



# Festival of Honors

## Schedule of Division III Honors Thesis Presentations

April 24-May 8, 2017



SMITH COLLEGE



**Monday, April 24, Burton 307  
Mathematics**

4:00 PM	<b>Ellie Mainou</b> <i>McKinley Fellow</i>	Using Genetic Algorithms to Incorporate Antibiotic Resistance in the Modeling of Tuberculosis in the U.S.	Gwen Spencer Rob Dorit
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**Monday, May 1, McConnell 103  
Chemistry**

4:00 PM	<b>Katherine Graham-O'Regan</b> <i>McKinley Fellow</i>	The Design and Synthesis of Novel Oxazole Pseudopeptide	David Bickar
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**Monday, May 1, McConnell 103  
Biochemistry**

4:40 PM	<b>Yu Zhang</b>	DNA-catalyst Conjugates for Site-selective Transformations in Biological Systems	David Gorin
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5:20 PM	<b>Natalie Kolber</b>	Murine HSP25 Interactome	Stylianos Scordilis
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**Monday, May 1, Sabin Reed 220  
Biological Sciences**

4:00 PM	<b>Doris Juarez</b> <i>McKinley Fellow</i>	Microcosm Experiments: Assessing Microbial Community responses to Food Web Perturbations	Laura Katz
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4:30 PM	<b>Abigail Onos</b> <i>McKinley Fellow</i>	Before and After High Tide: Uncovering Temporal Patterns of Biodiversity in Microbial Communities of Tide Pools	Laura Katz
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5:00 PM	<b>Isabella Fielding</b>	A Broad-based Investigation of Body Size of <i>Sciurus carolinensis</i> in Space and Time	Virginia Hayssen
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5:30 PM	<b>Amanda Castro</b>	Characterization of Hard and Soft Corals at Mexico Rocks, Belize Using Underwater and Aerial Images	L. David Smith
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**Monday, May 1, Ford Hall 241  
Computer Science**

1:00 PM	<b>Marina Cheng</b>	Pairwise Alignment-Free Protein Sequence Clustering	Sara Mathieson
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**Monday, May 1, Bass 210  
Psychology**

4:00 PM	<b>Alicia Bowling</b>	Navigating Faith in Resistance: Religion and Spirituality in the Politicization of Three Women Activists	Lauren Duncan
5:00 PM	<b>Jenna Perna-Elias</b>	Background Cues Control for the Applicability of the Danger Feature of the Stereotype of African American Men	Fletcher Blanchard

**Monday, May 1, Sabin Reed 301  
Statistical and Data Sciences**

4:00 PM	<b>Weijia(Vega) Zhang</b>	Platforms for Analyzing the New York City Bike Sharing System (Citi Bike)	Ben Baumer R.Jordan Crouser
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**Tuesday, May 2, McConnell B15  
Biological Sciences**

4:00 PM	<b>Anna Rogers</b>	Using <i>fluorescence in situ hybridization</i> (FISH) to explore somatic development of the extensive fragmenting ciliate <i>Chilodonella uncinata</i>	Laura Katz
4:30 PM	<b>Olivia Pilling</b>	Exploring Genome Architecture, Protein Evolution and Epigenetic Processes in Ciliates	Laura Katz
5:00 PM	<b>Monica Wilson McKinley Fellow</b>	Investigating Genome Architecture and Composition in the Class Litostomatea	Laura Katz
5:30 PM	<b>Chloe Lee</b>	Searching for Signals of Selection in Crop Genomes	Robert Dorit Sara Mathieson

**Tuesday, May 2, McConnell 103  
Chemistry**

4:00 PM	<b>Katherine Blackford</b>	Development of a Tandem Diels-Alder/Pauson-Khand Strategy for the Synthesis of Tetracycles	Kevin Shea
4:40 PM	<b>Megan Neubig</b>	The Isolation and Derivatization of Sesquiterpene Lactones from <i>Neurolaena lobata</i>	Kevin Shea
5:20 PM	<b>Yingchuan Zhu</b>	Aerobic, Copper Catalyzed Phenol Methylation via the Chan-Lam Coupling Reaction	David Gorin

**Tuesday, May 2, Seelye 106  
Engineering Science**

4:15 PM	<b>Eleanor Adachi</b>	Designing a Photovoltaic Array for Smith College	Denise McKahn
4:45 PM	<b>Isabella Casini McKinley Fellow</b>	Estimating Product Composition and Thermal Dynamics in a Continuous Feed Biomass Torrefier	Denise McKahn
5:15 PM	<b>Sara Kacmoli</b>	Novel Intrinsic Quantum Designs for Quantum Cascade Superluminescent Emitters	Susannah Howe

**Tuesday, May 2, Sabin Reed 220  
Neuroscience**

4:00 PM	<b>Wanqi Wang</b>	Developing a New System for Bioluminescence <i>In Vivo</i> Imaging of Free-moving Mice: A New Way to Measure Circadian Rhythms	Mary Harrington
4:30 PM	<b>Noah Daniel Blohm</b>	Salivary Concentrations of Dopamine and Other Constituents in Parkinson's Disease	David Bickar
5:00 PM	<b>Katrina Blandino</b>	Peer Social Motivation: Quantifying Differences in Species Specific Social Behavior Using Operant Conditioning	Annaliese Beery
5:30 PM	<b>Sarah Lopez</b>	Quantifying Reward for Social Partners in Two Vole Species	Annaliese Beery

**Wednesday, May 3, McConnell B15  
Biological Sciences**

4:00 PM	<b>Kathleen Moshofsky</b>	The Role of Sex and Ovarian Cycles in Rodent Behavioral and Physiological Variability	Annaliese Beery
4:30 PM	<b>Gina Cho</b>	Embryo-Environment Interactions: How PAHs (Polycyclic Aromatic Hydrocarbons) impact craniofacial development	Michael Barresi L. David Smith

**Wednesday, May 3, McConnell B15  
Neurosciences**

5:00 PM	<b>Varsha Subramaniam</b>	Differential Potency of Cyclohexanol Isomers for Positive Modulation and Inhibition of GABAA Receptor Currents	Adam Hall
5:30 PM	<b>Zoe Kohler-Boland</b>	Rapid Effects of G1 on Social Behavior and Preoptic Area Isotocin Expression in Male Goldfish	Lisa Mangiamele

**Wednesday, May 3, McConnell 103  
Chemistry**

4:00 PM	<b>Quinn Anex-Ries</b> <i>McKinley Fellow</i>	Synthesis and Characterization of PEG-PVDMA Hydrogels and Core-Crosslinked mPEG-block-PVDMA Micelles for Cancer Therapy	Maren Buck
4:40 PM	<b>Megan Wancura</b>	Reactive Azlactone-Functionalized Hydrogels: Fundamental Characteristics and Cell Compatibility	Maren Buck
5:20 PM	<b>Htoo Tint Wai</b> <i>McKinley Fellow</i>	Separation of the Diastereomers of 2,6-Diisopropylcyclohexanol & Synthesis and Purification of 2,6-Disubstitued Cyclohexanols and Cyclohexylamines for Application as Potential Anesthetics	Kevin Shea

**Wednesday, May 3, Ford Hall 240  
Engineering Science**

4:15 PM	<b>Elsie Odhiambo</b>	Engineering Protein-drug Conjugates for Therapeutic Targeting of Mesothelin-positive Tumors	Sarah Moore
4:45 PM	<b>Eugenie Jumai'an</b>	Conjugation of Engineered Proteins to Azlactone-Functionalized Polymers for Drug Delivery Applications	Sarah Moore
5:15 PM	<b>Lu Xia</b>	The Effects of Age, Gender, Race and Ear Canal Area on Normative Adult Wideband Acoustic Immittance (WAI) Measures	Susan Voss
5:45 PM	<b>Jingping Nie</b>	Wideband Acoustic Immittance Measurements and Time Domain Reflectance	Susan Voss

**Wednesday, May 3, Bass 210  
Psychology**

4:00 PM	<b>Elena Andreopoulos</b>	The Role of Gender, Sexual Trauma, and Psychopathology in Predicting Sexual Boundary Violation Risk Among Psychotherapists	Nnamdi Pole
5:00 PM	<b>Murong Li</b>	Understanding Intergroup Relations Among Disadvantaged Groups: How Collaborative Collective Action can be Achieved.	Fletcher Blanchard

**Thursday, May 4, McConnell 103  
Biochemistry**

4:00 PM	<b>Amalia Sweet</b>	Identification of TPX-2- Promoter Binding Proteins in the Parasite <i>Brugia malayi</i> : A Novel Approach to Stage Specific Anthelmintic Drug Discovery	Steven Williams
4:40 PM	<b>Emmie Knobloch</b> <i>McKinley Fellow</i>	Clocking Multifluorescent Protein Expression in Yeast	Nathan Derr
5:20 PM	<b>Jessica Morgan</b>	Nanoscale Cargo Transport of Spherical DNA Origami Structures by Ensembles of Molecular Motor Proteins	Nathan Derr

**Thursday, May 4, McConnell B15  
Biological Sciences**

4:00 PM	<b>Aliza Boles Fassler</b>	Effects of Eastern Hemlock ( <i>Tsuga canadensis</i> ) Decline on Forest Floor Characteristics and Macrofungal Communities at two sites in Western Massachusetts	Jesse Bellemare Danielle Ignace
4:30 PM	<b>Anna George</b>	Investigating the Distribution and Diversity of Rare Endemic Forest Plant Species in the Eastern United States	Jesse Bellemare
5:00 PM	<b>Veida Lekakh McKinley Fellow</b>	The Effects of Change in Foundational Species from <i>Tsuga canadensis</i> to <i>Betula lenta</i> on Soil Chemistry	Jesse Bellemare Danielle Ignace
5:30 PM	<b>Mallory Kakley</b>	Assessing the Ecological Relationships between <i>Sphagnum Mosses</i> and Testate Amoebae in a New England Peatland	Jesse Bellemare Laura Katz

**Thursday, May 4, Ford Hall 022  
Engineering Science**

12:15 PM	<b>Christine Hamilton</b>	Prototyping a Transportable Demonstration for Cut Resistance	Susannah Howe Glenn Ellis
12:15 PM	<b>Thuy Nguyen</b>	Effects of Accelerated UV Exposure on Mechanical Properties of Natural Nylon, Technora, and Polyester Fibers	Susannah Howe Michael Kinsinger
12:15 PM	<b>Flora Weil</b>	A Location-based Visualization Tool for the Development of Smart Parklets in Downtown Northampton	Susannah Howe

**Thursday, May 4, Bass 210  
Psychology**

4:00 PM	<b>Mark Britton</b>	The Interaction of Adult Age and Executive Function on Emotion Reactivity and Recovery Following a Stressor	Beth Powell Becky Ready
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**Friday, May 5, Sabin Reed 103  
Geosciences**

3:00 PM	<b>Elias Molitors Bergman McKinley Fellow</b>	Locating Slow Slip Event in Cascadia Across Space and Time	John Loveless
4:00 PM	<b>Cheryl Watts</b>	Modeling Sediment Transport During Sluicing Events in Paradise Pond	Robert Newton

**Monday, May 8, McConnell 406  
Physics**

2:30 PM	<b>Shuyao Gu</b>	Simulation of Excitations in Shell Bose-Einstein Condensates at Finite Temperature	Courtney Lannert
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**Previously Presented Thesis**

**Wednesday, December 21, 2016, Bass 418  
Psychology**

11:30 AM	<b>Suzanne Stillinger</b>	Loyalty, Idiosyncrasy, and Number: Contextual Effects on Perceptions of and Consequences of Violating In-group Preference Norms in Early Childhood	Fletcher Blanchard
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