

## **Students Graduating with Distinction**

**Kelly Adamski**, Pediatric coronal suture fiber alignment and the effect of interdigitation on suture mechanical properties (*Dr. Cameron "Dale" Bass, Department of Biomedical Engineering*)

**Nicolas Altemose**, Characterizing the sequence content of heterochromatic gaps in the human genome assembly (*Dr. Huntington F. Willard, Department of Biology*)

**Daniel Ardeljan**, Sustaining circuitry of the PMC GRN at the onset of gastrulation (*Dr. David R. McClay, Department of Biology*)

**Jennifer Anne Brandon**, *Gambusia holbrooki* Subpopulation Structure in Commercial Runoff, Future Housing Development, and Forest Ponds (*Dr. Daniel Rittschof, Duke University Marine Lab*)

**Bogna Brzezinska**, Assembly of the gene regulatory network that specifies coelomic pouch development in the sea urchin (*Dr. David R. McClay and Dr. Stacy Kaltenbach, Department of Biology*)

Catherine Castillo Castro, The mutagenic effects of the chemotherapeutic drug camptothecin in yeast (Dr. Sue Jinks-Robertson, Department of Molecular Genetics and Microbiology, Duke University Medical Center)

**Petty Chen**, hdac Involvement in Single Lumen Formation of the Zebrafish Gut (*Dr. Michel Bagnat, Department of Cell Biology, Duke University Medical Center*)

**Michael Jay Cheng**, Using Saccharomyces Cerevisiae to Characterize Human Alanine: Glyoxylate Aminotransferase in Primary Hyperoxaluria Type 1 (Dr. Chandra Tucker, Department of Biology)

**Jinny Cho**, Polyploidy in wing scale development in the tobacco hornworm, *Manduca sexta* (*Dr. H. Frederik Nijhout, Department of Biology*)

Natalie Como, The Chromatin Remodeling Factor Mi-2 Transcriptionally Regulates the Microtubule-Severing Protein Katanin60-Likel in the Drosophila Nervous System (*Dr. Nina Sherwood, Department of Biology*)

Farah Dadabhoy, Adverse Effects of Perinatal Ozone and Diesel Exposure on Lung Development and Behavior in Mice (Dr. Richard Auten, Department of Pediatrics, Duke University School of Medicine)

Claire Daly, The Role of Apoptosis and Cellular Proliferation in Mouse Foregut Remodeling (Dr. John Klingensmith, Department of Cell Biology, Duke University Medical Center)

**Robert Diep\***, Glucose transporter expression and fructose metabolism change after T cell activation (*Dr. Jeffrey Rathmell, Department of Pharmacology and Cancer Biology, Department of Immunology, Sarah W. Stedman Nutrition and Metabolism Center*)

**Brian Dong**, Identification of Novel Genes Causing Cardiomyopathy Through a Screen of Adult *Drosophila (Dr. Howard Rockman, Department of Cell Biology, Duke University Medical Center)* 

Alice Fan, Genetic Determinants of Response to PI3 Kinase Pathway Inhibition in Lymphoma (Dr. Sandeep Dave, Duke Institute for Genome Sciences and Policy)

Ava Feng\*, Astrocyte-Secreted Proteins Hevin and SPARC Regulate Synaptogenesis and Neurite Outgrowth (Dr. Cagla Eroglu, Department of Cell Biology, Duke University Medical Center) **Kent Feng\***, Distribution of sulfated proteoglycans in Bruch's membrane of the mouse eye: implications for age-related macular degeneration (*Dr. Catherine Bowes Rickman, Department of Cell Biology and Department of Ophthalmology*)

**Paul T. Fullerton, Jr.,** Modeling the Heterogeneity of Human non-Hodgkin's lymphoma using the Eμ-myc Murine Model of B-cell Lymphoma (Dr. Joseph R. Nevins, Duke Institute for Genome Sciences and Policy)

**Daniel J. Gillon**, Gene flow and local adaptation to climate change in two populations of the green sea urchin, *Strongylocentrotus droebachiensis* (*Dr. Gregory Wray and David A. Garfield, Department of Biology*)

Karl Gordon Patti, The Novel Protein Factor-θ is Important for Mesenchymal Stem Cell Reproduction (Dr. Victor J. Dzau, Duke University Medical Center)

Caroline Hadley\*, AEOL 10150, a catalytic antioxidant shown to protect against radiation induced pulmonary toxicity, does not attenuate the cytotoxic effect of radiation in non-small cell lung cancer tumor xenografts (Dr. Zeljko Vujaskovic, Department of Radiation Oncology, Duke University School of Medicine)

**Huang (Maria) Huang**, The Role of the Type III Transforming Growth Factor (TGF)-β Receptor in Multiple Myeloma (*Dr. Gerard Blobe, Department of Pharmacology and Cancer Biology, Duke University Medical Center*)

**Collin L. Kent**, Cellular Responses Involved in Posttraumatic Arthritis (*Dr. Farshid Guilak, Department of Orthopaedic Surgery, Duke University School of Medicine*)

**Andrew B. Kleist**, Identification of ligand bias at G protein-coupled receptors using a novel, cell-free approach (*Dr. Robert J. Lefkowitz, Department of Biochemistry, Duke University Medical Center*)

Yun Long (Patrick) Lang, Implication for synergy between constitutive Math1 expression and Ptc deletion in the tumorigenesis of medulloblastoma (Dr. Robert Wechsler-Reya, Department of Pharmacology and Cancer Biology, Duke University Medical Center)

James Kwon Lee†, The Will (Josh Gibson, Film/Video/Digital Program)

**George Leef**, Roles of Actin and Myosin II Proteins in Dorsal Closure in Drosophila: a Quantitative Analysis (*Dr. Daniel Kiehart, Department of Biology*)

Charles Li, Sporangiospore size dimorphism is linked to virulence of Mucor circinelloides (Dr. Joseph Heitman and Dr. Soo Chan Lee, Department of Molecular Genetics and Microbiology, Duke University Medical Center)

**Xiyao Wendy Lin,** The Role of the Cdc42 GTPase-activating protein Bem3 in gradient-tracking in yeast (*Dr. Daniel J. Lew, Department of Pharmacology and Cancer Biology, Duke University Medical Center*)

**Xiongfei Liu**, Prematurely terminated polypeptides are potential sources for rapidly degraded polypeptides (RDPs) (*Dr. Christopher Nicchitta, Department of Cell Biology, Duke University Medical Center*)

**Lina Lu**, Immunocellular Response in Peanut-Stimulated Human Peripheral Blood Mononuclear Cells in Subjects Undergoing Peanut Oral Immunotherapy (*Dr. Wesley Burks, Department of Pediatric Allergy and Immunology, Duke University School of Medicine*) Cassie A. Ludwig, Smoothed Protein Mutation in Postnatal Neural Stem Cells Yields a New Mouse Model for Classical Human Medulloblastoma (Dr. Anne Buckley, Department of Pathology, Duke University Medical Center)

Alice Mao, The Role of Pro-inflammatory Cytokines Tumor Necrosis Factor- $\alpha$  and Interferon- $\gamma$  in Angiotensin II Induced Kidney Injury (Dr. Steven Crowley, Department of Medicine, Division of Nephrology, Duke University School of Medicine)

**Chun L. Ng**, A rescue screen to identify cell-autonomous requirements for Gp93 in Drosophila melanogaster gut development and function (*Dr. Christopher Nicchitta, Department of Cell Biology, Duke University Medical Center*)

**Miki Nishitani\***, The Regulatory Role of *ActivinB* in the Early Signal of Endomesoderm Specification in the Sea Urchin *Lytechinus variegates (Dr. David R. McClay, Department of Biology)* 

**Diana Norton**, Identifying Rga1 as the Cdc42-specific GTPase activating protein in *Cryptococcus neoformans (Dr. J. Andrew Alspaugh, Division of Infectious Disease, Duke University School of Medicine)* 

William Olcott, Chlorpyrifos Induced Apoptotic Effects in the Eastern Oyster, Crassostrea virginica, (Dr. Patricia McClellan-Green, Department of Environmental and Molecular Toxicology, North Carolina State University)

Smita Patel, Bioinformatics Analysis Identifies Genes Coordinately Expressed with Brachyury and Reveals Putative Pathways Dysregulated in Chordoma (Dr. Michael Kelley and Dr. David Alcorta, Division of Medical Oncology, Duke University Medical Center; Department of Oncology/Hematology, Durham Veterans Administration Medical Center)

Ralitza H. Peneva, Determining the size of the male-specific region in the genome of the scuttle fly, *Megaselia scalaris*, a potential model system for the earliest stages of sex chromosome evolution (*Dr. Mohamed Noor, Department of Biology*)

**Henry Pinkard**, Pitch balance in accelerating and decelerating primates (Dr. Daniel Schmitt, Department of Evolutionary Anthropology)

**Kathryn Saba**, Using Oral Immunotherapy Studies to evaluate the involvement of salivary antibody A in the allergic response to peanut (*Dr. Wesley Burks and Michael Kulis, Department of Pediatrics/Allergy/Immunology, Duke University School of Medicine*)

Sunita Saith, Genetic Regulation of SORL1 Gene Expression (Dr. Ornit Chiba-Falek, Duke Institute for Genome Sciences and Policy)

Michael Schneider, Characterization of MPER Transgenic Mice (Dr. Laurent Verkoczy, Duke Human Vaccine Institute, Duke University School of Medicine)

**Calvin C. Sheng**, Regulated expressions of FT and SOC1 by various flowering pathways contribute to local adaptation in *Mimulus (Dr. John H. Willis, Department of Biology)* 

**Jeff J. Shi\***, Emerging patterns of microendemism in the rodent *Eliurus myoxinus* within Madagascar's threatened western forests (*Dr. Anne Yoder, Department of Biology*)

Marni Siegel, Personalized Therapeutic Approaches Using a Novel Pathway Classification Scheme in Lung Cancer (Dr. Joseph R. Nevins, Department of Molecular Genetics and Microbiology, Duke University Medical Center)

**Amanda Sun**, The Ethanol-Inducible Gene Silencing System as a Novel Approach for the Study of HEMERA's Role in Chloroplast Development (*Dr. Meng Chen, Department of Biology*)

Kathryn Swails†, Assessing Models of Carbon Offsetting in the DukeEngage Program (Dr. Charlotte Clark, Nicholas School of the Environment)

Sumaetee Tangwancharoen, Mapping the genetic basis of salt tolerance in Yellow Monkey Flower, *Mimulus guttatus (Dr. John Willis, Department of Biology)* 

Cole Thompson, Disruption of Replication Fork Integrity in Yeast Facilitates Formation of Mutation Clusters (Dr. Dmitry Gordenin, Chromosome Stability Group [Head Dr. Michael Resnick], National Institute of Environmental Health Sciences)

Emily Trinh, Analysis Mating of Cryptococcus neoformans var grubii, molecular type VNII (Dr. Thomas G. Mitchell, Department of Molecular Genetics and Microbiology, Duke University Medical Center)

Christopher Venters, Preliminary Structural Studies of *Drosophila Melanogaster* Myosin VIIA Tail Domains (*Dr. Daniel P. Kiehart, Department of Biology*)

Molly E. Walsh, Hierarchical organization of sun, beach slope, and landmarks as cues for Y-axis orientation of the supratidal amphipod *Talorchestia longicornis* (Say) (*Dr. Richard B. Forward, Jr., Duke University Marine Lab*)

Feng Wang, The discrete localization of ezrin to the nuclei of the terminally differentiating lens fibers (Dr. Vasanth Rao, Department of Pharmacology and Cancer Biology, Duke University Medical Center)

**Bruce Xinyang Xu,** The impairment of ATP release in human erythrocytes during storage (*Dr. Timothy McMahon, Division of Pulmonary, Allergy, and Critical Care Medicine, Duke University School of Medicine*)

**Katherine Xu**, Kidney Cross-Transplantation: The Role of ACE2 in Blood Pressure Regulation (*Dr. Thomas Coffman and Dr. Susan Gurley, Division of Nephrology, Department of Medicine, Duke University School of Medicine*)

George Yang, Perturbation of CALM protein in murine leukemia affect proliferation in a transferrin endocytosis dependent manner (Dr. Daniel Wechsler, Department of Pharmacology and Cancer Biology, Duke University Medical Center)