

## 2014 UURAF Award Winners

Congratulations to the 2014 UURAF Award Winners. Approximately 660 undergraduate students participated in this year's Forum.

First Place Award recipients will receive \$100 each. Grand Prize recipients will receive \$500 each.

### Grand Prize Winners:

- **Humanities, Social Sciences, & Communication Arts & Sciences:** Mari Isa for FRACTURE INITIATION AND PROPAGATION IN PEDIATRIC BLUNT CRANIAL TRAUMA. Research Mentor: Todd Fenton
- **Science, Mathematics, & Engineering:** Joshua Drost for MODELING FORCES APPLIED BY THE INDEX FINGER OVER NORMAL AND REDUCED RANGES OF MOTION. Research Mentor: Tamara Reid Bush

### ARTS & LETTERS

Category	Type	Student(s)	Project
Graphic Design-Section 1	Poster	Courtney Russ	Bakeram: A Hot Yoga Application
Graphic Design-Section 2	Poster	Erica Tedesco	EasyGrocery: An Interactive Shopping Tool
Graphic Design-Section 3	Poster	Brean Pavlinak	Working Hard and Playing Hard: An Application for Gamers Integrating Experience and Play
Humanities & Performing Arts – Section 1	Poster	Alyssa Onder	The Rise of the Female Artisan Freelancer
Humanities & Performing Arts – Section 2	Poster	Sarah Fagerman	Starving the Arts: Starving for the Arts
Humanities and Performing Arts – Section 1	Oral	Emily LaPlante	Theatre Engine: Using Mobile Devices for “Magical” Interaction During Live Performance
Humanities and Performing Arts – Section 2	Oral	Jane Sylvester	The Miller and the Brook: Distinctions Between Man and Feminized Nature in Schubert’s Song Cycle Die schöne Müllerin (1823)
Linguistics, Languages and Speech-Section 1	Poster	Alyssa Webster, Heidi Little, Kathryn Verplanck	Quotatives and Age-Grading in Philadelphia
Linguistics, Languages and Speech-Section 1	Oral	Craig Pearson, Inez Garzaniti, Kristen Mayfield	Functional Regions Activated by Literary Reading: An FMRI Study

### AGRICULTURE, FOOD & ENVIRONMENTAL SCIENCES

Category	Type	Student(s)	Project
Agriculture & Animal Science-Section 1	Poster	Katherine Demeuse	Determining the Mechanism of Colorado Potato Beetle ( <i>Leptinotarsa decemlineata</i> ) Resistance to Neonicotinoid Insecticides by Real Time PCR
Agriculture & Animal Science-Section 2	Poster	Aleksa Sedlak	Increased Susceptibility of Skin From Herda (Hereditary Equine Regional Dermal Asthenia) Horses To Collagenase Degradation –A Mechanistic Explanation For Solar-Induced Lesions
Agriculture & Animal Science-Section 3	Poster	Marc Wingo	Seasonal Patterns of Male Stickelback ( <i>Gastrosteus</i> Spp.) Courtship and Nesting Activity
Agriculture & Animal Science-Section 1	Oral	Lauren Kustasz	The Effect of Soil PH on Habitat Preference of <i>Centruroides Sculpturatus</i>
Agriculture & Animal Science-Section 2	Oral	Benjamin Bailey	The Effect of Interspecific Competition in Relation to Risk Assessment Ability of <i>Centruroides Sculpturatus</i>

<b>Environmental Sci &amp; Natural Resources-Section 1</b>	Poster	Levi Storks	Calling In The Face of Danger: Risk-Taking and Condition in the Gray Tree Frog ( <i>Hyla Versicolor</i> )
<b>Environmental Sci &amp; Natural Resources-Section 2</b>	Poster	Haley Celovsky	Nutrient and Contaminant Detention Time Through a Dam: Model Development
<b>Environmental Sci &amp; Natural Resources-Section 3</b>	Poster	Laura Bailey	Understanding Current and Historical Hydrology of the Boardman-Charlevoix and Jordan Watersheds
<b>Environmental Sci &amp; Natural Resources-Section 1</b>	Oral	Sydney Ruhala	Regional Analysis of the Spatial and Temporal Patterns of Environmental HG Loadings in the Great Lakes
<b>Environmental Sci &amp; Natural Resources-Section 2</b>	Oral	Bethany Myers	The Prevalence of Heartworm Infestation of Coyotes ( <i>Canis Latrans</i> ) in Michigan
<b>Health, Food &amp; Wellness-Section 1</b>	Poster	Hayley Bierhalter	Examination of Intestinal Changes in Pre and Post-Menopausal Mouse Models
<b>Health, Food &amp; Wellness-Section 2</b>	Poster	Todd Buckingham, Max Gustin	Lifestyle Attitudes During Pregnancy
<b>Health, Food &amp; Wellness-Section 3</b>	Poster	Lestella Bell	Bridging the Knowledge Gap: Does Biological HIV Knowledge Acquisition in the Classroom Correlate With Increased HIV Knowledge?
<b>Health, Food &amp; Wellness-Section 4</b>	Poster	Michelle Wormser	Symptoms Experienced by Cancer Patients Treated With Oral Agents: A Qualitative Analysis
<b>Health, Food &amp; Wellness-Section 1</b>	Oral	Cassandra Green	Validity of Objective and Subjective Physical Activity Measurement During Pregnancy
<b>Health, Food &amp; Wellness-Section 2</b>	Oral	Karalyn Kiessling	Pregnancy Interval, Birth Order, and Self-Reported Anemia—MI Prams 2009-11

## BUSINESS

Category	Type	Student(s)	Project
<b>Business-Section 1</b>	Poster	Abbey Neerken	Development of a United States Tourism Competitiveness Index
<b>Business-Section 2</b>	Poster	Jiyeun Kim	Employee Delight in the Hospitality Business

## COMMUNICATION ARTS & SCIENCES

Category	Type	Student(s)	Project
<b>Communication Arts &amp; Sciences-Section 1</b>	Poster	Amanda DePelsMaeker, Mary Flynn, Elaine Foster	Individual Differences in the Perception of Temporal Information in Speech
<b>Communication Arts &amp; Sciences-Section 2</b>	Poster	Benedict Hilado, Peter Burroughs, Annette Kim, Tyler Powers, Justin Tokarski	Can Dancing With a Virtual Agent In a Video Game Reduce Racial Prejudice?
<b>Communication Arts &amp; Sciences-Section 1</b>	Oral	Anna Myers, Nolly Dakroury, Ian Siporin, Laura Swanson	Crisis Intervention: Raising Awareness of Help For Survivors of Sexual Assault
<b>Digital Media-Section 1</b>	Oral	Kirk Mason	Spare Parts: Human Organ Trafficking in Bangladesh
<b>Digital Media-Section 2</b>	Oral	Heather Hartmann, Jack	"Art of Art" Documentary

		Burk, Alex Hennessy, Sarah Hopkins, DeShaun Leonard, Spencer Taylor	
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## EDUCATION

Category	Type	Student(s)	Project
Education-Section 1	Poster	Alexandra Sanchez	More Than Just Practicing Skills: Emotional Engagement in Middle School Mathematics
Education-Section 2	Poster	Michele Weston	Examining the Impact of Question Surface Features on Students' Answers to Constructed Response Questions in Biology

## ENGINEERING, COMPUTER SCIENCE, & MATHEMATICS

Category	Type	Student(s)	Project
Engineering-Section 1	Poster	Shaurya Srivastava	Electrochemical Characterization of INF $\gamma$ and IP-10 by Cyclic Voltammetry
Engineering-Section 2	Poster	Joshua Drost	Modeling Forces Applied by the Index Finger Over Normal and Reduced Ranges of Motion
Engineering-Section 3	Poster	Rebecca Carlson, Sarah Thorwall	Design of Functionally Asymmetric Sirnas
Engineering-Section 4	Poster	Caleb Andrews	Preparation and Characterization of Hydrophilic Polysiloxanes

## NATURAL & PHYSICAL SCIENCES

Category	Type	Student(s)	Project
Biochemistry & Molecular Biology-Section 1	Poster	Joseph Uebler	Identification and Characterization of Genes Involved in Scopolamine Biosynthesis in <i>Atropa Belladonna</i>
Biochemistry & Molecular Biology-Section 2	Poster	Keenan Noyes	Direction-Specific Computational Protein Refinement Via Steered Molecular Dynamics and "Frankenstein" Structure Analysis
Biochemistry & Molecular Biology-Section 3	Poster	Julianne Streukens	Elucidate the Role of the Instability Element of RB Proteins in Determination of Cell Fate
Cell Biology, Genetics, & Genomics-Section 1	Poster	Irene Li	Free-Fatty Acid Induced Metastatic Pathways in Liver Cancer
Cell Biology, Genetics, & Genomics-Section 2	Poster	Zachary Penrod	Regulated Turnover of Retinoblastoma Protein: Structural Determinants and Governance Through Phosphorylation
Cell Biology, Genetics, & Genomics-Section 3	Poster	Donald Zeolla	Skeletal Muscle Chloride Channel 1 Expression in Transgenic Mouse Models of Kennedy's Disease
Cell Biology, Genetics, & Genomics-Section 4	Poster	Kyle Brasier	Preliminary Characterization of the UGT Gene Family in <i>Stevia Rebaudiana</i>
Cell Biology, Genetics, & Genomics-Section 5	Poster	Alec Bonifer	Genomic Characterization of <i>Xanthomonas Oryzae</i> Pv. <i>Oryzae</i> Resistance to Bactericide Bismethiazol
Cell Biology, Genetics, & Genomics-Section 1	Oral	Lauren Newhouse	Implications of Purvate Kinase Isoform Expression on Metabolism of Pancreatic Cancer
Microbiology, Immunology & Infectious Disease-Section 1	Poster	Mike Rizzo	Exploring the Relationship Between the Diet and Butyrate-Producing Community Structure Inside the Animal Gut Microbiome

<b>Microbiology, Immunology &amp; Infectious Disease, Section 2</b>	Poster	Kasey Pryg	Using Magnetic Nanoparticles to Extract Pathogenic Bacteria
<b>Microbiology, Immunology &amp; Infectious Disease, Section 3</b>	Poster	Clare Laut	Acidic Exposure and Enhanced Colonization in Group B Streptococcus
<b>Microbiology, Immunology &amp; Infectious Disease, Section 1</b>	Oral	Emily Davidson	High Fat Diets Containing Eicosapentanoic Acid or Oleic Acid and Increase B-Cell IGA Production
<b>Physical Sciences, Section 1</b>	Poster	Michaelyn Lux, Kelsey Longe	Electrocatalytic Hydrogenation of Bio-Oil Components: A Foray Into Alternative Energy
<b>Physical Sciences, Section 2</b>	Poster	Brandon Stone	Steric Effects on the Structure of Copper Malonate Coordination Polymers Containing 1,3-DI(4-Pyridyl)Propane
<b>Toxicology, Section 1</b>	Poster	Zachary DeRade	The Role of Parkin in Neurotoxicant-Mediated Microtubule Destabilization in a Neuronal Cell Line and Mouse Brain

## SOCIAL SCIENCES

Category	Type	Student(s)	Project
<b>History, Political Science and Economics-Section 1</b>	Oral	<b>TIE</b> (A) Rachel Yales (B) Cody Schulz	(A) Enslaved Prisoners of Saint-Domingue: Origins and Destinations (B) European Energy Security: Historical Shifts, Current Progress, and Future Trends
<b>Psychology-Section 1</b>	Poster	Monique Daignault	Is a Change More Detectable If It Can Be Predicted?
<b>Psychology-Section 2</b>	Poster	Stephen Buskirk, Hannah Reed	Survival Processing Advantage and Memory
<b>Psychology-Section 3</b>	Poster	Ashley Gorman, Chelsea Johnson	The Effect of Emotional Valence on False Memory
<b>Psychology-Section 4</b>	Poster	Jennifer Ellis, Hans Schroder	Increasing Negative Emotions in Psychopathic Undergraduates: An Electrophysiological Investigation
<b>Psychology-Section 1</b>	Oral	Lindsay Rye	Behavioral Regulation and Aggression in Kindergarteners
<b>Social Science: General-Section 1</b>	Poster	Vincent Szlachtun, Sydney Dudley, Patrick Mulrenin, John Neidhart	An Exploratory Analysis on Foreign Born Athletes' Competitiveness With U.S. Born Players in Major League Baseball: Focusing on Players from the Dominican Republic and Venezuela
<b>Social Science: General-Section 2</b>	Poster	Jacqueline Pitone	Early Childhood Educators' Beliefs and Practices For Teaching Letter Knowledge to Preschoolers
<b>Social Science: General-Section 3</b>	Poster	Kyla Cools	Ceramics at the Aztalan Site: Results of the 2013 MSU Excavations
<b>Social Science: General-Section 4</b>	Poster	Mari Isa	Fracture Initiation and Propagation in Pediatric Blunt Cranial Trauma
<b>Social Science: General-Section 5</b>	Poster	Malysa Suarez	Mapping Recidivism for Women Offenders From Differing Neighborhoods Throughout Wayne County, Michigan
<b>Social Science: General-Section 1</b>	Oral	Kelsey Carpenter	Cranial Fracture Patterns in Pediatric Deaths: Homicides and Accidents
<b>Social Science: General-Section 2</b>	Oral	Justine Brunett	Community Connections: Highlighting the Social Aspects of the Integration Process for Resettled Refugees
<b>Social Work-Section 1</b>	Poster	Carmen Hillier	The Role of Childhood Adverse Events With Suicide Attempts: An Examination of Incarcerated Women

<b>Social Work-Section 2</b>	Poster	Marianne Caddy	Caregiver Role and Patient Use of Telehealth Resources
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