

Masters Theses

Student Name	Topic	Advisor	Year
Duncan Carmichael	The influence of Notch Signaling and Male Enriched Genes on Oxidative Stress Resistance in Post-Reproductive <i>C elegans</i>	Dr. M. Youngman	2024
Rachel Carrock	The lack of Relationship Between Morphology, Performance, and Behavior in <i>Lepidodactylus lugubris</i>	Dr. Stark	2024
Corey Pezak	Optimized Murine Macrophage Assay for Assessment of Yeast Strain Pathogenicity	Dr. Wykoff	2024
Faith St. Clair	Reducing Infection Once and Floral: Examining the Effects of Sunflower Pollen on <i>In Vitro</i> Growth and Attachment of <i>Crithidia bombi</i> , a Parasite of Bumblebees	Dr. Povelones	2024
Kaylee Velasquez	Gait, Kinematics and Running Stability of a Tropical Arboreal Ant (<i>Cephalotes atratus</i>) on Wet Substrates	Dr. Stark	2024
Margaret Boyle	Systematics and Phylogeography of the Indo-Burman Clade of <i>Hemidactylus</i> Geckos in Myanmar	Dr. Bauer	2023
Rachel Dacey	A Gene Based Solution: Examining the Role of Small RNA Post-Transcriptional Regulation on Non-viral Gene Delivery Systems	Dr. E. Youngman	2023
Michael Dong	Investigating the Role of 7- Ketocholesterol in Alleviating Inflammatory Bowel Disease (IBD) using Mouse Model of Chemically-Induced Chronic IBD	Dr. Bamezai	2023
Justin Lee	Evolution of the Kukri Snake genus <i>Oligodon</i> Fitzinger, 1826 (Squamata: Colubridae), with Emphases on Skull Morphology and Adaptations for Oophagy	Dr. Bauer	2023
Morgan Mack	Understanding the Influence of Nutrient Pollution on Mangrove Ecosystems: Insights from the Marsh-Mangrove Ecotone	Dr. Chapman	2023
Justin Robbins	Mangrove Vagrants and Satellites: Comparing Patterns of Mangrove Expansion Among Sites Along Florida's Northeastern Coast	Dr. Chapman	2023

Jean Ross	Intruder Alert!: The influence of intruder sex and size on maternal nest guarding and filial cannibalism in the maritime earwig	Dr. Iyengar	2023
Alexander Telma	Characterizing the Role & Regulation of Vitamin B6 Metabolism in <i>Candida glabrata</i>	Dr. Wykoff	2023
Luisa Zavala	Regulation of Pain in <i>Drosophila</i> Larvae by the $\alpha 1,3$ Fucosyltransferase, <i>FucTA</i>	Dr. Shirangi	2023
Yakendra Bajgain	Defining the Regulatory T Cell Specific Role of Ly-6A as an Immune Checkpoint (IC) using a Mouse Tumor Transplant Model	Dr. Bamezai	2022
Damir Creecy	<i>In Vivo</i> Role of Ly-6A in T Lymphocyte Activation and Clonal Expansion using B16 Melanoma Tumor Transplantation Mouse Experimental Model	Dr. Bamezai	2022
Calum Devaney	Transfer and Analysis of the <i>pdu</i> Gene Segment from Three <i>Salmonella enterica</i> Serovars Across Different Gram-Negative Bacteria	Dr. Wilson	2022
Kelsey Fenner	Ecomorphology of the Locomotor System of Geckos (Squamata; Gekkota)	Dr. Bauer	2022
Holly Garrod	DNA-Binding with a Novel Regulator: Does STM1266 Regulate and Bind to Biofilm Gene Promoters?	Dr. Wilson	2022
Kelly Hodges	Characterizing the Role of Nuclear Body Protein ZC3H8 in Proliferation, Apoptosis and DNA Repair of Mouse Mammary Tumor Cells	Dr. Schmidt	2022
Nicole Spanier	Uninvited Guests: Response of Social Networks to Changing Group Composition in the Maritime Earwig (<i>Anisolabis maritima</i>)	Dr. Iyengar	2022
Yuanxing Liao	Ecomorphology of the Locomotor System of Geckos (Squamata; Gekkota)	Dr. Bauer	2022
Matthew L. Murdoch	Systematics and Phylogeography of the Indo-Burman Clade of <i>Hemidactylus</i> Geckos in Myanmar	Dr. Bauer	2022
Joshua Zalewski	Bryophyte Community Composition as a Function of Environment in High-Altitude Peatlands of the Pocono Plateau	Dr. Wieder	2022

Mallory Brayer	Defining the Regulatory T Cell Specific Role of Ly-6A as an Immune Checkpoint (IC) using a Mouse Tumor Transplant Model	Dr. Bamezai	2021
Noah Buzinkai	<i>In Vivo</i> Role of Ly-6A in T Lymphocyte Activation and Clonal Expansion using B16 Melanoma Tumor Transplantation Mouse Experimental Model	Dr. Bamezai	2021
Timothy Hunter	Transfer and Analysis of the <i>pdu</i> Gene Segment from Three <i>Salmonella enterica</i> Serovars Across Different Gram-Negative Bacteria	Dr. Wilson	2021
Sarina Kao	DNA-Binding with a Novel Regulator: Does STM1266 Regulate and Bind to Biofilm Gene Promoters?	Dr. Wilson	2021
Amanda Morrissey	Investigation of the Ly-6A Ligand's Functional Role in Ly-6A Mediated Suppression of the Anti-Tumor Immune Response	Dr. Bamezai	2021
Rhiann Sato	Characterizing the Role of Nuclear Body Protein ZC3H8 in Proliferation, Apoptosis, and DNA Repair of Mouse Mammary Tumor Cells	Dr. Schmidt	2021
Abigail Vipperman	Uninvited Guests: Response of Social Networks to Changing Group Composition in the Maritime Earwig (<i>Anisolabis Maritima</i>)	Dr. Iyengar	2021
Taylor Heuermann	Boldness in Black-capped Chickadees (<i>Poecile atricapillus</i>), Carolina Chickadees (<i>P. carolinensis</i>), and their hybrids: Behavioral variation and genetic correlates	Dr. Curry	2020
Haun Hwang	Examining the effects of Soluble Klotho protein on lipid raft-based membrane order and response in CD4+ T helper cells	Dr. Bamezai	2020
Therese Adgie	Investigating the relationship between marsh plant community and encroaching Mangroves in the Florida Mangrove-Marsh Ecotone	Dr. Chapman	2020
Natasha Stepanova	Comparative skull morphology of Southern African Burrowing Skinks (Squamata; Scincidae)	Dr. Bauer	2020
Matthew Buehler	The evolutionary history of Sea Kraits (genus <i>Laticauda</i>)	Dr. Bauer	2020
Ari Rice	Haemosporidians across a Chickadee hybrid zone: Where birds and their parasites collide	Dr. Curry	2020
Christopher Mitchell	Gecko and gecko-inspired synthetic adhesive performance in variable temperature and humidity	Dr. Stark	2020
Brett Butler	Stemata and phylogeography of two Southwest African lizard taxa	Dr. Bauer	2020
Sofia Altamirano	Investigating the Developmental Origins of Sexually Dimorphic Neurons Involved in <i>Drosophila</i> Courtship Behavior	Dr. Shirangi	2020
Emily Geoghehan	Mangroves on the move: Investigating the effects of Mangrove invasion on soil processes along the Northeastern Florida coastline	Dr. Chapman	2020

Suzana Bandeira	Systematic studies on the Angolan Herpetofauna	Dr. Bauer	2019
Kelly Barrett	GPER protein expression in the rat uterus in response to estrogen and the role of GPER in the estrogen-induced activation of a critical inflammatory mediator, NFkB	Dr. Russo	2019
Charles Hyde	Climate change and belowground function in the marsh-mangrove ecotone	Dr. Langley	2019
Sean Lee	How do soil microbial communities affect the invasion of a wetland invasive plant?	Dr. Langley	2019
Grace L. Wong	Investigating a genome-wide role for endogenous siRNAs in mRNA quality control in <i>Caenorhabditis elegans</i>	Dr. E. Youngman	2019
Benjamin Capozzoli	Examining the Role of Mouse Ly-6A as an Immune Checkpoint Inhibitor	Dr. Bamezai	2019
Patrick Mitrano-Towers	SMK-1 represses the transcriptional response to oxidative stress in post-reproductive adult <i>Caenorhabditis elegans</i>	Dr. M. Youngman	2019
William Keilsohn	Dead bugs do tell tales: Examining genetic variations in the Maritime Earwig (<i>Anisolabis maritima</i>)	Dr. Iyengar	2019
Hayden Davis	Investigation into the diversity and morphology of the gecko genus <i>Cyrtodactylus</i> on the Island of Borneo	Dr. Bauer	2019
Evana Mortezaei	A genetic dissection of endogenous siRNA involvement in the nonstop decay pathway in <i>C. elegans</i>	Dr. E. Youngman	2019
Sepideh Cheheltani	Studies of Activation, chilling injury, and ice crystal growth-towards cryopreservation of Zebrafish Oocytes	Dr. DiBenedetto	2018
Shannon Keating	Resolving the Diplodactylidae phylogeny using Rapidly Evolving Long Exon Capture (RELEC) loci	Dr. Bauer	2018
Sarah Polekoff	Exploratory behavior in Black-capped Chickadees, Carolina Chickadees, and their hybrids	Dr. Curry	2018
Amber Shelton	Analysis of differential gene expression in cells with altered ZC3H8	Dr. Knepper	2018
Maura Lavelle	Toxicological effects of fracking fluid flowback on the developing Zebrafish embryo	Dr. DiBenedetto	2018
Soumini Sengupta	Investigating the role of Lipid Raft-based membrane order in CD4 ⁺ T Cell responses	Dr. Bamezai	2018
Gift Abane	Rising temperatures influence invasive plant species dominance and phenology	Dr. Chapman	2018
Caitlin Bauer	Interacting effects of genotype and the environment on nitrogen response of tall-form <i>Spartina alterniflora</i>	Dr. Langley	2018

Stephanie Trimboli	Exercise-induced oxidative stress in Swiss-Webster mice: Effects of training and adaptive responses	Dr. Olson	2017
Sarah Hopkins	Characterizing the role of SMK-1 as a key transcriptional regulator during the oxidative stress response in adult <i>Caenorhabditis elegans</i>	Dr. M. Youngman	2017
Julia McMahon	Effects of the Norepinephrine and Dopamine Reuptake Inhibitor, Bupropion and the Selective Serotonin Reuptake Inhibitor, Fluoxetine on Larval Zebrafish Locomotor behavior and development	Dr. DiBenedetto	2017
Jonathan DeBoer	Comparative ecological niche modeling in the New Caledonian Gecko genus <i>Bavayia</i>	Dr. Bauer	2017
Katherine Keenan	Estrogen and Bisphenol A affect expression of certain target genes in the Rat Hypothalamus and Pituitary	Dr. Russo	2017
Gabriella Santone	The Bacterial SSTM2803 and SSTM4270 Genes: Characterizing targets in the pool of unexplored genes	Dr. Wilson	2017
Krupa Patel	Activity and evolution of a protein secretion system: Analysis of the cloned <i>Salmonella</i> SPI-1 Type III system	Dr. Wilson	2017
Akshay Patel	Investigating the cytokine-mediated death mechanisms following activation of the GPI-anchored cell surface protein Ly-6A on transformed T Cells	Dr. Bamezai	2017
Kelly Olsen	Role of Brd2 in the transient wave of hematopoiesis within the posterior blood island of the developing Zebrafish embryo	Dr. DiBenedetto	2017
Mikah Schlesinger	Potential alterations of the Methane cycle in Alberta Peatlands in response to elevated nitrogen and wildfires	Dr. Vile	2017
Lindsay Bair	<i>Panicum virgatum</i> (switchgrass) as an agent for Phytoremediation of lead contaminated soils	Dr. Chapman	2017
Mark Eastburn	A Lion, a Lamb, and a Hyena: Comparative studies of the diets and behaviors of three Jumping Spider Species	Dr. Curry	2017
Robert Driver	Hybrid index as a predictor of hatching success and Haldane's Rule in hybridizing Chickadees	Dr. Curry	2017
Elena Koumis	Investigating the functions of DAF-16 age-dependent transcriptional targets as identified from RNA-sequencing in <i>C. elegans</i>	Dr. M. Youngman	2016
Chelsea Barreto	Uncovering the impacts of Mangrove encroachment and warming on microbial community composition and function	Dr. Chapman	2016
Arianna L. Kuhn	Systematics of the Namib day geckos (Squamata: Gekkonidae: <i>Rhoptropus</i>)	Dr. Bauer	2016
Mikhail Chavis	Phylogeny and population genetics of New Caledonian geckos and skinks for the Isle of Pines Region and Ile Walpole	Dr. Jackman	2016
Justin Bernstein	Phylogenetic analysis, species identification and delimitation of New Caledonian geckos and skinks using DNA barcoding	Dr. Bauer	2016

Jeffrey Weinell	Systematics and phylogeography of the <i>Trachylepis varia</i> (Squamata: Scincidae) species complex	Dr. Bauer	2016
Daniel Paluh	Comparative morphology of the quadrate bone within Gekkota: Phylogenetic and functional implications	Dr. Bauer	2016
Gregory Clement	Wildfire legacy effects at elevation: The interaction of disturbance, soil carbon and nitrogen properties, and interspecies competition in the Adirondack Mountains	Dr. Chapman	2016
Aaron Griffing	Developmental osteology of parafrontal bones in <i>Aristelliger</i> and <i>Teratoscincus</i> (Squamata: Sphaerodactylidae)	Dr. Bauer	2016
Alexander Mott	Investigating a potential role for heat shock proteins in salinity acclimation of <i>Strongylocentrotus droebachiensis</i>	Dr. Russell	2016
Ashveen Bains	Are the <i>kilE</i> genes essential for IncP β plasmid stability?	Dr. Wilson	2016
Erin M. Neal	Thiamine's effect on glucose metabolism in <i>Candida glabrata</i>	Dr. Wykoff	2016
Julia M. Stuart	N mineralization and nitrification in Alberta bogs as a function of time since wildfire and increasing anthropogenic N deposition	Dr. Wieder	2016
Alison A. Walsh	Charge differences between AMuLV measured through viral clearance using anion exchange chromatography	Dr. Bamezai	2016
Christopher Cangelosi	Analysis of expression and function of the cloned SPI-1 type-III secretion system and associated substrates in <i>Salmonella</i> Typhimurium and other bacteria	Dr. Wilson	2016
Titian Ghanforoush	Identifying locations that optimize the conservation of phylogenetic diversity of endemic squamates in the Grand Sud, New Caledonia	Dr. Jackman	2016
Rachel Skinner	Phylogenetic relationships of the <i>Pachydactylus Geitje</i> (Sparman 1778) species complex (Squamata: Gekkonidae)	Dr. Bauer	2016
Benjamin R. Karin	Phylogeography and evolution of three species of <i>Eutropis</i> from Borneo	Dr. Bauer	2016
Jackie L. Childers	Phylogenetics and phylogeography of Southern African Sand Lizards <i>Pedioplanis</i> (Sauria: Lacertidae)	Dr. Bauer	2016
Walter Bakun	Role of lipid raft-based membrane order in signaling through the antigen receptor in primary CD4 ⁺ T Cells: Investigating the mechanism	Dr. Bamezai	2016
Christopher Roche	Social structure among resident Carolina Chickadees (<i>Poecile carolinensis</i>) and irruptive Black-capped Chickadees (<i>P. atricapillus</i>)	Dr. Curry	2016
E. Alexander Rohtla	The call of the gecko: an acoustic and morphological examination of gecko vocalizations	Dr. Bauer	2016
Kaitlin Allen	Phylogenetics and phylogeography of Central and West African <i>Trachylepis</i> Skinks	Dr. Bauer	2015
Kevin Neal	Population structure and spatial genetic diversity of lizards of the Province Sud, New Caledonia: Implications for conservation in a mining-impacted region	Dr. Bauer	2015

Fatemeh Jalali	Observation of damage to Stage V Zebrafish oocytes during slow and rapid cooling	Drs. Karlsson & DiBenedetto	2015
Kristi Dodbiba	Rapid estrogen signaling through the GPER involves the activation of AKT and NFkB signaling pathways	Dr. Russo	2015
Daniel McHugh	Investigating the potential age-dependent regulation of DAF-16-mediated stress resistance by SMK-1 in <i>Caenorhabditis elegans</i>	Dr. M. Youngman	2015
Alex Kuczmariski	Transcriptional rewiring of starvation signal transduction pathways between <i>Saccharomyces cerevisiae</i> and <i>Schizosaccharomyces pombe</i>	Dr. Wykoff	2015
Melissa Pastore	Nitrogen retention and greenhouse gas mitigation of a brackish marsh under global change	Dr. Langley	2015
Katherine Freeman	Impacts of habitat fragmentation, parental care, and social context on reproductive success in the White-breasted Thrasher	Dr. Curry	2015
Christie Eldredge	Parental attentiveness in Carolina Chickadees (<i>Poecile carolinensis</i>): field study of a component of songbird personality	Dr. Curry	2015
Dylan Taylor	Georeferenced atlas and catalog of Libyan reptiles	Dr. Bauer	2015
Andrew Kathriner	Biodiversity and phylogenetics of Lessor Sunda geckos, with emphasis on the <i>Cyrtodactylus</i> fauna of Timor-Leste	Dr. Bauer	2015
Katherine A. Bell	The role of FLIZ1 in regulation of GATA-3 in Estrogen receptor negative cell lines	Dr. Knepper	2015
Cheryl Doughty	Carbon storage and coastal protection: Uncovering the potential impacts of Mangrove range expansion	Dr. Chapman	2015

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