2013 Summer Undergraduate Research Fund (SURF) Awards

Congratulations to the seventy UConn undergraduates who have been offered SURF Awards for Summer 2013. Thank you to your faculty mentors and other faculty members who have supported student applications to the SURF Award Program. Undergraduate research is one of the most engaging learning experiences available to UConn undergraduates!

1. Kaitrin Acuna — Visual Arts — YOG: 2015

Project Title: Sculpting Sound: A Book on the Art and Science of Synesthesia Faculty Mentor: Dr. Anke Finger, Department of Literatures, Cultures, & Languages, College of Liberal Arts & Sciences

Named Award: Dr. Roger Cherney Award

2. Rachel Adams — Biomedical Engineering — YOG: 2015

Project Title: Development of a Tissue Treatment and Sorting Protocol in the Fabrication of Transcatheter Aortic Valves

Faculty Mentor: Dr. Wei Sun, Departments of Biomedical and Mechanical Engineering, School of Engineering

3. Rebecca Albanese — Biological Sciences — YOG: 2014

Project Title: Exploring the Influence of Parental Race/Ethnicity, Education Level and Child Gender on Paternal Feeding Style

Faculty Mentor: Dr. Amy Mobley, Department of Nutritional Sciences, College of Agriculture & Natural Resources

4. Robert Anderson — Individualized Major: International Development — Human Rights — YOG: 2015

Project Title: *Human Trafficking Policy: An interdisciplinary Deconstruction and Evaluation* Faculty Mentor: Dr. Cathy Schlund-Vials, Department of English and Asian American Studies Institute, College of Liberal Arts & Sciences

5. Milos Atz — Chemical Engineering — YOG: 2014**

Project Title: A Study of Amyloid Protein Aggregation Kinetics Faculty Mentor: Dr. Mu-Ping Nieh, Department of Chemical and Biomolecular Engineering, School of Engineering

6. Sarah Banker — Molecular and Cell Biology — YOG: 2014

Project Title: Comparison of Nuclear and Mitochondrial Gene Phylogenies for the New Zealand Cicada Genus Kikihia

Faculty Mentor: Professor Chris Simon, Department of Ecology and Evolutionary Biology, College of Liberal Arts & Sciences

7. Caroline Barri — Nursing — YOG: 2014

Project Title: *Patient Self-Management Pain Strategies and Pain during Hospitalization* Faculty Mentor: Dr. Deborah McDonald, School of Nursing

8. Luke Belval — Athletic Training — YOG: 2014

Project Title: *Thermoregulatory responses of runners following a warm-weather road race* Faculty Mentor: Professor Douglas Casa, Department of Kinesiology, NEAG School of Education Named Award: Treibick Scholar

9. Samantha Beynor — Biological Sciences — YOG: 2014

Project Title: Change in Salinity Preference of Threespine Stickleback during Development Faculty Mentor: Dr. Eric Schultz, Department of Ecology and Evolutionary Biology, College of Liberal Arts & Sciences

Named Award: Friends of CLAS Scholarships

10. Jenna Blessington — Natural Resources — YOG: 2014

Project Title: *What is the Impact of Apex Predators on Black-Backed Jackals?* Faculty Mentor: Dr. Morty Ortega, Department of Natural Resources and the Environment, College of Agriculture & Natural Resources

11. Kevin Boyd — Molecular and Cell Biology — YOG: 2014

Project Title: *Molecular Simulations of Virus Nanoindentation* Faculty Mentor: Dr. Eric May, Department of Molecular and Cell Biology, College of Liberal Arts & Sciences Named Award: Wyand Family Honors Scholarship

12. Andrew Brown — Environmental Science — YOG: 2014

Project Title: The Vertical Distribution of Soil Phosphorus Under Managed Turfgrass in Connecticut and the Dependency of Turfgrass P Status on Past Management Decisions Faculty Mentor: Professor Thomas Morris, Department of Plant Science and Landscape Architecture, College of Agriculture & Natural Resources

13. Alexandra Buda — Molecular and Cell Biology — YOG: 2014

Project Title: Assessing a Novel Method for Bone Marrow Aspiration in Pediatric Oncology Faculty Mentor: Professor Arlene Albert, Department of Molecular and Cell Biology, College of Liberal Arts & Sciences

Co-Investigators: Dr. Michael Isakoff, Hematology/Oncology Department, Connecticut Children's Medical Center Dr. Sharon Smith, Emergency Department, Connecticut Children's Medical Center Named Award: Doug Anton Award

14. Steven Burger — Molecular and Cell Biology — YOG: 2015

Project Title: *An OCT4 Alternative; Analyzing the Role of CDH1 in Reprogramming* Faculty Mentor: Dr. Craig Nelson, Department of Molecular and Cell Biology, College of Liberal Arts & Sciences Named Award: Alan Bernstein Memorial Award

15. Sonny Caplash — Biological Sciences — YOG: 2015

Project Title: *Identification of Novel RNA Targets of the Leukemic Fusion of Protein RBM15-MKL1* Faculty Mentors: Dr. Stephanie Halene, School of Medicine, Yale University, and Dr. Mark Peczuh, Department of Chemistry, College of Liberal Arts & Sciences

16. Sharon Casavant — Nursing — YOG: 2015

Project Title: Exploration of Environmental Factors Affecting Breastfeeding Duration in an Exclusively Breast Milk NICU

Faculty Mentor: Professor Jacqueline McGrath, School of Nursing

17. Brittany Ciullo — Linguistics and Philosophy — Cognitive Science — YOG: 2014

Project Title: Pitch Variation Cues for Word Segmentation: A Comparison of Tonal and Non-Tonal Language Speakers

Faculty Mentor: Dr. Emily Myers, Department of Speech, Language, and Hearing Sciences, College of Liberal Arts & Sciences

Named Award: Sterling-Wasserman Family Award

18. Emily Clancy — Diagnostic Genetic Studies — YOG: 2014

Project Title: *Post-translational Modifications of the XLR3 Protein* Faculty Mentor: Dr. Michael O'Neill, Department of Molecular and Cell Biology, College of Liberal Arts & Sciences

19. Virginia Cousens — Chemical Engineering — YOG: 2014

Project Title: *Facilitated Transport of Soil Bacteria by Protists* Faculty Mentor: Dr. Leslie Shor, Department of Chemical and Biomolecular Engineering, School of Engineering Named Award: The Robert Ekman SEED Award for SURF

20. Samantha Cummins — Molecular and Cell Biology — YOG: 2014

Project Title: Development of a Mouse Model for the Disease of Heterotopic Bone Formation, Fibrodysplasia Ossificans Progressiva

Faculty Mentor: Professor David Goldhamer, Department of Molecular and Cell Biology, College of Liberal Arts & Sciences

Named Award: Coric Family Honors SURF Award

21. Michele Dalena — Biomedical Engineering — YOG: 2015

Project Title: *Modifications of Transcatheter Aortic Heart Valve Suturing and Design* Faculty Mentor: Dr. Wei Sun, Departments of Biomedical and Mechanical Engineering, School of Engineering

22. Rebecca D'Angelo — Anthropology — History — YOG: 2014

Project Title: *Natural Knowledge and the Anthropology of Choice* Faculty Mentor: Professor Christopher Clark, Department of History, College of Liberal Arts & Sciences Named Award: Virginia DeJohn Anderson Award

23. Roberta Delvy — Molecular and Cell Biology — Anthropology — YOG: 2014

Project Title: *Developing a Method for the Early Detection of Type 1 Diabetes* Faculty Mentor: Professor Michael Lynes, Department of Molecular and Cell Biology, College of Liberal Arts & Sciences

Named Award: Ocean Rain Family Foundation Fund for SURF

24. Katelyn DeNegre — Physiology and Neurobiology — YOG: 2014

Project Title: In Vitro RNAi Knockdown of the Meiosis Specific Protein, XIr3 (X-Linked Lymphocyte-Regulated 3 Complex)

Faculty Mentor: Dr. Michael O'Neill, Department of Molecular and Cell Biology, College of Liberal Arts & Sciences

25. Julia Drouin — Speech, Language, and Hearing Sciences — YOG: 2014

Project Title: Speech Perception in Persons with Aphasia

Faculty Mentor: Dr. Emily Myers, Department of Speech, Language, and Hearing Sciences, College of Liberal Arts & Sciences

Named Award: Friends of CLAS Scholarships

26. Erin Dwyer — Physiology and Neurobiology — YOG: 2014

Project Title: Investigation into the development of Magicicada of different species throughout the Eastern United States

Faculty Mentor: Professor Chris Simon, Department of Ecology and Evolutionary Biology, College of Liberal Arts & Sciences

27. Clancy Emanuel — Electrical Engineering — YOG: 2016**

Project Title: *Spectroscopic and Theoretical Investigation of the Low-Frequency Dynamics of Amino Acids* Faculty Mentor: Professor Robert Birge, Department of Chemistry, College of Liberal Arts & Sciences

28. Nicholas Farrell — Nutritional Science — YOG: 2014**

Project Title: *Astaxanthin's Potential Therapeutic Value in NASH* Faculty Mentor: Dr. Ji-Young Lee, Department of Nutritional Sciences, College of Agriculture & Natural Resources

29. Christopher Fekete — Physiology and Neurobiology — YOG: 2014

Project Title: Understanding the Molecular Mechanisms Involved in the Formation and Maintenance of GABAergic Synapses

Faculty Mentor: Professor Angel de Blas, Department of Physiology and Neurobiology, College of Liberal Arts & Sciences

30. Anton Gudz — Chemistry — YOG: 2015

Project Title: *Highly Active and Selective Catalytic Systems for Biomass and Photocatalytic Conversion* Faculty Mentor: Professor Steven Suib, Department of Chemistry, College of Liberal Arts & Sciences Named Award: Dr. John Tanaka Academic Enhancement Fund for Honors

31. Harrison Haney — Acting — YOG: 2014

Project Title: *Hatshepsut and Carter: A Story Lost in Time* Faculty Mentor: Dr. Michael Bradford, Department of Dramatic Arts, School of Fine Arts

32. Steven Hong — Molecular and Cell Biology — YOG: 2014

Project Title: *Localization and Function of EspG and Host G-Proteins during Enterohemorrhagic E. Coli Infection* Faculty Mentor: Dr. Kenneth Campellone, Department of Molecular and Cell Biology, College of Liberal Arts & Sciences

Named Award: Ocean Rain Family Foundation Fund for SURF

33. Michael Jacques — Linguistics and Philosophy — YOG: 2014

Project Title: *Coordination: Collectivity and Type Shifting* Faculty Mentor: Dr. Jon Gajewski, Department of Linguistics, College of Liberal Arts & Sciences Named Award: Friends of CLAS Scholarships

34. Myles Jones — Psychology — Physiology and Neurobiology — YOG: 2014

Project Title: The Effect of Fluoxetine on Anhedonic Symptoms in a Tetrabenazine Induced Rat Model of Depression

Faculty Mentor: Professor John Salamone, Department of Psychology, College of Liberal Arts & Sciences Named Award: Gerald Blume Summer Undergraduate Research Fund Award

35. Krisela Karaja — English — Spanish Literature and Culture — YOG: 2014

Project Title: Working for and Against the Concept of Nation in Latino and Albania Literature: Junot Diaz and Fatos Kongoli

Faculty Mentor: Dr. Guillermo Irizarry, Department of Literatures, Cultures, and Languages, College of Liberal Arts & Sciences

Named Award: Robert and Elizabeth Subkowsky Award

36. Milod Kazerounian — Computer Science and Engineering — Cognitive Science — YOG: 2014**

Project Title: *Exploring Irregularities in Language: What are their origins and why do they persist?* Faculty Mentor: Dr. Whitney Tabor, Department of Psychology, College of Liberal Arts & Sciences

37. Julie Klaric – Biological Sciences – YOG: 2015

Project Title: Discovering the Sequence Specificity of the BGLF-4 Protein Kinase in Epstein-Barr Virus and Predicting Host Substrates

Faculty Mentor: Dr. Daniel Schwartz, Department of Physiology and Neurobiology, College of Liberal Arts & Sciences

38. Gopal Kodumudi – Molecular and Cell Biology – YOG: 2014

Project Title: Dissecting the Role of Cazi in Centromere Formation Faculty Mentor: Dr. Barbara Mellone, Department of Molecular and Cell Biology, College of Liberal Arts & Sciences

39. Lukasz Kuna — Applied Physics — YOG: 2014

Project Title: *The Magnetocaloric Effect and Magnetic Refrigeration* Faculty Mentor: Dr. Menka Jain, Department of Physics, College of Liberal Arts & Sciences

40. Peter Larson — Pathobiology — YOG: 2015

Project Title: *Magnetic-Beaded Antibody Facilitation of Recombinant Vaccinia Virus Production* Faculty Mentor: Dr. Paulo Verardi, Department of Pathobiology and Veterinary Sciences, College of Agriculture & Natural Resources

41. Briana Lechkun — Natural Resources — YOG: 2014

Project Title: Effects of Nectar Robbing in Colombia

Faculty Mentor: Dr. Margaret Rubega, Department of Ecology and Evolutionary Biology, College of Liberal Arts & Sciences

42. Shang Lin (Tommy) Lee — Biological Sciences — Psychology — YOG: 2014

Project Title: *Teaching Rats a Temporal Sequence in a Water Maze* Faculty Mentor: Professor Etan Markus, Department of Psychology, College of Liberal Arts & Sciences Named Award: Friends of CLAS Scholarships

43. Prisma Lopez — Molecular and Cell Biology — YOG: 2014

Project Title: *Creating a Valuable Tool for the Analysis of Protein Kinase R Interaction with Various RNA Ligands* Faculty Mentor: Professor James Cole, Department of Molecular and Cell Biology, College of Liberal Arts & Sciences

Named Award: The McKinney-Lindsay Family Award

44. Andrea Lopez Salazar — Human Development and Family Studies — YOG: 2014

Project Title: Gender, Ethnicity, and Self-Esteem: A Comparison of African American and Hispanic Adolescent Girls

Faculty Mentor: Dr. Annamaria Csizmadia, Department of Human Development and Family Studies, College of Liberal Arts & Sciences, and Dr. Rhiannon Smith, Department of Psychology, College of Liberal Arts & Sciences

45. Mary Mackie — Political Science — Human Rights — YOG: 2014

Project Title: Indigenous Environmental Justice through Human Rights: Extractive Industries, the Navajo Nation, and UNDRIP

Faculty Mentor: Dr. Barbara Gurr, Women's, Gender, and Sexuality Studies Program, College of Liberal Arts & Sciences

Named Award: Dr. Bill DeWalt SURF Award

46. Daniel Madden — Molecular and Cell Biology — YOG: 2014

Project Title: *Probing the Molecular Interactions of Vitamin-D3 in Inhibition of the Hedgehog Signaling Pathway* Faculty Mentor: Dr. Kyle Hadden, Department of Pharmaceutical Sciences, School of Pharmacy Named Award: Gerald Blume Summer Undergraduate Research Fund Award

47. Richika Makol — Physiology and Neurobiology — Psychology — YOG: 2014

Project Title: Function of a Dyslexia Associated Gene in Human Neurons Faculty Mentor: Professor Joseph LoTurco, Department of Physiology and Neurobiology, College of Liberal Arts & Sciences Named Award: Patricia A. Hansen SURF Award

48. Eli Miranda — Speech, Language, and Hearing Sciences — YOG: 2015

Project Title: Story Goodness in Emerging and Established Sign Languages Faculty Mentor: Dr. Marie Coppola, Department of Psychology, College of Liberal Arts & Sciences Named Award: Friends of CLAS Scholarships

49. Maschal Mohiuddin – Biological Sciences – Journalism – YOG: 2015**

Project Title: *Application of Q State Mutants of Bacteriorhodopsin in an Artificial Retina* Faculty Mentor: Professor Robert Birge, Department of Chemistry, College of Liberal Arts & Sciences

50. Julianne Norton — Individualized Major: International Relations — YOG: 2015

Project Title: *How to Make the Ideal Shoe: Postmemory and Artists' Books* Faculty Mentor: Dr. Deborah Dancy, Department of Art and Art History, School of Fine Arts Named Award: Christopher M. Lewis Fund Award

51. William Ollayos — Biological Sciences — English — YOG: 2014

Project Title: Detecting Toxins and Toxicants: Limits of Detection for Novel SPR Technology Faculty Mentor: Professor Michael Lynes, Department of Molecular and Cell Biology, College of Liberal Arts & Sciences

Named Award: Gary Karp Award

52. Cristobal Ortega — Journalism — Photography — YOG: 2015

Project Title: *Gullah Voices: Traditions and Transformations* Faculty Mentor: Professor Mary Ellen Junda, Department of Music, School of Fine Arts

53. Takumi Otsuka — Biomedical Engineering — YOG: 2015

Project Title: *The Role of Dyslexia-Associated Gene Dcdc2 in Pre-NMDAR Regulation in Thalamocortical Pathways* Faculty Mentor: Professor Joseph LoTurco, Department of Physiology and Neurobiology, College of Liberal Arts & Sciences

54. Mallory Perry — Nursing — YOG: 2014

Project Title: Investigating the Role of Dietary Fat Supplementation in the Treatment of Premenstrual Syndrome in Minority Students

Faculty Mentor: Dr. Michelle Judge, School of Nursing

Named Award: Mr. Michael Alpert and Ms. Ariana Napier Honors and Enrichment Scholarship

55. Ragini Phansalkar — Biological Sciences — YOG: 2014

Project Title: *Identifying the interaction between histone CID and its chaperone VAL!* Faculty Mentor: Dr. Barbara Mellone, Department of Molecular and Cell Biology, College of Liberal Arts & Sciences Named Award: Treibick Scholar

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56. Emily Potrzeba – Speech, Language, and Hearing Sciences – YOG: 2014

Project Title: Investigating the Development of the Shape Bias for Word Learning in Children with Autism Spectrum Disorders

Faculty Mentor: Professor Letitia Naigles, Department of Psychology, College of Liberal Arts & Sciences

57. Kathryn Ritz — Molecular and Cell Biology — YOG: 2014

Project Title: *Centromere Drive as a Model of Evolution in Marsupial Hybrids* Faculty Mentor: Professor Rachel O'Neill, Department of Molecular and Cell Biology, College of Liberal Arts & Sciences

Named Award: Treibick Scholar

58. Margaret Rowland — Psychology — YOG: 2014

Project Title: Reversing the Effort-Related Impairments Induced by Tetrabenazine with the Selective Serotonin Reuptake Inhibitor Fluoxetine

Faculty Mentor: Professor John Salamone, Department of Psychology, College of Liberal Arts & Sciences

59. Ashley Russo — Molecular and Cell Biology — YOG: 2014

Project Title: Characterizing the Interactions between WHAMM and Phospholipids

Faculty Mentor: Dr. Kenneth Campellone, Department of Molecular and Cell Biology, College of Liberal Arts & Sciences

Named Award: Ocean Rain Family Foundation Fund for SURF

60. Jessie Scott — Biological Sciences — YOG: 2014

Project Title: *Characterization of a Putative Cephalotoxin in the Hemocytes of Euprymna Scolopes* Faculty Mentor: Dr. Spencer Nyholm, Department of Molecular and Cell Biology, College of Liberal Arts & Sciences

61. Catrina Shea — Accounting — Political Science — YOG: 2014

Project Title: *Economic Factors of IFRS Adoption in China, Brazil, and India* Faculty Mentor: Professor Mohamed Hussein, Department of Accounting, School of Business Named Award: Mathew Jasinski Award

62. Joshua Squires — Physics — YOG: 2014

Project Title: *Doping in High-Temperature Superconductivity* Faculty Mentor: Professor Barrett Wells, Department of Physics, College of Liberal Arts & Sciences Named Award: Trimble Family Award

63. Annie Stupik – Natural Resources – YOG: 2014

Project Title: *American Kestrel Juvenile Dispersal Patterns and Survival in Connecticut* Faculty Mentor: Dr. Chadwick Rittenhouse, Department of Natural Resources and the Environment, College of Liberal Arts & Sciences

64. Savas Tsikis — Molecular and Cell Biology — YOG: 2014

Project Title: Mutagenicity of 8-oxoguanine lesion adjacent to an abasic site in Escherichia coli cells proficient or deficient in Y-family DNA polymerase(s)

Faculty Mentor: Professor Ashis Basu, Department of Chemistry, College of Liberal Arts & Sciences Named Award: Friends of CLAS Scholarships

65. Aashay Vyas — Molecular and Cell Biology — YOG: 2014

Project Title: *Icosahedral Virus Capsid Assembly: Investigations of Size Determination in the P22 Coat Protein* Faculty Mentor: Professor Carolyn Teschke, Department of Molecular and Cell Biology, College of Liberal Arts & Sciences

66. Jesse Wang — Physiology and Neurobiology — YOG: 2014

Project Title: *Minor Spliceosome is Required for the Survival of Neurons during Retinal Development* Faculty Mentor: Dr. Rahul Kanadia, Department of Physiology and Neurobiology, College of Liberal Arts & Sciences

67. Alex Ward — Biological Sciences — YOG: 2014

Project Title: *Bioproduction and Construction of a Self-Assembling Nanoparticle Malaria Vaccine* Faculty Mentor: Dr. Peter Burkhard, Department of Molecular and Cell Biology, College of Liberal Arts & Sciences Named Award: Friends of CLAS Scholarships

68. Ashley West — Pharmacy — YOG: 2014

Project Title: *Immunosuppressant Activity in Compounds Isolated from Marine Bacteria* Faculty Mentor: Dr. Marcy Balunas, Department of Pharmaceutical Sciences , School of Pharmacy

69. Julio Yela — Electrical Engineering — YOG: 2014

Project Title: *Dual AC and DC Output Power Electronic System for Solar Photovoltaic Applications* Faculty Mentor: Dr. Ali Bazzi, Department of Electrical and Computer Engineering, School of Engineering

70. Arielle Yoon – Anthropology – YOG: 2014

Project Title: *Machismo and Societal Response to Sexual Assault and Rape Victims in Buenos Aires* Faculty Mentor: Professor Francoise Dussart, Department of Anthropology, College of Liberal Arts & Sciences

Note:

** Students who have elected NOT to accept their SURF award due to other opportunities for Summer 2013.