The 12th Annual Spring Undergraduate Research Festival

Wednesday, April 20, 2016
4:30pm - 6:30pm

University of Iowa
University Capitol Centre
2nd floor South Atrium
Iowa City, Iowa
This event is hosted by the Iowa Center for Research by Undergraduates.

ICRU promotes undergraduate involvement in research and creative projects at the University of Iowa, serving students, staff, and faculty.

ICRU Director
Bob Kirby
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ICRU Associate Director
Lindsay Marshall
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118 - Jenny Winberg
Leveled Books for Adults with Intellectual or Developmental Disabilities: A Pilot Study
Major(s): Communication Sciences and Disorders & Spanish
Mentor(s): Meredith Saletta (Communication Sciences and Disorders)

120 - Ziling Xia
Celebrity Apologies and Our Celebrity Relationships
Major(s): Nursing
Mentor(s): Perry Howell (Rhetoric)

122 - Jiawen Xu
High Frequency Trading In Commodity Markets
Major(s): Finance, Information Systems and Business Analytics(IS track)
Mentor(s): Qihang Lin (Management Science), N.A. (N.A.)

124 - Hepeng Ye
The role of protein dynamics of Formate Dehydrogenase mutant from Candida boidinii revealed by Kinetic Isotope Effects and crystal structures
Major(s): Chemistry B.S.
Mentor(s): Amnon Kohen (Chemistry)

126 - Angela Zhang
Regulation of neurogenesis through the transcription factors NPAS1 and NPAS3
Major(s): Statistics, Biochemistry
Mentor(s): Jacob Michaelson (Psychiatry)
Brigitte Waldier
*What is this called?: Children’s long-term retention of word forms*
Major(s): Speech and Hearing Sciences
Mentor(s): Karla McGregor (Communication Sciences and Disorders), Katherine Gordon (Communication Sciences and Disorders)

Xiao Wang
*Into Modernity: Political Struggle and Transition during the Late Qing Dynasty*
Major(s): History, International Relations
Mentor(s): Shuang Chen (History)

Laura Wang
*Breaking Down Language Barriers at the International Writing Program*
Major(s): English (Creative Writing), Chinese
Mentor(s): Kathleen Maris (International Writing Program), Natasa Du-rovicova (International Writing Program)

Lauren Werner
*Cortical Mapping with transcranial magnetic stimulation*
Major(s): Athletic Training
Mentor(s): Stacey DeJong (Physical Therapy and Rehabilitation Sciences)

Kelsey Willardson
*Use of dried blood spots to assess prevalence of zoonoses in animal caretakers*
Major(s): Health and Human Physiology
Mentor(s): Christine Petersen (Epidemiology), Angela Toepp (Schneider) (Epidemiology)

Breanna Williams
*Anxiety, Parenting Stress, and Childhood Behavior in Early Motherhood*
Major(s): Psychology
Mentor(s): Michael O’Hara (Department of Psychological And Brain Sciences)

The Spring Undergraduate Research Festival is proud to showcase nearly **100 visual presentations** given by the University of Iowa’s student researchers. Presenters work in over **40 different departments**, representing each of the senior, junior, sophomore, and freshman classes.

**Odd numbered posters will present from 4:30-5:30PM**

**Even numbered posters will present from 5:30-6:30PM**

***Please note that at 5:30, all of the boards will be turned around to show the even numbering and the second hour presenters’ posters***

We hope that you enjoy talking with these outstanding students and will see you again in for the 7th Annual Fall Undergraduate Research Festival!

**Programs with full abstracts are available on the ICRU website.**

Many thanks to the over 100 graduate and professional students and postdocs who have volunteered their time to serve as poster judges for this event.
First Hour Presenters
4:30-5:30PM
(odd numbers only)

1 - Preston Anderson
Lef-1 is Required for Regeneration of Myoepithelial Stem Cells Following Injury
Major(s): Biochemistry, Human Physiology
Mentor(s): John Engelhardt (Anatomy and Cell Biology), Kalpaj Parekh (Cardiothoracic Surgery)

3 - Terryl Bandy
Portable X-ray fluorescence (pXRF) as a field tool for high-resolution global biogeochemical studies
Major(s): Geoscience
Mentor(s): Brad Cramer (Earth and Environmental Sciences)

5 - Carl Beranek
Skin Conductance Response and Gambling Behavior
Major(s): Biomedical Engineering
Mentor(s): William Hedgcock (Marketing)

7 - Lauren Boncosky
Dyadic Mother-Child Book Sharing: Preschool Age Children with Autism
Major(s): Speech and Hearing Science
Mentor(s): Elizabeth Delsandro (Speech and Hearing Science)

9 - Jennifer Chavez-Rivera
Immigration in the United States: The Effects of Attitudes and Migrant Behavior on Enforcement of Immigration Policy
Major(s): Political Science and Ethics Public Policy
Mentor(s): Rene Rocha (Political Science)

11 - Yiwen Chu
Designing Packaging for Products Using CNC Machines
Major(s): 3D design
Mentor(s): Monica Correia (School of Art and Art History)

92 - Tatiana Smith
Contextual Congruency Effect in Object Categorization
Major(s): Psychology
Mentor(s): Ed Wasserman (Psychology)

94 - Matthew Sodoma
Infantile amnesia during Pavlovian fear conditioning in developing rats
Major(s): Psychology, Neurobiology
Mentor(s): Kevin Brown (Psychological and Brain Sciences), John Freeman (Psychological and Brain Sciences)

96 - Robert Specht
Investigating Different Chemical Properties of Ionic Liquids
Major(s): Chemistry
Mentor(s): Scott Shaw (Chemistry), Radhika Anaredy (Chemisty)

98 - Richard Su
The Efficient Implementation of the Total-Variation L1 Primal-Dual Algorithm for 3D Medical Image De-noising
Major(s): Electrical/Computer Engineering, Computer Sci. & Music
Mentor(s): Reinhard Beichel (electrical/computer engineering)

100 - Maja Sunleaf
Curating a Paleobotany Collection
Major(s): Anthropology
Mentor(s): Tiffany Adrain (Earth and Environmental Science)

104 - Spencer Van Dorn
Alyssa Mendenhall
Effects of Aging on Rho-ROCK Gene Expression in Response to Mechanical Stimuli in Human Dermal Fibroblasts
Major(s): Biomedical Engineering
Mentor(s): Edward Sander (Biomedical Engineering)
78 - Madalyn Rasor
Acute and Chronic Biological Effects of Copeptin on Vascular Function in Mice and Humans
Major(s): Human Physiology
Mentor(s): Gary Pierce (Health & Human Physiology)

80 - Eric Ruttenberg
Long-Term Major League Baseball Franchise Optimization
Major(s): Business Analytics and Information Systems
Mentor(s): Jeffery Ohlmann (Management Sciences)

82 - John Sagar
Trending ability of Cardiac Output Measurement by LiDCORapid™ and Transesophageal Echocardiography in an Elective Cardiac Surgery: A Comparison with Thermodilution
Major(s): Human Physiology
Mentor(s): Sudhakar Subramani (Anesthesia)

84 - Matthew Salzburg
Perceived Control and Decision Making
Major(s): Business Analytics and Marketing
Mentor(s): William Hedgcock (Marketing)

86 - Monisa Saravanan
Molecular Effects of Prenatal Stress on Mitochondrial DNA Copy Number across Development of Basal Ganglia and Cortex
Major(s): Human Physiology
Mentor(s): Hanna Stevens (Psychiatry)

88 - Ryan Shellady
Legality vs. Practicality: The Contemporary Landscape of Stand Your Ground Laws
Major(s): Ethics and Public Policy
Mentor(s): Celesta Albonetti (Sociology)

90 - Sarah Small
A Novel Strategy to Improve Insulin Sensitivity
Major(s): Human Physiology
Mentor(s): Matthew Potthoff (Pharmacology)

13 - Erica Cole
Cu(II) Cation Assists in Increasing Dimensionality of Uranyl Malate Structures
Major(s): Chemistry
Mentor(s): Tori Forbes (Chemistry)

15 - Daniel Coulthard
Using Clinopyroxene Compositions to Infer Depths of Crystallization Beneath an Off-Axis Icelandic Volcano
Major(s): Geoscience, Environmental Science
Mentor(s): David Peate (Earth and Environmental Science)

17 - Devon Dawson
Conner Wharff
Cardiorespiratory Fitness is Associated with Learning Rate of Executive Function Tasks in Older Adults
Major(s): Psychology; Spanish
Mentor(s): Michelle Voss (Department of Psychological & Brain Sciences)

19 - Frank De Stefano
Developing a Clinical Database to Improve Medical Imaging Protocols for Neurofibromatosis Type-1 Patients
Major(s): Biochemistry
Mentor(s): Jessica Sieren (Radiology & Biomedical Engineering), Eric Hoffman (Radiology & Biomedical Engineering)

21 - David Donovan
Logan Muckenhirn
NANOSCALE SURFACE MODIFICATION AND IT'S EFFECT ON BIOFILM FORMATION AND PROPOGATION
Major(s): Biomedical Engineering
Mentor(s): Biomedical Engineering
Mentor(s): Scott Shaw (Chemistry)
23 - Nick Eginoire  
*Effects of Break-Induced Replication in G1 phase of the cell cycle*  
Major(s): Biology  
Mentor(s): Anna Malkova (Biology)

25 - Megan Farlow  
*The Reuse of Sculpture in Imperial and Late Antique Building Projects*  
Major(s): Art and Art History  
Mentor(s): Brenda Longfellow (Art History)

27 - Kelli Fowler  
*Construction, Validation, and Assessment of Dietary Compliance Scores for the Wahls Elimination™ and Swank Diets*  
Major(s): Psychology  
Mentor(s): Catherine Chenard (Internal Medicine)

29 - Michaela Fowler  
*Nutritional Intake of Individuals with Multiple Sclerosis following the Wahls™ and Wahls Paleo Plus™ Diets.*  
Major(s): Human Physiology, BS  
Mentor(s): Catherine Chenard (Internal Medicine)

31 - Timothy Fuqua  
*Decoding gene regulation using a novel hedgehog enhancer in Drosophila melanogaster*  
Major(s): Biology  
Mentor(s): Albert Erives (Biology), Elizabeth Stroebele (Biology)

33 - Sarah Gardner  
*Restoration of Vision in a Mouse Model of Congenital Stationary Night Blindness*  
Major(s): Biochemistry  
Mentor(s): Sheila Baker (Biochemistry)

64 - Brooke Marshall  
*Learning Vocabulary Through Gamification*  
Major(s): Communication Sciences and Disorders  
Mentor(s): Karla McGregor (Speech and Hearing Sciences)

66 - Skylar McSorley  
*Using a more ecologically valid test to measure hearing aid outcomes*  
Major(s): Speech and Hearing Science  
Mentor(s): Yu Hsiang Wu (Communication Sciences and Disorders)

68 - Amy Meehleder  
*Future Relics and the "Fetishization of Potential": An Expanded (Eco-) Gothic Exploration of David Altmejd’s Sculpture*  
Major(s): Art History and Anthropology  
Mentor(s): Craig Adcock (Art History)

70 - Alexis Miller  
*Probing Caspase-1 with Cardiolipin*  
Major(s): Biomedical Engineering  
Mentor(s): Fayyaz Sutterwala (Internal Medicine - Infectious Diseases)

72 - Adam Moritz  
*Modeling the Volcanic Plumbing System of Bórsákjarðar, Iceland using Geothermobarometry*  
Major(s): Geoscience, Computer Science  
Mentor(s): David Peate (EES), Ingrid Ukstins Peate (EES)

74 - Nick Mullen  
*The Effects of Oxidative Stress on RNA Polymerase II Transcription and mRNA Capping in vitro*  
Major(s): Biochemistry BS  
Mentor(s): David Price (Biochemistry)

76 - Ben Olson  
*The Physiological Indicators of Projection Bias*  
Major(s): Math and Economics  
Mentor(s): Bill Hedgcock (Marketing)
50 - Michael Kegel
Delivering Tagged Insulin Receptor Substrate Proteins to Mouse Hearts
Major(s): Biochemistry, Music
Mentor(s): E. Dale Abel (Internal Medicine)

52 - Zehra Khan
Air Pollution at Its Finest: Analysis of Particulate Matter in Karachi, Pakistan
Major(s): Chemistry
Mentor(s): Betsy Stone (Chemistry)

54 - Kathleen Kiesewetter
‘In My Life’: Rock Stars, Memoirs, and the Beatles
Major(s): English, Art
Mentor(s): Donna Parsons (Music, Honors)

56 - Alexis Koch
Gene Fusion Analysis of Pdr1-Regulated Gene Expression in Anti-Fungal Drug Resistance
Major(s): Human Physiology
Mentor(s): Scott Moye-Rowley (Molecular Physiology & Biophysics)

58 - Stephen Kruse
Role of Norepinephrine in Seizure-Induced Respiratory Arrest
Major(s): Biomedical Engineering
Mentor(s): Gordon Buchanan (Neurology)

60 - Hannah Langenfeld
Aerobic and Anaerobic Ammonium Oxidation in an Engineered Bioreactor
Major(s): Biology with an emphasis in plant biology
Mentor(s): Craig Just (College of Civil and Environmental Engineering)

62 - Zesen Lin
Calcium-mediated Regulation of Sodium Channel in Brain
Major(s): Chemistry
Mentor(s): Madeline Shea (Biochemistry)

35 - Ashley Gilbert
Particulate Matter Analysis in Kathmandu, Nepal
Major(s): Chemistry
Mentor(s): Betsy Stone (Chemistry)

37 - Haviland Gilbert
The Studio Orchestra as Culturally Relevant Music Education
Major(s): Music Performance
Mentor(s): Erin Wehr (Teaching and Learning)

39 - Callie Ginapp
5HT2A receptor-mediated mechanisms in CO2-induced arousal.
Major(s): Biology (Neurobiology)
Mentor(s): Gordon Buchanan (Neurology)

41 - Lisa Gordon
Shane Nielsen
Cognitive aging and learning: The effect of age on statistical learning
Major(s): Communication Sciences and Disorders
Mentor(s): Melissa Duff (Communication Sciences & Disorders)

43 - Bailey Hadnott
Study of Airborne PCBs in and around New Bedford Harbor
Major(s): Environmental Engineering
Mentor(s): Keri Hornbuckle (CEE), Andres Martinez (CEE)

45 - Amanda Hart
The Architectural Patronage of Emperor Charles V in Spain, 1519-1556
Major(s): Art History
Mentor(s): Robert Bork (Art and Art History)

47 - SHIQIN HE
Let’s Get Started: Comparing Electron-Beam- and Light-Initiated Polymerizations
Major(s): Chemical Engineering
Mentor(s): Julie Jessop (Chemical Engineering)
49 - Kathryn Heffner
A Zine of Her Own: Female Editors of Science Fiction Fanzines
Major(s): English
Mentor(s): Amy Chen (Special Collections)

51 - Melody Hines
Identification and Analysis of Faunal Assemblage Present at JH13202
Major(s): Anthropology
Mentor(s): James Enloe (Anthropology)

53 - Hannah Infelt
The Effects of Fractionated Irradiation on Bone Morphology and Strength
Major(s): Mechanical Engineering
Mentor(s): Jessica Goetz (Orthopedics and Rehabilitation)

55 - Josh James
Identification of Protocadherin and other neuronal genes expressed in the choroid plexus
Major(s): Neurobiology (B.S.)
Mentor(s): Joshua Weiner (Biology)

57 - Tamar Kavlashvili
Inverse Relationship between Progesterone Receptor and Myc in Endometrial Cancer
Major(s): Biology
Mentor(s): Shujie Yang (OB/Gyn), Kimberly Leslie (OB/Gyn)

59 - Clarice Kelling
Student Engagement through the Design of Pop-Up Library Events
Major(s): Theatre Arts and Elementary Education
Mentor(s): Katie Hassman (University of Iowa Libraries)

61 - David Kessler
Does sentence predictability influence word identification in school-age children?
Major(s): Speech and Hearing Science
Mentor(s): Elizabeth Walker (Communication Sciences & Disorders)

38 - Sangwoo Han
Neural Circuitry of D1 Receptor Neurons in the PFC
Major(s): Human Physiology, Neurobiology
Mentor(s): Nandakumar Narayanan (Neurology)

40 - Tanner Hartsock
Utilizing Askja, Iceland as an Analog for Quantifying the Alteration of Igneous Protoliths on the Martian Surface
Major(s): Geoscience
Mentor(s): Ingrid Ukstins-Peate (Earth and Environmental Science)

42 - Madison Hunke
Effects of Media on the Arab Spring
Major(s): International Studies (Islamic and Middle Eastern Track), French (Arabic Track)
Mentor(s): Ahmed Souaiaia (Religious Studies)

44 - Casey Inman
Co-housing effect in Drosophila model of Huntington’s disease: a longitudinal study of survival and motor coordination
Major(s): Human Physiology
Mentor(s): Chun-Fang Wu (Biology)

46 - Nathaniel Johnson
Moped-Related Injuries in the United States
Major(s): Human Physiology
Mentor(s): Charles Jennissen (Emergency Medicine)

48 - Jenny Juehring
Explaining Presidential Elections in Russia and Ukraine: Survey Data on the Relationship between Vote Choice and Corruption Experiences and Perceptions
Major(s): Political Science, Economics
Mentor(s): Vicki Claypool (Political Science), Bill Reisinger (Political Science)
24 - Daniel Davies
*Mechanism of Small Molecule Adsorption to Gold Nanostars*
Major(s): Chemical Engineering
Mentor(s): Amanda Haes (Chemistry)

26 - Patrick Dey
*Thin Layer Sonoelectrochemistry in Aqueous and Non-Aqueous Systems*
Major(s): Chemistry
Mentor(s): Johna Leddy (Chemistry)

28 - Stephen Estelle
*Optimizing the Separation of Malignant and Benign Prostate Tumor Cells with Shear Stress*
Major(s): Biomedical Engineer
Mentor(s): Michael Henry (Physiology), Benjamin (Krog)

30 - Noah Gavin
*Porous Rotating Disk Electrode for Research on Gas Producing Particles*
Major(s): Chemical Engineering
Mentor(s): Johna Leddy (Chemistry), Matthew Lovander (Chemistry)

32 - Haviland Gilbert
*The Studio Orchestra as Culturally Relevant Music Education*
Major(s): Music Performance
Mentor(s): Erin Wehr (Teaching and Learning)

34 - Ashley Goll
*Functional analysis of mutant lamins that cause muscular dystrophy*
Major(s): Biochemistry
Mentor(s): Lori Wallrath (Biochemistry)

36 - Anuradha Gore
*CAPN5 proteolysis of GFAP leads to fibrosis in the retina*
Major(s): Human Physiology
Mentor(s): Vinit Mahajan (Ophthalmology and Visual Sciences)

63 - Nicholas Koehn
*Longitudinal Analysis and Comparison of Four Mathematical Prediction Models Evaluating Solitary Pulmonary Nodules Imaged on CT*
Major(s): Human Physiology
Mentor(s): Jessica Sieren (Department of Radiology)

65 - Kayla Ladd
*Restored Motility in the Absence of an Essential Regulator in Myxococcus xanthus*
Major(s): Biochemistry
Mentor(s): John Kirby (Microbiology)

67 - Brian Leal
*Latino Men's Health: Comprehensive Literature Review*
Major(s): Health and Human Physiology
Mentor(s): Jason Ulloa (Community and Behavioral Health)

69 - Ryan Lee
*Decreased presence of Langerhan’s cells and Tregs in biopsies from Bullous Pemphigoid patients*
Major(s): Biology
Mentor(s): Kelly Messingham (Dermatology), Janet Fairley (Dermatology)

71 - Danny Linggonegoro
*Vasopressin in Early-Gestation is Sufficient to Initiate Preeclampsia*
Major(s): Human Physiology
Mentor(s): Justin Grobe (Pharmacology)

73 - Lu Liu
*Conversion Quantification in Epoxides Annealed after Cationic Photopolymerization*
Major(s): Chemical Engineering
Mentor(s): Julie Jessop (Chemical and Biochemical Engineering)

75 - Jessica Macaluso
*The Role of Biological Sex in Lithic Manufacture*
Major(s): Anthropology, Biology
Mentor(s): Robert Franciscus (Anthropology)
77 - Ross McCurdy
*End to end test of the Polarimeter for Relativistic Astrophysical X-ray Sources (PRAXyS)*
Major(s): Astronomy, Physics
Mentor(s): Philip Kaaret (Physics & Astronomy)

79 - Victoria Mendoza
*Serotonergic mechanisms in epilepsy-depression comorbidity*
Major(s): Neurobiology
Mentor(s): Gordon Buchanan (Neurology)

81 - Astrid Montuclard
*Compassion and Caucus Day: Compassion Regulation more prominent among Republicans*
Major(s): Chinese Language and Literature, Premed
Mentor(s): Daryl Cameron (Psychology)

83 - Laura Mueldener
*Medial Olivocochlear Reflex and Changes in Middle Ear Reflectance*
Major(s): Speech and Hearing Sciences
Mentor(s): Shawn Goodman (Communication Sciences and Disorders)

85 - Sungha Nielsen
*Stereotype Validation and Intellectual Performance: An Extension to Positive Stereotypes*
Major(s): Psychology
Mentor(s): Jason Clark (Psychological and Brain Sciences)

87 - Nicole Nitschke
*Alterations in Exercise-induced Autonomic Thermoregulation in Acid-Sensing Ion Channel (ASIC) -/- Mice*
Major(s): Biomedical Engineering
Mentor(s): Christopher Benson (Internal Medicine)

89 - Maureen O'Connor
*Genetic suppression of elevated triglycerides caused by mutant lamins in Drosophila*
Major(s): Biochemistry
Mentor(s): Lori Wallwath (Biochemistry)

12 - Claire Castaneda
*Youth Size ATV Seat Design: Variability and Lack of Consistent Changes in Vehicles Designated for Different Ages Demonstrates Need for Evidence Based Standardization*
Major(s): Biomedical Engineering
Mentor(s): Charles Jennissen (Emergency Medicine, University of Iowa Hospitals and Clinics), Gerene Denning (Emergency Medicine)

14 - Wanhua Chen
*Determinants of Annual Report Length*
Major(s): ACCOUNTING; BUSINESS ANALYTICS
Mentor(s): Samuel Melessa (Accounting)

16 - Kathryn Classon
*Using a Central Composite Design to Optimize Transferable Shadow Cure*
Major(s): Chemical Engineering
Mentor(s): Julie Jessop (Chemical and Biochemical Engineering)

18 - Rae Ann Corrigan
*Advanced Physics-Based Models of Cancer Therapeutics*
Major(s): Biomedical Engineering
Mentor(s): Michael Schnieders (Biomedical Engineering & Biochemistry), Nancy Downing (Nursing)

20 - Ari Craven
*The Passport Project: Exploring Iowa & Iowa City*
Major(s): Theatre & Studio Arts
Mentor(s): Jon Winet (School of Art and Art History)

22 - Chloe Daniel
*Investigating Alternative Causes for Stone Flake Features Attributed to Handedness*
Major(s): Anthropology, Psychological and Brain Sciences
Mentor(s): Robert Franciscus (Anthropology)
Second Hour Presenters
5:30-6:30PM
(even numbers only—boards will be turned around)

2 - Patrick Adrian
Neutral Collisional Effects in Two Stream Instabilities
Major(s): Physics and Mathematics
Mentor(s): Scott Baalrud (Physics and Astronomy)

4 - Maya Amjadi
Ectosomes from human neutrophils laden with Staphylococcus aureus induce a pro-inflammatory response in macrophages
Major(s): Biology, Spanish
Mentor(s): William M. Nauseef (Internal Medicine), Mallary Greenlee-Wacker (Internal Medicine)

6 - Kayleigh Applegate
The Allotment of Maternity Leave
Major(s): Anthropology for Health Sciences
Mentor(s): Erica Prussing (Anthropology)

8 - Dena Baughman
“The Role of Uncoupling Protein (UCP)-2 on Platelet Mitochondrial Function”
Major(s): Human Physiology
Mentor(s): Rhonda Souvenir (Endocrinology), E. Dale Abel (Endocrinology)

10 - Asher Bergman
Impact of Press Rhetoric on Liancourt Rocks Dispute
Major(s): International Studies, Linguistics
Mentor(s): Stephen Vlastos (History)

91 - Neel Patel
Delayed Umbilical Cord Clamping in Neonates < 34 Weeks Gestational Age
Major(s): Human Physiology
Mentor(s): John Dagle (Department of Pediatrics - University of Iowa Hospitals and Clinics)

93 - Charlie Rupp
Analyzing students’ reasoning and ability to explain reaction orders from initial rate data.
Major(s): Human Physiology
Mentor(s): Nicole Becker (Chemistry), Allie (Brandriet)

95 - Chelsea Ryan
Infralimbic cortex inhibition after unreinforced lever presses increases cocaine seeking behavior in rats
Major(s): Psychology
Mentor(s): Ryan LaLumiere (Department of Psychological and Brain Sciences)

97 - Kaitlin Schlotfelt
The Preservation and Maintenance of Coal Balls from the Iowa Pennsylvanian Epoch
Major(s): Anthropology
Mentor(s): Tiffany Adrain (Earth and Environmental Science)

99 - Matthew Schoenberger
Do parasites help drive life history variation in natural populations?
Major(s): Pre-Pharmacy
Major(s): Biology
Mentor(s): Maurine Neiman (Biology)

101 - Maria Seltz
A Case Study Examining Women in Entrepreneurship
Major(s): Finance and Management
Mentor(s): Erin Johnson (Management & Organizations)
103 - Lara Shema
Globally Aware and Gifted: A Qualitative Content-Analysis of the Global Awareness Network of the National Association for Gifted Children between 2001 and 2010.
Major(s): Elementary Education
Mentor(s): Laurie Croft (Belin Blank International Center for Gifted Education)

105 - Jamie Smuskiewicz
Enhancing College-Aged Women’s Perceptions of Food Healthiness
Major(s): Psychology
Mentor(s): Teresa Treat (Psychology), Marianne Rizk (Psychology)

107 - Emily Solsrud
3D Printing a Biomechanically and Anatomically Correct Model of the Cervical Spine
Major(s): Biomedical Engineering
Mentor(s): Nicole Grosland (Biomedical Engineering), Nicole Watson (Center for Computer Aided Design)

109 - Sarah Splittgerber
Regulation of t-tubule development through insulin-AKT signaling
Major(s): Psychology/Pre-med
Mentor(s): Kensuke Tsushima (Internal Medicine)

111 - Victoria Utter
Development of Interactive Software Story Authoring Tool to Improve Executive Function in Preschoolers
Major(s): Computer Engineering
Mentor(s): Juan Pablo Hourcade (Computer Science)

115 - Katelyn Wheeldon
The Impact of the Organization for Economic Co-Operation and Development’s Base Erosion and Profit Shifting Action Plans on U.S. Multinational Corporations
Major(s): Finance and Accounting
Mentor(s): Jaron Wilde (Accounting), Anand Vijh (Finance)

117 - Jason Wong
Characterization of pHLIP partitioning using TIRF microscopy
Major(s): Physics
Mentor(s): Janice Robertson (Molecular Physiology and Biophysics)

119 - Hang Yin
Improved Modeling of Carbohydrates in Aqueous Solutions Using Modified van der Waals Parameters
Major(s): biochemistry
Mentor(s): Adrian Elcock (Biochemistry)

121 - Kasra Zarei
eyeFusion: Validation of a Mobile-Phone Application, Contrast-Modulation Flicker Fusion Test
Major(s): Biomedical Engineering, Biochemistry
Mentor(s): Michael Abramoff (Ophthalmology, BME, ECE), Todd Scheetz (Ophthalmology, BME)

123 - Anthony Zhang
Enabling hybrid Nanoimprint and Photolithography using AZ1518 and Teflon
Major(s): Electrical Engineering
Mentor(s): Aju Jugessur (Optical Science and Technology Center)