

BioSEPC' 10 - Summer Research Internship

❖ Please contact each individual for more information!

REUs (Government-funded; only available for US citizens and permanent residents)

Name	E-mail	Research Institution	Program Type	REU	Project
Complete REU list from NSF				Y	http://www.nsf.gov/crssprgm/reu/list_result.cfm?unitid=5047
Karl Kremling	kremling	Cornell U - Boyce Thompson Institute	Plant Research	Y	<u>Plant Genetics</u> : I used a maize x teosinte near isogenic line population to screen for interesting shade avoidance response phenotypes.
Karl Kremling	kremling	U of Missouri	Plant Research	Y	<u>Plant Genetics</u> : My project involved using fluorescence in situ hybridization (FISH) compare mtDNA insertions into the nuclear chromosomes of maize.
Mikel Shybut	shybutmi	Cornell U - Boyce Thompson Institute	Plant Research	Y	Plant Genetics
David Montgomery	montgome1	U of Virginia	Mountain Lake Biological Station	Y	Ecology, Evolution and Behavior
Allyse Hellmich	hellmich	American Museum of Natural History		Y	
Whitby Eagle	eaglewhi	U of Iowa, Dept of Microbiology	Microbiology	Y	<u>Microbiology</u> : I was in John Kirby's lab researching the function of the HAMP domain of the Che6 chemosensory operon in the model bacterium <i>Myxococcus xanthus</i> . I did this creating a new insertion mutant that had HAMP knocked out via the plasmid PBJ114, then selected for successful transformation via Kanamycin resistance. Once I had my mutant in both backgrounds (DZF1 and DZ2) I performed a series of developmental, motility, and predation assays of them to determine their relevant phenotypes.
		University of Nebraska-Lincoln (UNL)	Microbiology	Y	<u>Microbiology</u> : Please contact Laurie Voelker (lvoelker2@unl.edu) or visit http://www.unl.edu/summerprogram/program_bioenergy.shtml for more information.
		University of Delaware	Ocean Sciences	Y	<u>Ocean Sciences</u> : Please contact Ana Dittel (adittel@udel.edu) or visit http://www.ceoe.udel.edu/academics/undergraduate/summer/index.shtml for more information.

Matt Nielsen	nielsenm	U of Puerto Rico-Rio Piedras - Institute for Tropical Ecosystem Studies	Ecology	Y	<u>Tropical Ecology</u> : This program was actually stationed at the El Verde field station in the rainforest of the Luquillo Mountains (and most students field site). My particular research involved surveying the spider community of several types of forest and then considering how these communities had changed since the last hurricane (I was working with a long term data set).
Matt Nielsen	nielsenm	Kansas State U	Ecology	Y	<u>Ecological Genomics/Ecology</u> : This program currently has a topical focus on ecological genomics, although it is also associated with ecology in general. It is also associated with Konza Prairie, a large field research site where several students did field work, but not me. Myself, I studied the evolution of cold tolerance in several /Drosophila/ fruit fly species using molecular evolutionary genetic techniques. I would say that this program as a whole is very well run and coordinated.
Dan Ferguson	ferguson	U Wisconsin-Madison	Ecology	Y	<u>Ecology</u> : to understand the community and chemical ecology of clonal aspen forests.
Nathan Pavlovic	pavlovic	Kansas State University - Lipidomics Research Center	Molecular Bio/ Microbiology	Y	<u>Molecular Bio/Microbiology</u> :spectrophotometric quantification of lipids from soils to investigate microbial adaptive responses to nutrient deposition.

Non-REUs (Available for ALL students)

Allie Greenberg	greenber	Mayo Clinic in MN	Summer Undergraduate Research Fellowship	N	<u>Breast Cancer Genetics</u> : Worked primarily epidemiological examinations of breast cancer genetics (3 different projects) and MGUS; still in contact and trying to work remotely on the projects
Xiaoni Liu	liuxiaon	Florida orthopedic institute	Clinical Research Internship	N	<u>Clinical research</u> internship on shoulder surgeries
Kerry York	Yorkkerr	Washington University in St. Louis Medical School	Biomedical Research Apprenticeship Program (BioMedRAP)	N	<u>Genetics</u> : She mapped mutations of a protein phosphatase 2 to a chromosome in the Chlamydomonas reinhardtii (algae) genome. She did a lot of work screening for phenotypic mutations and then used a molecular approach (PCR based) to figure out where the mutations occurred. She also worked on a filming project with a mechanical engineer partner at another university to obtain film documentation of flagellar movement which was then put through a statistical program to analyze and graphically represent waveform.
Joo Hyun Im	imjoohyu	National University of Ireland, Maynooth	Molecular Evolution	N	<u>Yeast Genetics</u> : I worked on yeast prion proteins studying HSP70 protein subfamilies SSA1~4.
Lyda Robb	robblyda	Southwest Foundation for Biomedical Research	Molecular Oncology/Pharmacology	N	<u>Biochemistry</u> : Anti-cancer drug discovery for microtubule targeting agents/Biological examination of vascular disrupting agents/ Structure activity relationship analyses of various compounds
Lyda Robb	robblyda	U of TX Health Sci Center San Antonio			
Joo Hyun Im	imjoohyu	U of Wyoming	Bioinfor/Comput	N	<u>Env. Genomics</u> : I created a clone library of Verrucomicrobia species in the local environment. I also worked on finding CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats) sequences in bacterial genomes.
Kathryn Walder	walderka	U of Iowa	Neurobiology	Y	<u>Neurobiology</u> : Physical Therapy and Rehabilitation Science, Neurobiology of Pain Lab We isolated and cultured mouse (WT, ASIC 3-/-, and ASIC 1 -/-) fibroblast like synoviocytes for intra and extracellular protein assays. We created a model for rheumatoid arthritis in tissue culture using acid stimulation and then assayed the cells for MAPK expression and other known inflammatory proteins.
Dan Ferguson	ferguson	Howard Hughes Medical Institute - Janelia Farm	Neuroscience	Y	<u>Neuroscience</u> : I was working on a project involving extending the longevity of dragonflies in an indoor flight arena using neuroendocrine regulators.

Candyce Jones	jonescan	UCLA	Neurology	N	<u>Neurology</u> : Duchenne muscular dystrophy

Grinnell Summer MAPs (Available for ALL students)

Michael Dyle	dylemich	Grinnell	MAP – DeRidder	N	<u>Plant Genetics</u> : I did plant molecular biology working with proteins involved in photosynthesis.
Janna Niehaus	niehausj	Grinnell	MAP - Hinsa	N	<u>Env. Microbiology</u> : I worked on identifying genes necessary for biofilm formation in <i>Psychrobacter arcticus</i> , and on replacing those genes.
Kelsey Holkesvik	holkesvi	Grinnell	MAP - Queathem	N	<u>Physiology/Health</u> : Indoor/Outdoor exercise effect on cortisol heart rate and body image