:** Susie Sonnenschein for SEXUAL DIMORPHISM IN THE PREFRONTAL CORTEX DURING PUBERTY IN RATS. Faculty Mentor: Cheryl Sisk
- **Science, Mathematics, & Engineering:** Ari Walter for HISTOLOGICAL AND MOLECULAR PROFILE OF TFAP2A KNOCKOUT EMBRYOS REVEAL CRITICAL FUNCTION IN SKIN DEVELOPMENT. Faculty Mentor: Brian Schutte

ARTS & LETTERS

Category	Type	Student(s)	Project
Graphic Design, Section 1	Poster	Jill Zelenski	INTERACTIVE WATER CYCLE
Graphic Design, Section 2	Poster	Savanna Boutwell	LIFE & EARTH SCIENCES
Humanities & Performing Arts, Section 1	Oral	Milan Griffes	GREEK MUSICAL NOTATION
Humanities & Performing Arts, Section 2	Oral	Craig Pearson, Truman Silvasi	NEUROSCIENCE OF READING: FMRI SHOWS HEIGHTENED BRAIN ACTIVATION IN CLOSE READING OF JANE AUSTEN
Humanities & Performing Arts, Section 1	Poster	Peter Martino	DOLLHOUSE
Humanities & Performing Arts, Section 2	Poster	Christine Scales	PARTICIPATORY MEMORY
Linguistics, Languages & Speech, Section 1	Poster	Bridget Molnar, Sara Krebs, Kathleen Moon, Christina Nguyen	TEMPORAL CHARACTERISTICS OF SPEECH TO CHILDREN WITH COCHLEAR IMPLANTS
Linguistics, Languages & Speech, Section 2	Poster	John Sheets, Kyle Latack	SLEEPING-BAG AS A BAG FOR SLEEPING OR A BAG THAT IS SLEEPING? HOW NATIVE AND NON-NATIVE SPEAKERS USE PROSODY TO DISAMBIGUATE COMPOUNDS AND PHRASES

Linguistics, Languages & Speech, Section 3	Poster	Kait Ayres	SPEECH MOTOR ADAPTATION TO AUDITORY PERTURBATION IN CHILDREN WHO DO AND DO NOT STUTTER
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AGRICULTURE, FOOD, & ENVIRONMENTAL SCIENCES

Category	Type	Student(s)	Project
Agriculture & Animal Science, Section 1	Poster	Shelby Goodwin	FLIGHT BEHAVIOR AND SUCCESSFUL LANDINGS OF LAYING HENS HOUSED IN AVIARY SYSTEMS WITH LITTER
Agriculture & Animal Science, Section 2	Poster	Ashley Leach	OPTIMIZING BAIT FOR MONITORING THE INVASIVE PEST, SPOTTED WING DROSOPHILA (DROSOPHILA SUZUKII MATSUMURA)
Agriculture & Animal Science, Section 3	Poster	Stephan Diljak	EFFECTS OF PLATING CONDITIONS ON ZEBRAFISH EMBRYONIC FIBROBLASTS
Agriculture & Animal Science, Section 4	Poster	Shelby Tackett	DEVELOPMENT OF A FARM TO CONSUMER TRACEABILITY MODEL
Agriculture & Animal Science, Section 5	Poster	Nicole Martinec, Caelah Doerr, Erika First, Ashley Rogers, Krysten Trottier	EFFECT OF CHIP SCRAPS ON STARTER PIG GROWTH
Agriculture & Animal Science, Section 1	Oral	Benjamin Bailey, Ryan Guysky, Chelsey Klein, John Peleman, Paveenuch Sritragu	ANTIBIOTICS: THE CONNECTION BETWEEN POLICY AND FACT
Agriculture & Animal Science, Section 2	Oral	Roya Oliai	THE ROLE AND USE OF MODEL SYSTEMS TO STUDY HUMAN PREIMPLANTATION EMBRYOS
Environmental Science & Natural Resources, Section 1	Poster	Kimberly Ferguson	TROPISM RESPONSES AND GROWTH PATTERNS OF WIND TREATED PINUS CONTORTA DOUGLAS VAR. LATIFOLIA

Environmental Science & Natural Resources, Section 2	Poster	Annette Lundberg, Ruth Adamus, Mathieu Gervais, Riley Ravary	ECTOPARASITIC ACTIVITY IN INCUBATING BIRDS
Environmental Science & Natural Resources, Section 1	Oral	Nicole Zokvic	EPIZOOTIOLOGY OF EMERGENT FLAVOBACTERIA IN GREAT LAKES CHINOOK SALMON (<i>ONCORHYNCHUS TSHAWYTSCHA</i>) AND HATCHERY WATERWAYS
Health, Food & Wellness, Section 1	Poster	Deanna Phelan	RELIABILITY AND VALIDITY OF THREE PHYSICAL MEASUREMENTS DURING PREGNANCY AND POSTPARTUM
Health, Food & Wellness, Section 2	Poster	Adriel Egner	POORER AEROBIC FITNESS PREDICTS REDUCED INTEGRITY OF COGNITION ACROSS MULTIPLE MEMORY SYSTEMS
Health, Food & Wellness, Section 3	Poster	Mitchell Rozman	THE IMPACT OF AGING ON PERIPHERAL BLOOD FLOW
Health, Food & Wellness, Section 1	Oral	Kayle Noble	EXPLORING AGE-RELATED CHANGES IN MICROVASCULAR FUNCTION WITH MRI
Health, Food & Wellness, Section 2	Oral	Kristyn Wilhelm, Samantha Belanger	THE EFFECTS OF MULTIPLE CONCUSSIONS ON NEUROCOGNITIVE PERFORMANCE AND SYMPTOM CLUSTERS IN HIGH SCHOOL AND COLLEGIATE STUDENT-ATHLETES

COMMUNICATION ARTS & SCIENCES

Category	Type	Student(s)	Project
Communication Arts & Sciences, Section 1	Poster	Stephanie Schmidt, Jesse Nagel	ONE SMALL STEP FOR (A) MAN: FUNCTION WORD REDUCTION AND ACOUSTIC AMBIGUITY
Communication Arts & Sciences, Section 2	Poster	Jason Pearson	AN ANALYSIS OF THE ELEMENTS OF PERSUASION IN COACHES' LOCKER ROOM SPEECHES
Communication Arts & Sciences, Section 1	Oral	<u>TIE</u> (1) Marisa Hamel, Kathleen McLain	(1) PHOTOGRAPHIC EXHIBITION AND BOOK: AN EXTRAORDINARY DOCUMENT OF OUR WORLD AND DETROIT RESURGENT

		(2) Julia Grippe, Danielle Turcotte	(2) REVISITING VERGER'S DAHOMEY: A PHOTOGRAPHIC CONTRAST
Digital Media, Section 1	Oral	Antonio Revard, Dan Sosnowski, Benjamin Szymczak	FEATHER FEUD
Digital Media, Section 2	Oral	Simon Schuster	SUSTAINING STATE

EDUCATION

Category	Type	Student(s)	Project
Education, Section 1	Poster	Augusta Morrison, Emily Ekdom	ART FOR THE BLIND
Education, Section 1	Oral	Andrea Grafstein, Alayna Washington	MOTIVATIONAL FACTORS TOWARDS SCHOOL FOR CULTURALLY DIVERSE STUDENTS: INTEREST AND RESPECT

ENGINEERING, COMPUTER SCIENCE, & MATHEMATICS

Category	Type	Student(s)	Project
Engineering, Computer Science, & Mathematics, Section 1	Poster	Tianyu Zhao	EMBEDDED CONTROL SYSTEM OF A TAIL ASSISTED JUMPING AND RUNNING ROBOT
Engineering, Computer Science, & Mathematics, Section 2	Poster	Charles Chen	NOVEL ALKALINE HYDROGEN PEROXIDE PRETREATMENT ENHANCES THE ENZYMATIC DIGESTIBILITY OF WOODY BIOMASS SUBSTRATES UNDER AMBIENT CONDITION
Engineering, Computer Science, & Mathematics, Section 3	Poster	Kaitlin Ward	DETROIT ZOOLOGICAL SOCIETY WASTE TO ENERGY FEASIBILITY STUDY
Engineering, Computer Science, & Mathematics,	Poster	Jennifer Jones	WHAT MAKES GODIVA CHOCOLATE SUPERIOR TO OTHER TYPES OF CHOCOLATE?

Section 4			
Engineering, Computer Science, & Mathematics, Section 1	Oral	Jennifer Andrews	QUANTITATIVE ESTIMATION OF LEACHED IRON FROM METAL-NITROGEN-CARBON BASED CATALYST USING UV-VIS SPECTROSCOPY

NATURAL & PHYSICAL SCIENCES

Category	Type	Student(s)	Project
Biochemistry & Molecular Biology, Section 1	Poster	Keenan Noyes	REGION SPECIFIC PROTEIN REFINEMENT USING STEERED MOLECULAR DYNAMICS
Biochemistry & Molecular Biology, Section 2	Poster	Brandon Wilkinson	THE EFFECTS OF PU.1 AND CEBP/β ON CHROMATIN ARCHITECTURE AND LINEAGE-DETERMINING CELL DIFFERENTIATION
Biochemistry & Molecular Biology, Section 3	Poster	TIE (1) Yen-Nhu Nguyen (2) Patrick Ropp	(1) IDENTIFICATION OF CAROTENOID PATHWAY REGULATORS THROUGH QUANTITATIVE TRAIT LOCI AND GENOME WIDE ASSOCIATION STUDIES (2) EXPRESSION OF A FERULATE MONOLIGNOL TRANSFERASE IN ARABIDOPSIS AND CLONING OF A CINNAMOYLCOENZYME A REDUCTASE RNAI CONSTRUCT
Biochemistry & Molecular Biology, Section 1	Oral	Irina Pushel	USING FLY EYES TO UNDERSTAND A TUMOR SUPPRESSOR: KEY MUTATIONS IN DROSOPHILA RBF1 REVEAL FUNCTIONAL SIGNIFICANCE IN FLY EYE DEVELOPMENT
Cell Biology, Genetics, & Genomics, Section 1	Poster	Shohei Ueno	EYA1 SEQUENCING IN A PATIENT WITH SUSPECTED BOR SYNDROME
Cell Biology, Genetics, & Genomics, Section 2	Poster	Ashley D. Sample	MIXED-LINEAGE KINASES IN GLIOMA VIABILITY
Cell Biology, Genetics, & Genomics,	Poster	Irene Li	FREE-FATTY ACID EFFECTS ON LIVER CANCER METASTASIS: ACCELERATING THE EPITHELIAL-MESENCHYMAL

Section 3			TRANSITION
Cell Biology, Genetics, & Genomics, Section 1	Oral	Sean Misek	MLK3 SIGNALING IN GLIOMA INVASION
Microbiology, Immunology & Infectious Disease, Section 1	Poster	Jessica Hunter	A DEGENERATE VIBRIO CHOLERAEE DIGUANYLATE CYCLASE REGULATES BIOFILM FORMATION AND MOTILITY THROUGH SYNTHESIS OF CYCLIC DI-GMP
Microbiology, Immunology & Infectious Disease, Section 2	Poster	Michael Paxhia	USING LIPOPOLYSACCHARIDE TRUNCATION MUTANTS TO INVESTIGATE SURFACE CHARACTERISTICS AND METAL REDUCTION IN GEOBACTER SULFURREDUCTENS
Microbiology, Immunology & Infectious Disease, Section 3	Poster	Daniel Mitchell	RELATIONSHIP BETWEEN FITNESS AND INVASION IN LONG-TERM E. COLI EVOLUTION POPULATIONS
Microbiology, Immunology & Infectious Disease, Section 4	Poster	Ari Walter	HISTOLOGICAL AND MOLECULAR PROFILE OF TFAP2A KNOCKOUT EMBRYOS REVEAL CRITICAL FUNCTION IN SKIN DEVELOPMENT
Physical Sciences, Section 1	Poster	Emily Movsesian	MELTING OF THE EARTH'S MANTLE: A MODELING APPROACH WITH RESEARCH AND EDUCATIONAL APPLICATIONS
Physical Sciences, Section 2	Poster	Sultan Qiblawi	DIVALENT COPPER TRANS-1,4-CYCLOHEXANEDICARBOXYLATE COORDINATION POLYMERS WITH ISOMERIC DIPYRIDYLAMIDE LIGANDS: NEW PILLARED AND SELF-PENETRATED BINODAL NETWORKS

SOCIAL SCIENCES

Category	Type	Student(s)	Project
History, Political Science, & Economics, Section 1	Oral	Cody Schulz	GERMAN ENERGY SECURITY: POSSIBILITIES FOR THE FUTURE
History, Political Science, &	Poster	Michelle LeBlanc	PLANNING POLICIES AND REGULATIONS THAT CAN

Economics, Section 1			REDUCE THE PRACTICE OF PRIVATE PROPERTY ABANDONMENT IN THE UNITED STATES
Psychology, Section 1	Poster	Susie Sonnenschein	SEXUAL DIMORPHISM IN THE PREFRONTAL CORTEX DURING PUBERTY IN RATS
Psychology, Section 2	Poster	Neelima Wagley	THE EFFECT OF LANGUAGE BACKGROUND ON THE PERCEPTION OF TONAL GROUPINGS
Psychology, Section 3	Poster	Shelby Parks	AN INVESTIGATION INTO THE RELATIONSHIPS BETWEEN TEMPERAMENT AND PEER INTERACTIONS IN PRESCHOOL CHILDREN
Psychology, Section 4	Poster	Monique Daignault	CAN KNOWING WHEN A CHANGE WILL OCCUR HELP YOU DETECT IT?
Social Science: General, Section 1	Poster	Arika Starostanko, Lauren Prainito	ASSOCIATIONS BETWEEN CAREGIVERS' LEVEL OF EDUCATION AND THEIR USE OF MENTAL STATE LANGUAGE WITH YOUNG CHILDREN
Social Science: General, Section 2	Poster	Hiba Naseem, Ashley Martin	FOLLOW MY LEAD: IMPORTANCE OF PARENTAL RESPONSIVENESS TO CHILD'S INITIATIONS
Social Science: General, Section 3	Poster	Kaitlin Scharra	EXPLORING THE USE OF PREHISTORIC STONE BOX GRAVES AND THE ROLE OF BURIAL TREATMENTS: A REANALYSIS OF THE EAST ST. LOUIS STONE QUARRY SITE CEMETERY (CA AD 1300)
Social Science: General, Section 1	Oral	Abigail Wroble	PROBATION/PAROLE OFFICERS ROLE IN RECOVERY: THE IMPORTANCE OF COMMUNICATION
Social Science: General, Section 2	Oral	Justin Cochran, Torin Kulhanek	THE INFLUENCE OF SOCIAL CONTEXT ON THE FREQUENCY AND OUTCOME OF CONFLICT
Social Work, Section 1	Poster	Amanda Freis	RECENT VICTIMIZATION, MENTAL HEALTH, AND SOCIAL WORK NEEDS OF WOMEN IN JAIL