### Symposium on Undergraduate Research & Creative Expression

**APRIL 14, 2015**  
**IOWA STATE UNIVERSITY MEMORIAL UNION**

### Schedule

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<th>Time</th>
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<td>8:30 – 9:00</td>
<td>Registration</td>
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| 9:00 – 9:30   | Opening                                           | Welcome Michael Lyons, Coordinator for Undergraduate Research University Honors Program, Iowa State University  
Opening Remarks Ann Smiley-Oyen, Associate Professor, Kinesiology Iowa State University |
| 9:30 – 10:45  | Presentation Session I                           |                                                                        |
| **SESSION 1.A** | **PLANT BIOLOGY**                                |                                                                        |
| Room 3505     | Moderator: Kevin Roe, Natural Resource Ecology and Management |                                                                        |

1.A.1 A Malaria Type Effector in the Soybean Cyst Nematode Modulates the Plant Immune System  
*Danielle Andrews*, Biology  
Mentor: *Thomas Baum*, Plant Pathology and Microbiology

1.A.2 The Effects of Cover Crop Termination on Subsequent Corn Seedling Growth  
*Abigail Peterson*, Agronomy  
Mentor: *Tom Kaspar*, National Lab for Agriculture and the Environment

1.A.3 Oxygen Demand of Red Flour Beetles in Sorghum  
*Christian Miller*, Biosystems Engineering  
Mentor: *Thomas Brumm*, Plant Pathology and Microbiology
SESSION 1.B CHEMICAL ENGINEERING
Room 3512 Moderator: Rebecca Cademartiri, Materials Science and Engineering

1.B.1 Increasing *Escherichia coli* Membrane Robustness to Long-chain Fatty Acids
*Will Black*, Chemical Engineering
Mentor: *Zaigao Tan*, Chemical and Biological Engineering

1.B.2 Using Biomaterials to Reduce Fibrous Encapsulation of Biomedical Implants
*Catherine Le Denmat*, Chemical Engineering
Mentor: *Kaitlin Bratlie*, Materials Science and Engineering

1.B.3 T4 Phage Drying on Paper
*Christopher Lim*, Chemical Engineering
Mentor: *Rebecca Cademartiri*, Materials Science and Engineering

1.B.4 Mesophorous Block Copolymer Membrane
*Sittinon Nuethong*, Chemical/Biological Engineering
Mentor: *Sri Harsha Kalluru*, Chemical and Biological Engineering

SESSION 1.C PSYCHOLOGY AND SOCIOLOGY
Room 3534 Moderator: Stephanie Madon, Psychology

1.C.1 Values and Attitude Change
*Ban Joo Ang*, Psychology
Mentor: *Kevin Blankenship*, Psychology

1.C.2 The 50 Shades of Social Rejection: The Role of Rejection-Sensitivity in Everyday Exclusion Experiences
*Alison Miller*, Psychology
Mentor: *Zlatan Krizan*, Psychology

1.C.3 In the Line of Fire: Post-Traumatic Stress Effects on Officers Involved in Shootings
*Logan Godar*, Criminal Justice/Sociology
Mentor: *Matt Delisi*, Sociology

1.C.4 Suspect Suggestibility During Police Interrogations
*Brooke Kindelsperger*, Psychology
Mentor: *Stephanie Madon*, Psychology
SESSION 1.D  BIOCHEMISTRY
Room 3538  Moderator: Olga Zabotina, Biochemistry/Biophysics and Molecular Biology

1.D.1  Metals Binding by Methanobactin from *Methylosinus trichosporium* OB3b and *Methylocystis strain* SB2
Nathalie Fuentes, Biochemistry
Mentor: Alan Dispirito, Biochemistry/Biophysics and Molecular Biology

1.D.2  Reduction of Cell Wall Methylation Affects Plant Growth and Stress Resistance
Lauran Chambers, Biochemistry
Mentor: Olga Zabotina, Biochemistry/Biophysics and Molecular Biology

SESSION 1.E  ARCHITECTURE
Room 3558  Moderator: Ross Adams, Architecture

1.E.1  Atmospheres: Explication and Excess
Matthew Darmour-Paul, Architecture
Mentor: Ross Adams, Architecture

1.E.2  Rethinking the Way We Live: A Case for Passive House Retrofitting
Jackie Katcher, Architecture/Environmental Studies
Mentor: Ulrike Passe, Architecture

1.E.3  The Interlock House Environmental Control and Alert System
Kelsey Fleenor, Architecture
Mentor: Shan He, Architecture

SESSION 1.F  PLANTS: CULTURAL AND ENVIRONMENTAL IMPACTS
Room 3219  Moderator: David Green, Ecology, Evolution and Organismal Biology

1.F.1  Dropped

1.F.2  Yerba Mate in Argentina: A Cultural Reflection and Projection through a Popular Pastime
Christina Goeddel, Chemical Engineering/Spanish
Mentor: Marta Vessoni-De-Lence, World Languages and Cultures

1.F.3  Comparison of Two Wetlands for Differences in Composition due to Age of Seeding
Elliott White, Biology/Animal Ecology
Mentor: William Crumpton, Ecology, Evolution and Organismal Biology
10:45 – 11:00  Break & Refreshments, Pioneer Room

11:00 - 11:50  PRESENTATION SESSION II

SESSION 2.A  APPLIED ENGINEERING
Room 3505  Moderator: Sunday Tim, Agriculture and Biosystems Engineering

2.A.1  Determination of Stimulation Focality in Heterogeneous Head Models during Transcranial Magnetic Stimulation (TMS)
Erik Lee, Electrical Engineering
Mentor: Ravi Hadimani, Electrical and Computer Engineering

2.A.2  Using Virtual Reality to Visualize the 3D Pathline of Individual Particles in a Double Screw Mixer
Teshia Robinson, Mechanical Engineering
Mentor: Theodore Heindel, Mechanical Engineering

2.A.3  Calibration of Safety Performance Functions for the Michigan Department of Transportation
Rochelle Starrett, Civil Engineering
Mentor: Peter Savolainen, Civil, Construction and Environmental Engineering

SESSION 2.B  GENDER STUDIES
Room 3512  Moderator: Christiana Langenberg, English

2.B.1  The Dangers of Feminine Political Narratives
Krista Klocke, Speech/Communication
Mentor: Denise Oles-Acevedo, English

2.B.2  Insult to Injury: Transgender / Translucent
Sarah Hohnstrater, English/Women and Gender Studies
Mentor: Christiana Langenberg, English

SESSION 2.C  MEDIATED MUTAGENESIS
Room 3534  Moderator: Maura McGrail, Genetics/Development and Cell Biology

2.C.1  CRISPR/Cas9 Mediated Mutagenesis in Danio rerio
Cassie Bullard, Biology
Mentor: Jeff Essner, Genetics, Development and Cell Biology

2.C.2  VCP Mediated Mutagenesis in Danio rerio to Model Motor Neuron Degeneration in ALS
Stephen Jones, Biology
Mentor: Jeff Trimarchi, Genetics, Development and Cell Biology
SESSION 2.D  GEOLOGICAL AND ATMOSPHERIC SCIENCES
Room 3538  Moderator: William Simpkins, Geological and Atmospheric Sciences

2.D.1  Exploring Periostracum as a Potential Environmental Proxy in Arctica islandica
Katie Luzier, Geology
Mentor: Alan Wanamaker, Geological and Atmospheric Sciences

2.D.2  Experimental Recreation of the Sub-Glacial System; An Analysis of Hold Time Versus Strengthening to Shed Light on the Mechanics of Stick-Slip Ice Streams
Ian McBrearty, Geology
Mentor: Luke Zaet, Geological and Atmospheric Sciences

2.D.3  Contemporary and Future Extreme Winter Precipitation in the Upper Mississippi River Basin
Natalie LaLuzerne, Meteorology
Mentor: William Gutowski, Geological and Atmospheric Sciences

SESSION 2.E  LANGUAGE EDUCATION
Room 3558  Moderator: John M. Levis, English

2.E.1  Exploring Strategy Effectiveness for English Language Learners through Scholarly Engagement
Lauren Perila, Early Child Education
Mentor: Katherine Richardson Bruna, School of Education

2.E.2  Chinese ESL Learners' Pragmatic Competence in the Usage of Genuine Compliments, Ironic Compliments, and Ironic Insults
Jessica Sparr, Linguistics
Mentor: Barbara Schwarte, English

2.E.3  Speech Recognition Application for Pronunciation Training
Ariana Mora, Psychology
Mentor: Horabail Venkatagiri, Liberal Arts and Sciences Cross Disciplinary Studies

SESSION 2.F  HISTORY/POLITICAL SCIENCE
Room 3219  Moderator: TBA

2.F.1  NATO Membership and the Democratization of Post-Communist Countries
M’lyn Crawford, Political Science/History
Mentor: Amy Erica Smith, Political Science

2.F.2  Remembering Alaska's Forgotten Campaign
Lea Johannsen, History
Mentor: Charles M. Dobbs, History (Emeritus)
11:50 – 12: 10 Break & Refreshments featuring FOCUS Artists

12:10 – 1:00 PRESENTATION SESSION III

SESSION 3.A  MECHANICAL/INDUSTRIAL ENGINEERING
Room 3505  Moderator: Theodore Heindel, Mechanical Engineering

3.A.1  Probe Effects on the Local Gas Holdup Conditions in a Fluidized Bed
Emily Whitemarsh, Mechanical Engineering
Mentor: Theodore Heindel, Mechanical Engineering

3.A.2  Understanding Fast Pyrolysis of Biomass through Laser-Induced Fluorescence
Alex Tietz, Mechanical Engineering
Mentor: Terrence Meyer, Mechanical Engineering

3.A.3  NdFeB Permanent Magnet Recycling Through Liquid Metal Extraction
Anthony Pribble, Mechanical Engineering
Mentor: Frank Peters, Industrial and Manufacturing Systems Engineering

SESSION 3.B  CIVIL ENGINEERING
Room 3512  Moderator: Simon Laflamme, Civil, Construction and Environmental Engineering

3.B.1  Municipal Solid Waste Disposal and Landfill Alternatives in the United States
Brandon Movall, Civil Engineering
Mentor: Merry Rankin, Facilities Planning and Management

3.B.2  Evaluating Tall Wind Turbine Tower Designs
Chris Levandowski, Civil Engineering
Mentor: Sri Sritharan, Civil, Construction and Environment Engineering

3.B.3  Biocementation Method for Soil Improvement
Yatong Zeng, Civil Engineering
Mentor: Jian Chu, Civil, Construction and Environmental Engineering

SESSION 3.C  SOLAR AND AEROSPACE ENGINEERING
Room 3534  Moderator: Jonathan Regele, Aerospace Engineering

3.C.1  Energy Efficient Residential Dehumidification by Solar Driven Liquid Desiccant Systems
Ryan Everly, Mechanical Engineering, Esdras Murillo, Electrical Engineering
Mentor: Ulrike Passe, Architecture
3.C.2  Path Planning with Power Schedules for Solar-Powered Ground Robot  
Nathaniel Kingry, Kishan Patel, Aerospace Engineering  
Mentor: Ran Dai, Aerospace Engineering

3.C.3  Quadcopter Modification for Grabbing Tasks  
Mannoj Chandrasekaran, Mechanical Engineering  
Mentor: Sourabh Bhattacharya, Mechanical Engineering

SESSION 3.D  MICROBIOLOGY AND GENETICS  
Room 3538  Moderator: F. Chris Minion, Veterinary Microbiology and Preventive Medicine

3.D.1  Investigation of Multidrug Resistance Protein 1 Involvement in Phosphoramidemustard-induced Ovotoxicity  
Aysha Majeed, Microbiology/Genetics  
Mentor: Aileen Keating, Animal Science

3.D.2  Identification of Mutations in the HIV-1 gp41 Subunit Associated with Neutralization Resistance  
Miah Blomquist, Microbiology/Genetics  
Mentor: Michael Cho, Biomedical Sciences

3.D.3  Identification of Mycoplasma spp. using MALDI-TOF Mass Spectrometry  
Aric McDaniel, Microbiology/Genetics  
Mentor: Joann Kinyon, Veterinary Diagnostic Laboratory

1:00 – 1:10  Break & Refreshments, Pioneer Room

1:10 – 2:00  PRESENTATION SESSION IV

SESSION 4.A  DESIGN AND COMMUNITY  
Room 3505  Moderator: Diane Al Shihabi, Interior Design

4.A.1  Historic Preservation of Interiors: Collaborating with Public to Rehabilitate Sigourney Carnegie Library  
Albert Li, Amanda Hills, Hannah Bixby, Interior Design  
Mentor: Diane Al Shihabi, Interior Design

4.A.2  Chicago Lakeside; A Study of a Reclaimed Brownfield Site for a New Urban Community  
Rose Tashjian, Alex Robinson, Landscape Architecture  
Mentor: Carl Rogers, Landscape Architecture

Joseph Danielsen, Interior Design
Mentor: Diane Al Shihabi, Interior Design

SESSION 4.B  GENE EXPRESSION
Room 3512  Moderator: Jeff Trimarchi, Genetics, Development and Cell Biology

4.B.1 Gene Expression Analysis During Retinal Ganglion Cell Development
Andrea Wester, Biology
Mentor: Jeff Trimarchi, Genetics, Development and Cell Biology

4.B.2 Understanding the Function of OPTN Gene in Neurons using TALEN Facilitated Mutagenesis
Alicia Manning, Biology
Mentor: Jeff Trimarchi, Genetics, Development and Cell Biology

4.B.3 Understanding the Function of SIGMAR1 Gene in Neurons Using TALEN-mediated Mutagenesis
Madelyn Mullally, Biology
Mentor: Jeff Trimarchi, Genetics, Development and Cell Biology

SESSION 4.C  MATH AND DATA APPLICATIONS
Room 3534  Moderator: TBA

4.C.1 Programmatic Implementation of an Algorithm Relating Differential Equations and CRNs
Charles Labuzzetta, Math, Adam Hammes, Computer Science, Nyle Sutton, Computer Science/Math
Mentor: Jack Lutz, Computer Science

Xinhang Shen, Materials Engineering
Mentor: Scott Beckman, Materials Science and Engineering

4.C.3 Using the Eclipse IDE to Develop Large-Scale Data Mining Programs in Boa
Sambhav Srirama, Computer Science
Mentor: Hridesh Rajan, Computer Science
SESSION 4.D  SOIL SCIENCE  
Room 3538  Moderator:  Michael Thompson, Agronomy  

4.D.1  The Effect of Soil Organic Matter on Potassium Fixation  
Nathan Smith, Agronomy/Environmental Science  
Mentor:  Michael Thompson, Agronomy  

4.D.2  Novel Strains Isolated from Soil for Cellobiosan Utilization  
Yee Shiean Tan, Chemical Engineering  
Mentor:  Laura Jarboe, Chemical and Biological Engineering  

SESSION 4.E  HONEY BEE BIOLOGY  
Room 3558  Moderator:  Adam Dolezal, Ecology, Evolution and Organismal Biology  

4.E.1  Honey Bee Behaviors and Viruses  
Amber Haritos, Public Service in Agriculture/Animal Ecology  
Mentor:  Amy Toth, Ecology, Evolution and Organismal Biology  

Giselle Narvaez Rivera, Animal Ecology  
Mentor:  Amy Toth, Ecology, Evolution and Organismal Biology  

SESSION 4.F  ANIMAL FOOD PRODUCTION  
Room 3219  Moderator:  Stephanie Hansen, Animal Science  

4.F.1  Evaluation of Perennial Forage Grown as Bioenergy Crops as a Feedstuff for Beef Cattle  
Stephanie Clark, Animal Science  
Mentor:  Stephanie Hansen, Animal Science  

4.F.2  Small-Scale Farmers’ Livelihood in Uganda: Egg Production for Rural Development  
Celize Christy, Global Resource Systems/Animal Science  
Mentor:  Helen Jensen, Economics (College of Agriculture and Life Sciences)  

2:00 – 2:10  Break & Refreshments, Pioneer Room  

2:10 – 3:30  PRESENTATION SESSION V
SESSION 5.A GENETICS
Room 3505 Moderator: Michael Muszynski, Genetics, Development and Cell Biology

5.A.1 An in vitro Model to Investigate the Interactions of Transdifferentiated Mesenchymal Stem Cells with Neural Progenitor Cells
Deborah Lincow, Genetics
Mentor: Don Sakaguchi, Genetics, Development and Cell Biology

5.A.2 Analysis of the Maize Cytokinin Receptor Zea Mays Histidine Kinase-1 Function using Saccharomyces cerevisiae
Anna Rogers, Genetics/Statistics
Mentor: Michael Muszynski, Genetics, Development and Cell Biology

SESSION 5.B ANIMAL BIOLOGY
Room 3512 Moderator: Aileen Keating, Animal Science

5.B.1 Novel Clostridium Species, from the Swine Intestinal Tract
Sarah Azam, Genetics/Psychology
Mentor: Torey Looft, Veterinary Microbiology and Preventive Medicine

5.B.2 A Novel Modification of the Tetrapod Scapula during Development of Turtles with Shell Closing Systems
Kevin Quinteros, Animal Ecology/Biology
Mentor: Fredric Janzen, Ecology, Evolution and Organismal Biology

5.B.3 Characterizing Feed Restriction’s Impact on Biomarkers of Leaky Gut
Erin Nolan, Animal Science
Mentor: Lance Baumgard, Animal Science

5.B.4 The Effects of Nutrition and Mechanical Stress on Social Wasp Development
Frances Hunter, Animal Ecology/Biology
Mentor: Jennifer Jandt, Ecology, Evolution and Organismal Biology

SESSION 5.C KINESIOLOGY AND HEALTH
Room 3534 Moderator: Warren Franke, Kinesiology

5.C.1 Evaluating the Effectiveness of Knee Pads in the Sport of Wrestling
Logan Gushiken, Kinesiology
Mentor: Jason Gillette, Kinesiology

5.C.2 Assessment of Physical Activity Behavior in Adolescents Through a Self-Report Tool
Amanda Bries, Dietetics
Mentor: Greg Welk, Kinesiology
5.C.3 The Influence of Activating versus Relaxing Music on Repetitive Movement and Associated Motor Cortical Activity

*Patrick Frick, Kinesiology*
Mentor: *Elizabeth Stegemoller, Kinesiology*

5.C.4 The Effectiveness of an Online Community of Practice as an Intervention for Childhood Obesity

*Casey DeBoer, Kinesiology*
Mentor: *Spyridoula Vazou, Kinesiology*

**SESSION 5.D**

**X-RAY SCIENCE**

Room 3538

Moderator: Scott Wendt, Center for Nondestructive Evaluation

5.D.1 Using X-ray Diffraction to Determine Stresses

*Ashley McKenna, Rebecca Whitesell, Materials Engineering*
Mentor: *Scott Wendt, Center for Nondestructive Evaluation*

5.D.2 High Precision X-ray CT-scanning of Biological Samples

*Olivia Valley, Materials Engineering, Abigail Collision, Animal Science, Nick Cosentino, Aerospace Engineering, Nicholas Collision, Mechanical Engineering*
Mentor: *Scott Wendt, Center for Nondestructive Evaluation*

**SESSION 5.E**

**COMMUNICATION STUDIES**

Room 3558

Moderator: TBA

5.E.1 Short Film: Nonverbal Communication

*Margaret McGinity, Music/Journalism*
Mentor: *Jeff Ames, Greenlee School of Journalism and Communication*

5.E.2 Social Presence Support between College Students and their Parents: A Comparison of Communication Channels

*Angela Sequeira, Communication*
Mentor: *Kristina Scharp, Psychology*

**SESSION 5.F**

**MECHANICAL AND MATERIALS ENGINEERING**

Room 3219

Moderator: Kristen Constant, Materials Science and Engineering

5.F.1 Surface Roughness of Drivetrain Gears

*Patrick Keep, Mechanical Engineering*
Mentor: *Sriram Sundararajan, Mechanical Engineering*

5.F.2 Polymerization of Diblock Copolymers Containing a Zwitterionic Arginine Moiety

*Catherine Meis, Materials Engineering*
Mentor: *Theresa Reineke, Chemistry, University of Minnesota*
3:30 – 5:00  POSTER PRESENTATION
Gallery, Memorial Union

P.1  Application of Polymer Kinetics and Controlled Self-Assembly in Multi-dimension Nanomaterial Synthesis
James Booze, Materials Engineering
Mentor: Martin Thuo, Materials Science and Engineering

P.2  The Social Stigma of Mental Illness: Negative Perceptions and Misattribution
Trevor Brammer, Psychology
Mentor: Robert Hessling, Psychology

P.3  The Influence of Activating versus Relaxing Music on Repetitive Finger Movement
Alison Brinkman, Kinesiology
Mentor: Elizabeth Stegemoller, Kinesiology

P.4  Effects of Manual Load Carriage on Kinematics of Gait
Mitchell Carlson, Morgan Stonewall, Emma Tilley, Carlee Cutler, Kinesiology
Mentor: Ann Smiley-Oyen, Kinesiology

P.5  Identification of Glial Marker Genes in the Developing Enteric Nervous System
Kendra Clark, Megan Trautmiller, Biology
Mentor: Julie Kuhlman, Genetics, Developmental and Cell Biology

P.6  Finger Tapping and Parkinson's disease: Patient Quality of Life
Jaime Freiburger, Kinesiology
Mentor: Elizabeth Stegemoller, Kinesiology

P.7  The Role of Sustainable Visual Merchandising Practices in Driving Retail Sales and Building Retail Store Loyalty
Xeniya Konika, Apparel, Merchandising, and Design
Mentor: Amrut Sadachar, Apparel, Events and Hospitality Management

P.8  Determining the Effects of Wind Shear Events on the Power Output of Individual Wind Turbines on an Iowa Wind Farm
Samantha Lodge, Meteorology/Environmental Science
Mentor: Eugene S. Takle, Agronomy, Geological and Atmospheric Sciences
P.9 Identification of Mammalian Orthoreovirus Proteins that are Responsible for Downregulation of Hif-1a
Tyler Meseke, Biology/Anthropology
Mentor: Pooja Gupta, Veterinary Microbiology and Preventive Medicine

P.10 Ways to Wing it: Correlation of Wing Shape with Habitat Preferences, Toxicity and Migration in Butterflies
Morgan Muell, Miranda Salsbery, Biology
Mentor: Rhea Waldman, Ecology, Evolution and Organismal Biology

P.11 Barrow and Gilt Vocalizations during a Human Approach Test
Sarah Myers, Animal Science
Mentor: Anna Johnson, Animal Science

P.12 Cell Signaling Mechanisms in Neurodegenerative disease
Madison Partridge, Microbiology, Ashlyn Welder, Biology
Mentor: Vellareddy Anantharam, Biomedical Sciences

P.13 Effects of Singing on Speech in Patients with Parkinson's Disease
Hollie Radig, Kinesiology
Mentor: Elizabeth Stegemoller, Kinesiology

P.14 The Effect of Physical Activity vs. Cognitive Activity in Reaction Time
Olga Riusech, Emily Forsyth, Andrea Garcia, Quintin Smidzik, Kinesiology
Mentor: Ann Smiley-Oyen, Kinesiology

P.15 Examining the Role of the Primary Motor Cortex in Motor Equivalence
Mathew Schmitz, Kinesiology
Mentor: Elizabeth Stegemoller, Kinesiology

P.16 The Gallery Café: An Exploration and Expression of Shape, Form, and Space
Holland Shodeen, Cassie Cook, Interior Design
Mentor: Cigdem Akkurt, Interior Design

P.17 The Effects of Sedentary Activity on Individuals with Parkinson's Disease
Rachel Wille, Kinesiology
Mentor: Elizabeth Stegemoller, Kinesiology
P.18  Eric and Anna Gustafson Residence; Designers Jiani Yao and Xinran Chen
Jiani Yao, Xinran Chen, Interior Design
Mentor: Diane Al Shihabi, Interior Design

P.19  The 10 Most Medically Relevant Mosquito Species in the Midwest, Lucid Key Illustrations
Katherine Zumach, Selah Zaldarriaga, Chelsea Jackson, Shawna Synder, Biological/Pre-Medical Illustration Program
Mentor: Isai Madriz, Entomology

P.20  Magnetostrictive and Magnetoresistance Properties of Thin Film Gd5Si4
Joe Benedict, Electrical Engineering
Mentor: Ravi Hadimani, Electrical and Computer Engineering

P.21  Media Effects of Academic Achievement
Lucy Heiderscheit, Adam Morgan, Psychology
Mentor: Sara Prot, Psychology

3:45 – 5:00  PRESENTATION SESSION VI

SESSION 6.A  DIET AND FOOD SCIENCE
Room 3505  Moderator: Ruth MacDonald, Food Science and Human Nutrition

6.A.1  Development, Acceptability, and Shelf Life of a Gluten-Free Fruit and Whole Grain Snack
Celia Bravard, Food Science
Mentor: Stephanie Clark, Food Science and Human Nutrition/Health Science

6.A.2  Resistant Starch as an Alternative Strategy to Improve Vitamin D Status in Type II Diabetes
Yi Ting Loo, Dietetics
Mentor: Matthew J. Rowling, Food Science and Human Nutrition/Health Science

6.A.3  A Meta-Analysis of Surveys of Public Perceptions toward Genetically Modified Foods in the U.S.
Mikayla Sullivan, Global Resource Systems/Public Service Administration in Agriculture
Mentor: Carmen Bain, Sociology

Shumao Ye, Dietetics
Mentor: Manju Reddy, Food Science and Human Nutrition/Health Science
SESSION 6.B ART APPLICATIONS
Room 3512 Moderator: Jennifer Drinkwater, Integrated Studio Arts

6.B.1 The Shape of Your Life
Corbin Zahrt, Graphic Design
Mentor: April Eisman, Integrated Studio Arts

6.B.2 Study of Light in Art
Riley Eveleth, Integrated Studio Arts
Mentor: Jennifer Drinkwater, Integrated Studio Arts

SESSION 6.C ELECTRICAL AND COMPUTER ENGINEERING
Room 3534 Moderator: Nathan Neihart, Electrical and Computer Engineering

6.C.1 A Computational Vision on Human Emotion
Rohit Zambre, Electrical Engineering
Mentor: Arun Somani, Electrical and Computer Engineering

6.C.2 Continuous Mobile Authentication Using Gestures
Cimore Wright, Computer Engineering
Mentor: Morris Chang, Electrical and Computer Engineering

6.C.3 Video Game Scripting to Enhance Learning.
Garret Meier, Software Engineering
Mentor: Joseph Zambreno, Electrical and Computer Engineering

SESSION 6.D LANDSCAPE ARCHITECTURE AND DESIGN
Room 3538 Moderator: TBA

6.D.1 The Roadscape Project: Understanding Common Places through Design
Henry Herman, Landscape Architecture
Mentor: Michael Martin, Landscape Architecture

6.D.2 The Crowd-sourced Roadscape Project
Emma Lorenz, Landscape Architecture
Mentor: Michael Martin, Landscape Architecture

6.D.3 A Roadscape: Evolution of a Vernacular Design
Krithika Mohan, Landscape Architecture
Mentor: Michael Martin, Landscape Architecture

6.D.4 Design Thinking
Alexandra Vaughan, Samantha Creeger, Industrial Design
Mentor: Seda Yilmaz, Industrial Design
SESSION 6.E   LITERATURE ANALYSIS
Room 3558   Moderator: Susan Yager, English

Cathryn Kelzenberg, Political Science/English
Mentor: David Peterson, Political Science

6.E.2 The Bloodless Spirits Wept: Orpheus's Perpetual Love through Literature and Film
Brenda Tyrrell, English
Mentor: Jeremy Withers, English

6.E.3 Tragedy Recollection, Self and Social, in Waltz with Bashir
Bradley Adams, English
Mentor: Brianna Burke, English

6.E.4 Barbie’s Dream Life: Wine Sold Separately
Beth Trafton, English
Mentor: Christiana Langenberg