

# **FALL FEST – Friday, October 21, 2016**

***Goddard Library, 1<sup>st</sup> & 2<sup>nd</sup> Floors***

***1:00 – 4:00 pm***

This event celebrates the research and creative work Clark undergraduate students produce with the support and mentoring of the University's distinguished faculty and staff, and illustrates the University's commitment to LEEP. Many of the projects on display today have been supported by various University programs, including the Steinbrecher fellowship program, the LEEP Fellow program, the Harrington Fellows program, the Theodore Barth Foundation Internship Award, the NOAA Fellows program, the HERO Fellows program, and the Lois and Robert Green Urban Development and Social Change (UDSC) Summer Internship program.

## **What is LEEP (Liberal Education and Effective Practice)?**

At Clark, we are pioneering a new model of liberal education: Liberal Education and Effective Practice (LEEP) that combines a traditional liberal arts experience with authentic engagement in the world and workplace. This innovative model integrates the wealth of intellectual and academic resources already present at the university with the skills and capacities that are becoming increasingly essential in the 21st century. The Clark undergraduate experience in all its dimensions—from the classroom to the research laboratory, from the co-curricular experience to teams and clubs—will educate graduates known not just for academic excellence, but also for resilience, persuasion, creativity, and the ability to demonstrate character when tested.

## **About the Steinbrecher Fellowship Program**

In 2005, the family and friends of Clark alumnus David C. Steinbrecher '81 created the Steinbrecher Fellowship Program with a generous gift that established a permanent endowment in memory of David that provides fellowships for Clark undergraduates to pursue original ideas, creative research, public service or enrichment projects. The Steinbrecher Fellowship also seeks to create and maintain a vibrant community of learners by bringing Fellows together with each other and with a small group of faculty mentors to share ideas, experiences, and intellectual excitement at dinners and other special gatherings several times during each academic year.

## **About the LEEP Fellow program**

The LEEP Fellow program provides opportunities for students to complete LEEP Projects while receiving close mentoring and comprehensive programming support. The LEEP Project is an opportunity for Clark students—typically juniors and rising seniors—to take what they've learned in the classroom and explore its real-world applications. LEEP Projects take different forms, such as creating a product for a local business, assisting families in a developing country, working alongside a researcher in a lab either on campus or in the field, or providing research to support a sustainability initiative.

Throughout their LEEP Project students reflect on their experience and relate what they are learning to future goals. LEEP Projects culminate in a campus presentation at Fall Fest that offers the opportunity to hone essential public speaking skills.

### **The Harrington Fellows Program**

The Harrington Public Affairs Fellowship Program for undergraduates encourages and supports the pursuit of original research on politics and public policy as well as service projects, and is funded by the Francis A. Harrington Public Affairs Fund established in 1963.

### **Theodore Barth Foundation Internship Award**

Thanks to the generosity of the Theodore Barth Foundation, the Career Services offers undergraduate students up to \$2500 to support unpaid summer internships in the nonprofit sector. This funded internship opportunity is open to first-years, sophomores, and juniors.

### **The NOAA Fellows Program**

Scientists and managers with the National Oceanic and Atmospheric Administration (NOAA) partnered with Clark University to offer qualified undergraduate students paid summer field internships. Opportunities were available in NOAA labs and offices nationwide, working in fields such as applied ocean and atmospheric science, policy, and science communication.

### **The HERO Fellows Program**

The Human-Environment Regional Observatory (HERO) program is a unique undergraduate-graduate-faculty experience that engages in research on human-environment relationships in Massachusetts. HERO Fellows conduct hands-on research under the mentorship of Clark University faculty. The research conducted by HERO Fellows often leads to scholarly publications, presentations at academic conferences across the USA, and awards and honors.

### **The Lois and Robert Green Urban Development and Social Change (UDSC) Summer Internship program**

The Urban Development and Social Change Program offers a paid summer internship for a continuing Clark undergraduate student, made possible by a generous endowed fund established by Clark alumni Lois and Robert Green. The intern assists a Worcester City Councilor or the staff of a Worcester city government agency or non-profit organization with a variety of projects and activities aimed at addressing issues of concern to residents of Worcester.

From 1:00 - 4:00 p.m. students will display their research findings through posters and electronic media (PowerPoint) presentations. **Posters are found on both the 1st and 2nd floors of the Goddard Library. Oral presentations are being held on the 4<sup>th</sup> floor of the library in the Fuller & Prouty Conference rooms.**

Please enjoy some light refreshments found upstairs on the 2nd floor and thank you for coming!

## **Oral Presentations**

### **Fuller Conference Room (4<sup>th</sup> floor – Goddard Library)**

- 1:00-1:15**     **INTERNATIONAL DEVELOPMENT, COMMUNITY & ENVIRONMENT DEPARTMENT (IDCE)**  
*The Detrimental Health effects of Unplanned Urbanization and Climate Change.* **Maya Hodgson-Dottin '17, LEEP Fellow** (sponsor: Professor Jude Fernando)
- 1:20-1:40**     **INTERNATIONAL DEVELOPMENT AND SOCIAL CHANGE (IDSC)**  
*IDSC Capstone: Law and Society in Africa, SOAS.* **Beliansh Assefa '17** (sponsor: Professor Anita Fabos)
- 1:40-2:00**     **PSYCHOLOGY**  
*Benefits of Yoga in the Park.* **Nidhi Thaker '17, LEEP Fellow** (sponsor: Professor Johanna Vollhardt and LEEP Center)
- 2:00-2:15**     **POLITICAL SCIENCE**  
*Voices From Afar: Engaging and Empowering the Jamaican and Dominican Diaspora on LGBT Policy Issues.* **Courtney Thomas '17, LEEP Fellow** (sponsor: Professor Heather Silber-Mohamed)
- 2:15-3:30**     **POLITICAL SCIENCE**  
*Interning at the United Nations: Our Experiences from Nairobi, Stockholm, and New York!* **Dea Dodi '17, Miranda Weinstein '17, Absar Ali, '18 & Arslan Tarar, '18** (sponsor: Professor Srinu Sitaraman)

## **Oral Presentations**

### **Prouty Conference Room (4<sup>th</sup> floor – Goddard Library)**

- 1:00-1:15**     **ART HISTORY**  
*Architecture Conservation: Bogota's Estacion de la Sabana.* **Maria Luisa Escobar Pardo '17, LEEP Fellow** (sponsor: Professor Kristina Wilson)

- 1:15-1:40**     **LAW AND SOCIETY**  
*Sexual Assault on College Campuses: Understanding University and Criminal Judicial Systems.* **Sarah Maloney'17, LEEP Fellow** (sponsor: Professor Steven Kennedy) Please be advised: this presentation contains difficult subject matter
- 1:40-1:55**     **EDUCATION**  
*Against the Opportunity Gap: Providing Summer Academic Programming to Underserved Youth in Dorchester.* **Katherine Alexander '17, LEEP Fellow** (sponsor: Valerie Sperling)
- 1:55-2:10**     **MUSIC**  
*The Main Room.* **Aaron Meyer '17, LEEP Fellow** (sponsor: Professor Jessica Bane-Robert)
- 2:10-2:30**     **ENGLISH**  
*Marketing & Social Media Content Creation for Rabbit Heart Poetry Film Festival.* **Audrey Dolan '17, LEEP Fellow** (sponsor: Professor James Elliott)
- 2:30-2:50**     **GEOGRAPHY**  
*Spatiotemporal Assessment of the Future Environmental Water Demand in Khanbogd, Mongolia.* **Oyut Amarjargal '17, LEEP Fellow** (sponsor: Professor Prajwal Panday)
- 2:50-3:05**     **INTERNATIONAL DEVELOPMENT AND SOCIAL CHANGE (IDSC)**  
*Project Orientations and Audit Tracking.* **Audriana Vassel '17, LEEP Fellow** (sponsor: Professor Nigel Brissett)
- 3:05-3:30**     **PHILOSOPHY**  
*Capitalist Hinderances to Moral Willing: Lessons from Kant and Marx.* **James Patin '17** (sponsor: Dr. C. W. DeMarco, Senior Lecturer in Philosophy)
- 3:30-3:50**     **HISTORY**  
*1920s German Women's Magazines as Public Spaces.* **Meghan Paradis '17** (sponsor: Professor Nina Kushner)

## **Summer Research & LEEP Fellow Posters**

### **Biochemistry and Molecular Biology**

- Biochemical and Mechanistic Studies on the HECT E3 Ubiquitin Ligase HUWE1.* **Noor Alzuhairy'17, LEEP Fellow** (sponsor: Professor Donald Spratt)
- Development of the eyes and wings of Drosophila melanogaster.* **Diana Argiles Castillo '18, LEEP Fellow** (sponsor: Professor Justin Thackeray)

3. *Biochemical and Mechanistic Studies of ITCH: A HECT E3 Ubiquitin Ligase.* **Roela Bardhi '17, LEEP Fellow** (sponsor: Professor Donald Spratt)
4. *Biochemistry and Mechanisms of HACE1.* **Janel Gardner '17, LEEP Fellow** (sponsor: Professor Donald E. Spratt)
5. *Systems for Adverse Event Reporting: Creating a Fair and Just Safety Culture.* **Antony Gruness '17, LEEP Fellow** (sponsor: Professor Sergio Granados-Focil)
6. *Copolymerization of Lauryl Methacrylate and Methyl Methacrylate.* **Jenna Harrison-Peters '18** (sponsor: Professor Sergio Granados-Focil)
7. *Isolating the Opportunistic Fungal Pathogen *Aspergillus fumigatus* from the Clark University Campus.* **William Hawkins '17** (sponsor: Professor John Gibbons)
8. *Deciphering the Structure and Mechanism of AREL1 to Enhance Chemosensitivity in Tumor Cells.* **Pinky Htun '17, LEEP Fellow** (sponsor: Professor Donald Spratt)
9. *A Mechanistic and Biochemical Study of HERC1 and E6AP E3 Ubiquitin Ligases.* **Feston Idrizi '16, LEEP Fellow** (in conjunction with Yaya Wang, graduate student; sponsor: Professor Donald Spratt)
10. *HECTD1 - An E3 Ubiquitin Ligase Involved in Neural Tube Closure and Placental Development.* **Vladislav Kiveliyk '17, James and Ada Bickman Fellow** (sponsor: Professor Donald Spratt)
11. *Production and Activity of Insulin-Degrading Enzyme: Preliminary Data for Future Work with Amyloid- $\beta$  Polypeptide.* **Claire Krasinski '17** (in collaboration with Valerie Ivancic, graduate student; sponsor: Professor Noel Lazo and Professor Donald Spratt)
12. *Investigation of the Nucleolar Localization of DdSrc1.* **Siu Ting Lam '17** (in collaboration with Elizabeth Nelson, graduate student; sponsor: Professor Denis Larochelle)
13. *Investigating the Role and Function of Musashi-1 in Oligodendrocytes.* **Jenna Libera '18** (sponsor: Professor Sean Ryder)
14. *Relationship of Plasma MiRNAs to Atrial Fibrillation Recurrence After Catheter Ablation.* **Jordan Majka '18** (in conjunction with UMass Medical School sponsor: Dr. David McManus)
15. *Insertion of CenB into pGex-4T-1 in *Dictyostelium discoideum*.* **Tram-Anh Nguyen '17, LEEP Fellow** (in collaboration with Shivani Patel; sponsor Professor Denis Larochelle)

16. *Identifying Cis-Regulatory Modules that regulate the gene twin of eyeless in D. melanogaster.* **Luke Nourie '17, Beavers Fellow & Arianna Brugnola '18, LEEP Fellow** (sponsor: Professor Robert Drewell)
17. *Biochemistry and Mechanism of the HECT E3 Ubiquitin Ligase WWP1.* **Emilie Ogisu '17, LEEP Fellow** (sponsor: Professor Donald E. Spratt)
18. *Investigating DNA Methylation in Dictyostelium discoideum.* **Precious Oyem '17** (in collaboration with James St. Denis, graduate student; sponsor: Professor Denis Larochelle)
19. *Controlled Radical Polymerization of N-Isopropylacrylamide.* **Alistair Richardson '17 & Graham Bell '17** (sponsor: Professor Sergio Granados-Focil)
20. *Impact of small molecules on the enzymatic activity of lentil seedling oxidase.* **Maria Solares '17** (in collaboration with Ashley Burke, graduate student; sponsor: Professor Charles Jakobsche)
21. *Biochemical Characterization of HERC2, a HECT E3 Ubiquitin ligase implicated in Breast Cancer.* **Noah Schwaegerle '17, LEEP Fellow** (in collaboration with Yaya Wang, graduate student; sponsor: Professor Donald Spratt)
22. *Fluorescently Labeled Non-Viral DNA Delivering Vector.* **Alva Tan '17 & Thanaphorn Suk-in '17** (sponsor: Professor Sergio Granados-Focil and Professor Robert Bellin)
23. *Roles of the Hydrophobic Core Residues in Insulin Conformational Changes.* **Tran Tran '17** (in collaboration with Qingzhe (Mark) Tan, graduate student; sponsor: Professor Shuanghong Huo)
24. *Developing Activity-Based Molecular Probes to Analyze Cancer-Relevant Enzymes.* **Alexander Wall '17, LEEP Fellow** (sponsor: Professor Charles Jakobsche)

## **Biology**

25. *Development of a novel immunotherapeutic against Neisseria gonorrhoeae.* **Isaac Bass '17** (sponsor: Professor John Baker)
26. *Head shape and substrate effects on subsurface locomotion in lizards.* **David Berry '18** (sponsor: Professor Philip Bergmann)
27. *Maternal-stress relationship of three spine stickleback.* **Sophie Debler '17, Wynn Haimer '18, Kayleigh McHugh '19** (sponsor: Professor John Baker)
28. *Invasion of Aedes Albopictus in Bermuda.* **Maya Hodgson-Dottin '17** (sponsor: Professor Todd Livdahl)

29. *The role of Notch/Delta signaling during brain and ventral nerve cord development in the spiralian annelid Capitella teleta.* **Iva Hoxha '17** (sponsor: Professor Neva Meyer)
30. *Elucidating the effects of ectopic BMP signaling on neural development in the annelid Capitella teleta.* **Amiel Jaggernaut '18** (sponsor: Professor Neva Meyer)
31. *Nucleotide Relations in Promoter Region Binding Sites for Basal Transcription Factors.* **Degen Larkin '17** (sponsor: Professor Robert Drewell and Professor Jacqueline Dresch)
32. *Gene Regulation in Maturing Cerebellar Granule Neuron Cells.* **Jesslyn Lukman '18, LEEP Fellow** (sponsor: Professor David Thurlow)
33. *Relationship Between Hindlimb Morphology and Jump Performance in the Green Frog.* **Jordan Majka '18** (in association with Sherman Fairchild Scholarship Program sponsor: Professor Philip Bergmann)
34. *Exploring the drivers of Gene Expression between Diatom spp.* **Celine Miranda '17** (sponsor: Professor Deborah Robertson)
35. *A Tale of Two Microbes: Campylobacter Transmission & Cyanobacteria Genera.* **Julianne Murphy '17, Sponsored by the Henry J. Leir Luxembourg Program** (sponsor: Professor John Baker)
36. *Biophysical analysis of FTZ-DNA binding site affinity.* **Rachel Orloski '17** (sponsor: Professor Robert Drewell, Professor Jacqueline Dresch, and Professor Donald Spratt)
37. *Investigating DNA Methylation Differences Within Sub-castes of Apis mellifera.* **Sarah Parker '17 & Aishwarya Ayyappan '18** (sponsor: Professor Robert Drewell)
38. *Biochemical Characterization of SMURF1.* **Lara Prosterman '17** (sponsor: Professor Donald Spratt)
39. *Thermal legacies: Investigating the maternal and paternal roles of transgenerational plasticity in Cyprinodon variegatus.* **Kristen Sheldon '17** (sponsor: Professor Deborah Robertson)
40. *Power Analysis of a Novel Nonlinear Phylogenetic Regression Model.* **Justin Wilbur '17** (in collaboration with Gen Morinaga, graduate student; sponsor: Professor Philip Bergmann)
41. *Illustration and Design: Mushrooms in the Tree of Life.* **Amy Yeager '17 & Sam Hill '17** (sponsor: Professor David Hibbett)

42. *Investigating the Role of CG4096 gene in the EGFR Signaling Pathway.* **Siqi Yuan '17** (sponsors: Professor Justin Thackeray)

### **Chemistry**

43. *Mechanochemical synthesis of  $L_nCuX_2$  ( $L = 3$ -cyanopyridine;  $n = 1,2$ ;  $X = Cl, Br$ ) via drop-solvent grinding.* **Jonathan Chellali '18** (sponsor: Professor Mark Turnbull)

44. *Transition metal complexes of 2-amino-3,5-dihalopyridines: Synthesis, structures and magnetic properties of  $(3,5$ -diCAP) $_2Cu_2X_6$  and  $(3,5$ -diBAP) $_2Cu_2X_6$ .* **Joris Cipi '17** (sponsor: Professor Mark Turnbull)

45. *Synthesis of a Small Molecule Active in Lowering HIV Infectivity.* **Devon Fontaine '17** (in conjunction with Valerie Ivancic, graduate student; sponsor: Professor Charles E. Jakobsche)

46. *Synthesis, Structure, and Magnetic Behavior of Nickel (II) and Cobalt (II) Halide Complexes of isoquinoline.* **Micheal Kebede '18** (sponsor: Professor Mark Turnbull)

### **Computer Sciences**

47. *Camera Canvas for the motor-impaired.* **Trung Ngo '18** (sponsor: Professor John Magee)

48. *Generating Realistic Images Using Deep Neural Networks.* **Jiri Roznovjak '18** (sponsor: Professor John Magee)

49. *Eye-Gaze With Predictive Link Following Improves Accessibility as a Mouse Pointing Interface.* **Jason Vazquez-Li '17, LEEP Fellow & Lyle Stachecki '17, LEEP Fellow** (sponsor: Professor John Magee)

### **Cross-Disciplinary**

50. *Imposed/Ascribed: Heritage and Identity in North-East India.* **Fileona Dkhar '17** (sponsor: Professor Robert Tobin)

51. *Goddard Library Research Guides.* **Nadia Friedler '17, LEEP Fellow & Devin Melle '17, LEEP Fellow** (sponsor: Tony Penny)

52. *Visual Arts Facilitator at the Boys and Girls Club of Worcester LEEP Project.* **Faith Geanacopoulos '17, LEEP Fellow** (sponsor: Linda Freedman)

### **Cultural Studies & Communication**

53. *IdentifyU- Poetry Inside Out.* **Margaret Foster '18, LEEP Fellow, Savannah MacLean '17, LEEP Fellow & Celia Ringland '17, LEEP Fellow** (sponsor: Professor Sarah Michaels)



54. *Creative Promotions Development for Spiritual Haze*. **Alex Hull '19, LEEP Fellow** (sponsor: Professor Matt Malsky)

### **Economics**

55. *Food Access/ Health Metrics Internship*. **Nicholas Johnson '17, LEEP Fellow** (sponsor: Jacqueline Geoghegan)

### **Education**

56. *Fostering Creativity for Young People in Dublin*. **Tess Reichart '17, LEEP Fellow** (sponsor: Professor Meredith Neuman)

### **English**

57. *Female Homelessness in Worcester; Summer Internship at the Abby Kelley Foster House*. **Madeline Phillips '17, LEEP Fellow** (sponsor: Professor James Elliott)

### **Environmental Science**

58. *Soil Phosphates Response to Varying Moisture Levels*. **Meyru Bhanti '18** (in conjunction with St. Michaels college in Burlington, VT sponsor: Professor Farrah Fatemi)

59. *Water Supply Treatment of Oyu Tolgoi Mining in Mongolia and Its Environmental, Social, and Economical Cost*. **Odgerel Chintulga '18, LEEP Fellow** (sponsor: Professor John Baker)

60. *Bird species diversity, landscape ecology, and bioacoustics: analysis of the Rio de Piedras Reservoir Project*. **Stefanie Farrington '17** (sponsor: Professor John Gibbons)

61. *Community-Based Approaches to Climate Change Resilience in Rural Nepal*. **Sophia Graybill '17, LEEP Fellow** (sponsor: Professor Timothy Downs)

62. *Assessment of disease abundance and bleaching in *Acropora* spp. in South Caicos, Turks and Caicos Islands*. **Celine Miranda '17** (sponsor: Professor Deborah Robertson)

### **Geography**

63. *Research and Development at NPR ft. GIS*. **Amanda Canarios '17, LEEP Fellow** (sponsor: Professor Mark Davidson)

64. *Monitoring and Forecasting Shifting Climate and Land Change Impacts in Peru's Parque de la Papa for Enhanced Agricultural Management*. **Shirin Esmaeili '17** (sponsor: Professor Florencia Sangermano)

65. *Education and Urban Green Space: A GIS analysis of Graduation Rates and Green Space in Denver, Colorado*. **Will Heikes '17, LEEP** (sponsor: Professor Mark Davidson)

66. *Working with Federal Law Enforcement in Hartford, Connecticut.* **Alexander Merriam '17** (sponsor: Professor Deb Martin)

67. *GIS Internship with NOAA's Office of Coastal Management.* **Isabel Miranda '17** (sponsor: Professor John Rogan)

68. *Verification of the Sedimeter as a Turbidity, Erosion, and Scour Sensor.* **Carly Robbins '18** (sponsor: Professor Chris Williams)

69. *Assessing Landscape Vulnerability to Drought and Climate Change in National Parks of the Western United States.* **Thomas Smith '17** (in conjunction with NASA DEVELOP National Program; sponsor: Professor John Rogan)

### **HERO (Human-Environment Regional Observatory)**

70. *Assessing juvenile tree status from plantings initiatives within ALB Quarantine Zone, MA.* **Tyler Anderson '18, Eli Simonson '17 & Rishi Singh '17** (in conjunction with Geography sponsor: Professor John Rogan)

71. *Assessing resident experiences with tree planting initiatives in Worcester, MA.* **Savannah Sanford '17, Emma Freud '17, Rishi Singh '17, Eli Simonson '17, & Tyler Anderson '18** (sponsor: Professor John Rogan and Professor Deb Martin)

### **History**

72. *Examining Worcester's African American Population's Participation in Religious, Community, and Fraternal Life.* **Joseph Viola '17, LEEP Fellow** (sponsor: Professor Janette Greenwood)

### **International Development and Social Change (IDSC)**

73. *Reconciliation: Changing Pressures on Sustainable Cuban Urban Agriculture.* **Claire Bayler '17, LEEP Fellow** (sponsor: Professor Jude Fernando)

74. *How Are Communities (In SE Asia) Affected By Tourism/Voluntourism? (Using The Case Study Of Operation Groundswell).* **Amy Fallon '17, LEEP Fellow** (sponsor: Professor Denise Humphreys Bebbington)

75. *WAASE Project Management Internship.* **Claire Hanna '17, LEEP Fellow** (sponsor: Professor Marianne Sarkis)

76. *Struggles and Court Cases of the LGBTQI Community in India: Through the Lens of Documentary-Film.* **Maya Katz-Ali '17, LEEP Fellow** (sponsor: Professor Anita Fabos)

77. *Referral Network Analysis with the Worcester Alliance Against Sexual Exploitation.* **Molly Kellman '17, LEEP Fellow** (sponsor: Professor Marianne Sarkis)

78. *Commercial Sexual Exploitation in Worcester: Mapping the Legal Pathway and Identifying Gaps in Services/Opportunities for Interventions.* **Leah Meyers '18 and Maria Rudolf '18** (sponsor: Professor Marianne Sarkis)

79. *Peace Corps: Marketing and Social Media Coordinator.* **Bethlehem Phifer-Houseman '17, LEEP Fellow** (sponsor: Professor Anita Fabos)

80. *Creating an Alternative Spring Break Program.* **Jenny Rubin '18, LEEP Fellow** (sponsor: Professor Micki Davis)

### **Language, Literature and Culture**

81. *"ChamTell" Teaching Program.* **Elias Champi '17, LEEP Fellow** (sponsor: Professor Constance Whitehead Hanks)

82. *Translation: Theory and Practice.* **Nikolas Wagner '18, LEEP Fellow** (sponsor: Professor Robert Tobin)

### **Management**

83. *Social Marketing to Improve Worcester's Waterways, LEEP Project.* **Vincent Morra '17, LEEP Fellow** (in conjunction with Blackstone Headwaters Coalition and Peter Coffin)

### **Mathematics and Computer Science**

84. *An Evolved Evolutionary Algorithm.* **Michael Gaiewski '18** (sponsor: Professor Jacqueline Dresch)

### **Physics**

85. *Analysis of Surface-Layer Lattice Distortions in TbTe<sub>3</sub>.* **Matthew Alvarado-Ross '17** (sponsor: Professor Michael Boyer)

86. *Clark University Microgrid System.* **Camille Bales '19** (sponsor: Professor Charles Agosta)

87. *The Bistro USB Charging Station.* **Yoni Hazan '18** (sponsor: Professor Charles Agosta)

88. *Biological Switch to Oscillator Transitions.* **Alec Ikei '17** (in collaboration with Ammar Tareen, graduate student; sponsor: Professor Ranjan Mukhopadhyay)

89. *Fluid Flow in a Granular Media Bed.* **Nikolay Ionkin '18, LEEP Fellow & Nathan Fitzpatrick '18, LEEP Fellow** (sponsor: Professor Arshad Kudrolli)

90. *Investigation of Cuprous Oxide Nanocubes Using Scanning Tunneling Microscopy.* **Donny Pearson '17, Muhammad Kasule '17 & Lubaina Selani '17** (sponsor: Professor Michael Boyer)

91. *Evolutionary Dynamics*. **Greg Schulman '17** (sponsor: Professor Ranjan Mukhopadhyay)

## **Philosophy**

92. *Concepts of disability and adaptive rock climbing*. **Marielle Joseph '17, LEEP Fellow, Alyssa Williams '17, LEEP Fellow & Madi Carleton '17, LEEP Fellow** (sponsor: Professor Wiebke Deimling)

## **Political Science**

93. *Research and Innovation at NOAA*. **Rebecca Hadik '17** (sponsor: Professor Amy Richter)

## **Prehealth**

94. *Project Healthcare*. **Courtney Pharr '17, LEEP Fellow** (sponsor: Professor Michelle Bata)

## **Psychology**

95. *The effects of meditation and rumination on reported perceived stress and optimism in undergraduate students*. **Sherief Eldeeb '18** (sponsor: Professor Nicole M. Overstreet)

96. *Hegemonic Empathy in Adolescent Boys*. **Brandon Hall '17** (sponsor: Professor Andrew Stewart)

97. *Heterosexism in the Workplace: Extended Tests of the Outgroup Male Target Hypothesis*. **Declan Kurant '17, LEEP Fellow** (sponsor: Professor Andrew Stewart)

98. *Developing a Curriculum for Perspectives Corporation*. **Julissa Lopez '18, LEEP Fellow** (sponsor: Professor Esteban Cardemil)

99. *Urban Agriculture: Entrepreneurship in Bogota, Colombia*. **Sydney Tanguay '17, LEEP Fellow** (sponsor: Professor John Dobson)

## **Sociology**

100. *Olivia Benson as Detective, Lieutenant, and Mother: An Analysis of Occupations, Feminism, Law Enforcement, and Gendered Expectations*. **Yasmine Shawwaf '17, LEEP Fellow** (sponsor: Professor Debra Osnowitz)

## **Theodore H. Barth Foundation**

101. *STAND for a Change: My Summer Preventing Genocide*. **Casey Bush '19** (in conjunction with Career Services Vickie Cox-Lanyon)

102. *AIDS Project Worcester: Prevention and Outreach Education Internship.* **Eliana Stanislawski '17** (in conjunction with Career Services Vickie Cox-Lanyon)

103. *Children's International Summer Village - Norway.* **Emily Thompson '17, Education Department, LEEP Fellow** (sponsor: Career Services Vickie Cox-Lanyon)

### **Urban Development and Social Change (UDSC)**

104. *Are Worcester Employers Ready for TMA Services?* **Devin Clarke '17, Lois and Robert Green Internship** (sponsor: Professor Deb Martin)

105. *Addressing Youth Mobility: Recommendations for Including Youth Needs in Transit Planning.* **Madilyn Jacobsen '17, Lois and Robert Green Internship** (sponsor: Professor Deb Martin)