

Student Accomplishments, 2008 - 2009

Summer 2008: On Campus Research Projects (TCNJ MUSE program)

Sarah J. Wolfson

Mentor: Dr. Keith W. Pecor

“The ecology of exotic crayfish in New Jersey”

Liron Bendor and Kenneth Rapp

Mentor: Dr. Curt Elderkin

“Phylogenetic analysis of mitochondrial and microsatellite DNA of *Elliptio complanata*”

Lauren M. Anllo

Mentor: Dr. Jeffery Erickson

“Assessment of autoresuscitation capability following repetitive hypoxia-induced apnea in pet-1 mutant mice”

Samantha Mecker

Mentor: Dr. Jeffery Erickson

“Effects of prenatal exposure on resting ventilation and autoresuscitation capability in pet-1 mutant mice”

Alex M. Arnouk

Mentor: Dr. Sudhir Nayak

“Role of the anaphase-promoting complex in the germ-line of *Caenorhabditis elegans*”

Jessica Arias

Mentor: Dr. Miriam Segura-Totten

“Study of the function of the barrier-to-autointegration factor in nuclear disassembly”

Kristine M. Badin and Mark Massak

Mentor: Dr. Leeann Thornton

“Determining the biochemical mechanism of hormone inactivation by rice cytochrome P450 enzymes”

Off Campus: Research Projects, Summer 2008

Posters presented December 3, 2008

Mark Bauernfeind

New York Botanical Garden (Pfizer Cullman Genomic Laboratory) and American Museum of Natural History (Genomics Lab)

“Population genetic analysis of the recently endangered cycad, *Cycadis micronesica*.”

Andrea Egizi

The Cary Institute of Ecosystem Studies-Millbrook, NY

“Distribution of *Entomophaga maimaiga* spores in oak forests and implications for gypsy moth populations”

Janine Bernardo

The University of North Carolina – Chapel Hill, Department of Biochemistry and Biophysics
“Mapping cellular stress-induced phosphorylation sites of DNA replication factor Cdt 1”

Daniel DeMizio

NYS Institute of Basic Research in Developmental Disabilities--CUNY College of Staten Island, Division
Human Genetics
“Prenatal analysis of fragile X syndrome individuals for the joint expression of mosaic Turner syndrome”

Emily Dudek

Coriell Institute for Medical Research - Stem Cell and Matrix Biology Laboratory
“The optimal concentration of growth factors PDGF-AA, EGF, FGF1, FGF2, and TGF β for maintenance of human umbilical cord blood-derived mesenchymal stem cells”

Danielle R. Erickson*

New Jersey Medical School (UMDNJ), Department of Orthopedics
“Manipulating arachidonic acid metabolism to control bone regeneration”
**Poster to be presented in Spring, 2009*

Sisi Grace Gao

Northern Arizona University, Department/Division Behavioral and Conservation
“Temporal changes in population dynamics of the Pinyon jay”

Zach Goldstein

UMDNJ-Newark, Department of Pathology
“Silibinin potentiation of vitamin D3-induced differentiation and human kinase suppressor of Ras-2”

Radha Govindra

UMDNJ-Newark, Department of Obstetrics, Gynecology and Women’s Health
“Metabolic reprogramming mechanisms in placental hypoxia”

Krista Greene

Cashin Associates Engineering & Environmental Planning, Environmental Division
“Shellfish population analysis of Hempstead Harbor, Nassau County, NY “

Jeremy Hreha

University of Florida, Department of Pediatrics/Powell Gene Therapy Center
“Creation of V642F and D404N mutations of the acid α -glucosidase (GAA) gene for vector production”

Chetan Jeurkar

UMDNJ-Newark, Department of Cell and Molecular Biology
“Calcium signaling in phototransduction: Air versus water, fish versus cow”

Michael Jung

UMDNJ-Newark. School of Biomedical Sciences, Department of Molecular Biology
“The role of Bec-1 in C. elegans oocyte quality”

Simona Lekht

NJ Department of Agriculture, Department of Plant Industry

"The effectiveness of protein analysis in identification of Russula species in North America"

Aaron McKeon-Fish

Children's Hospital of Philadelphia, Department of Hematology/Gene Therapy

"Minicircle plasmid vector development and purification for use in murine and canine gene therapy"

Hsin Jou (Josephine) Ng

UMDNJ-Newark, Cancer Center, Department of Cell Biology and Medicine

"Effects of ErbB2/Ras signaling network on metastatic potentials of prostate cancer cells"

Sara Jackrel

West Texas A&M University, Department of Life, Earth and Environmental Sciences

"Using infrared video to study bat activity and behavior"

Joseph Sarhan

Yale University School of Medicine, Cardiology Department

"Involvement of hnRNP in LFA-1-mediated T cell cytokine mRNA stabilization"

Sagar Shah

UMDNJ-New Jersey Medical School, Department of Orthopaedics - Musculoskeletal Oncology

"Status of large allografts following limbs salvage resection of tumors: A retrospective study"

Emily Stumpf

Medical Diagnostic Laboratories-Hamilton, NJ-Antimicrobial Resistance Division

"The role of the LytSR complex in penicillin tolerance in Group B Streptococcus"

Nicholas Tarangelo

Weill Cornell Medical College, Division of Immunology, Department of OB-GYN

"Hyaluronan levels in vaginal secretions and recurrent vulvovaginal Candidiasis (RVVC) infection"

Corey Tong

University of Texas Health Science Center, San Antonio, TX, Department of Biochemistry

"Structural determination of the FCS domain of Polycomb proteins during regulation of gene expression in stem cell development"