

**Table 2. Participating Faculty Members
(Alphabetically by Faculty Member)**

OMB Number 0925-0001 and 0925-0002 (Rev. 10/15 Approved Through 10/31/2018)

Name/Degree(s)	Rank	Primary (& Secondary) Appointment(s)	Role in Program	Research Interest
Ahmad, Ferhaan, M.D., Ph.D.	Associate Professor	Internal Medicine (Radiology, Genetics, MSTP)	<ul style="list-style-type: none"> ▪ Mentor ▪ Retreat Committee 	Genetic and Genomic Mechanisms Underlying Inherited Cardiovascular Disorders
Anderson, Michael G., Ph.D.	Associate Professor	Molecular Physiology & Biophysics (Ophthalmology and Visual Sciences, Genetics, Neuroscience, MSTP)	<ul style="list-style-type: none"> ▪ Mentor ▪ Executive Committee ▪ Admissions Committee Chair 	Mouse Models of Human Eye Disease
Au, Kin Fai, Ph.D.	Assistant Professor	Internal Medicine (Biostatistics, Informatics and Computational Biology, Genetics)	<ul style="list-style-type: none"> ▪ New Mentor ▪ Computational Genetics Faculty 	RNA-seq and Third Generation Sequencing
Bassuk, Alexander G., M.D., Ph.D.	Associate Professor	Pediatrics (Neurology, Genetics, Molecular & Cellular Biology, Neuroscience, MSTP)	<ul style="list-style-type: none"> ▪ Mentor ▪ Computational Genetics Faculty ▪ Faculty Membership Committee 	Genetics of Neurological Disease, Genetics of Inflammatory Disease
Braun, Terry A., Ph.D.	Associate Professor	Biomedical Engineering, Ophthalmology and Visual Sciences (Genetics, Informatics)	<ul style="list-style-type: none"> ▪ Mentor ▪ Computational Genetics Faculty 	Computational Techniques for Candidate Disease-gene Prioritization
Brenner, Charles M., Ph.D.	Professor	Biochemistry (Internal Medicine, Genetics, Translational Biomedicine, MSTP)	<ul style="list-style-type: none"> ▪ Mentor 	Tumor Suppressor Genes & New Steps in NAD Metabolism
Casavant, Thomas L., Ph.D.	Professor	Biomedical (Electrical and Computer Engineering, Ophthalmology, Genetics, Informatics)	<ul style="list-style-type: none"> ▪ Mentor ▪ Computational Genetics Faculty ▪ Director of Bioinformatics Certificate 	Bioinformatics, Genomics, Human Disease Mutation, Sequencing and Analysis, High-Performance Computing, System Modeling

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Comeron, Josep M., Ph.D.	Associate Professor	Biology (Genetics, Informatics)	<ul style="list-style-type: none"> ▪ Mentor ▪ Executive Committee ▪ Graduate Affairs Committee Chair ▪ Computational Genetics Chair 	Population Genetics, Molecular Evolution and Genome Evolution
Cornell, Robert A., Ph.D.	Professor	Anatomy & Cell Biology (Genetics, Molecular & Cellular Biology, Neuroscience, MSTP)	<ul style="list-style-type: none"> ▪ Mentor ▪ Admissions Committee 	Neural Crest Patterning in Zebrafish
Darbro, Benjamin, M.D., Ph.D.	Assistant Professor	Pediatrics (Genetics, Informatics)	<ul style="list-style-type: none"> ▪ New Mentor 	Genetic Determinants of Intellectual Disability
Dawson, Deborah V., Ph.D., Sc.M.	Professor	Pediatric Dentistry (Biostatistics, Genetics, Informatics)	<ul style="list-style-type: none"> ▪ Executive Committee ▪ Graduate Affairs Committee ▪ Instructor: Basic Biostatistical Methods with Genetics Applications 	Statistical Genetics/Genetic Epidemiology
Dupuy, Adam J., Ph.D.	Associate Professor	Anatomy & Cell Biology (Pathology, Genetics, Molecular & Cellular Biology, MSTP)	<ul style="list-style-type: none"> ▪ Mentor ▪ Instructor: Genetic Analysis of Biological Systems 	Mouse Models of Cancer Using the Sleeping Beauty Transposon System
Eberl, Daniel F., Ph.D.	Professor	Biology (Otolaryngology, Genetics, Neuroscience, Translational Biomedicine, MSTP)	<ul style="list-style-type: none"> ▪ Director of Genetics Program ▪ Mentor 	Molecular and Cellular Mechanisms of Hearing and Auditory Behavior
Ellermeier, Craig, Ph.D.	Associate Professor	Microbiology (Genetics, MSTP)	<ul style="list-style-type: none"> ▪ Mentor ▪ Scholarly Integrity/Responsible Conduct of Research Facilitator 	Molecular Mechanisms of Bacterial Signal Transduction and Bacterial Pathogenesis
Erives, Albert, Ph.D.	Associate Professor	Biology (Genetics, Informatics)	<ul style="list-style-type: none"> ▪ Mentor ▪ Instructor: Bioinformatics 	The Genetics of Eukaryotic Transcriptional Enhancers
Fassler, Jan S., Ph.D.	Professor	Biology (Epidemiology, Genetics, Informatics, Translational Biomedicine, MSTP)	<ul style="list-style-type: none"> ▪ Mentor ▪ Instructor: Bioinformatics 	Environmental Stress Sensing and Response in Yeast

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Fingert, John H., M.D., Ph.D.	Associate Professor	Ophthalmology and Visual Sciences (Genetics, Molecular & Cellular Biology, MSTP)	<ul style="list-style-type: none"> ▪ Mentor 	The Molecular Genetic Basis of Glaucoma and Other Inherited Eye Diseases Using a Range of Patient-based Research Techniques
Frank, C. Andrew, Ph.D.	Assistant Professor	Anatomy & Cell Biology (Genetics, Molecular & Cellular Biology, Neuroscience)	<ul style="list-style-type: none"> ▪ Mentor 	Homeostatic Control of Synaptic Function
Geyer, Pamela, Ph.D.	Professor	Biochemistry (Obstetrics & Gynecology, Genetics, Molecular & Cellular Biology, Translational Biomedicine, MSTP)	<ul style="list-style-type: none"> ▪ Mentor ▪ Co-director of Medical Scientist Training Program 	Chromosome Organization and Gene Expression
Grueter, Chad, Ph.D.	Assistant Professor	Internal Medicine (Genetics)	<ul style="list-style-type: none"> ▪ New Mentor ▪ Scholarly Integrity/Responsible Conduct of Research Facilitator 	Regulation of Gene Expression in Development and Disease
Han, Shizhong, Ph.D.	Assistant Professor	Psychiatry (Genetics)	<ul style="list-style-type: none"> ▪ New Mentor ▪ Admissions Committee 	Psychiatric Disorders
Houston, Douglas W., Ph.D.	Associate Professor	Biology (Genetics, Molecular & Cellular Biology, Translational Medicine, MSTP)	<ul style="list-style-type: none"> ▪ Mentor ▪ Graduate Affairs Committee 	Maternal Transcription Factor and Signaling Pathways in Vertebrate Development
Irish, Erin E., Ph.D.	Associate Professor	Biology (Genetics)	<ul style="list-style-type: none"> ▪ Post-Comps Advising Committee 	Regulation of Determinacy in Plant Meristems
Johnson, Wayne A., Ph.D.	Professor	Molecular Physiology & Biophysics (Genetics, Neuroscience)	<ul style="list-style-type: none"> ▪ Post-Comps Advising Committee 	Molecular Mechanisms of Sensory Signal Transduction
Jones, Bradley D., Ph.D.	Professor	Microbiology (Genetics, MSTP)	<ul style="list-style-type: none"> ▪ Mentor 	Invasion & Pathogenesis of Salmonella
Kirby, John R., Ph.D.	Professor	Microbiology (Genetics, Informatics, Translational Biomedicine, MSTP)	<ul style="list-style-type: none"> ▪ Mentor 	Chemosensory Signal Transduction in Bacteria

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Kitamoto, Toshihiro, Ph.D.	Associate Professor	Anesthesia (Pharmacology, Genetics, Neuroscience, MSTP)	<ul style="list-style-type: none"> ▪ Mentor ▪ Instructor: Genetic Analysis of Biological Systems ▪ Instructor: Ethics Refresher 	Molecular and Behavioral Neurogenetics
Kuehn, Markus H., Ph.D.	Associate Professor	Ophthalmology and Visual Sciences (Genetics, Molecular & Cellular Biology)	<ul style="list-style-type: none"> ▪ Mentor ▪ Instructor: Human Molecular Genetics 	Genetics of Optic Neuropathies
Kwitek, Anne E., Ph.D.	Associate Professor	Pharmacology (Internal Medicine, Genetics, MSTP)	<ul style="list-style-type: none"> ▪ Mentor ▪ Executive Committee 	Dissecting the Genetic Components of Complex Disease in Rat and Human, with an Emphasis on Hypertension, Diabetes, and the Metabolic Syndrome
Lear, Bridget, Ph.D.	Assistant Professor	Biology (Genetics, Neuroscience)	<ul style="list-style-type: none"> ▪ Mentor ▪ Retreat Committee Chair 	Neural and Genetic Basis of Circadian Behavior
Lin, Fang, M.D., Ph.D.	Associate Professor	Anatomy & Cell Biology (Genetics, Molecular & Cellular Biology, MSTP)	<ul style="list-style-type: none"> ▪ Mentor 	G Protein Signaling in Zebrafish Embryogenesis
Llopart, Ana, Ph.D.	Assistant Professor	Biology (Genetics, Informatics)	<ul style="list-style-type: none"> ▪ Mentor ▪ Admissions Committee 	Genetic Basis of Speciation
Logsdon, John, Ph.D.	Associate Professor	Biology (Genetics, Informatics, MSTP)	<ul style="list-style-type: none"> ▪ Mentor 	Molecular Evolution of Genes and Genomes
Malkova, Anna, Ph.D.	Associate Professor	Biology (Genetics)	<ul style="list-style-type: none"> ▪ Mentor 	Repair of Double-strand breaks (DSB): Break-Induced Replication (BIR)
Manak, John R., Ph.D.	Associate Professor	Biology (Pediatrics, Genetics, Informatics, Molecular & Cellular Biology)	<ul style="list-style-type: none"> ▪ Mentor ▪ Faculty Membership Committee 	Elucidation of the Function of the Myb Complex (Also Known as the Myb-MuvB or dREAM Complex)
McAllister, Bryant F., Ph.D.	Associate Professor	Biology (Genetics, Informatics)	<ul style="list-style-type: none"> ▪ Mentor ▪ Seminar Committee Chair 	Evolutionary Genetics and Genome Evolution

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McCray, Paul B., M.D.	Professor	Pediatrics (Microbiology, Genetics, Human Toxicology, Informatics, Translational Biomedicine, MSTP)	<ul style="list-style-type: none"> ▪ Mentor 	Pathogenesis and Treatment of Cystic Fibrosis
Michaelson, Jacob J., Ph.D.	Assistant Professor	Psychiatry (Communication Sciences and Disorders, Biomedical Engineering, Genetics)	<ul style="list-style-type: none"> ▪ New Mentor ▪ Website Committee 	Systems Biology and Genetics of Autism and Neurodevelopmental Conditions
Mullins, Robert F., Ph.D.	Professor	Ophthalmology and Visual Sciences (Molecular Physiology & Biophysics, Biophysics, Genetics, Molecular & Cellular Biology)	<ul style="list-style-type: none"> ▪ Mentor 	Structural and Molecular Basis for Degenerative Diseases of the Retina
Phillips, Bryan T., Ph.D.	Assistant Professor	Biology (Genetics, Molecular & Cellular Biology)	<ul style="list-style-type: none"> ▪ Mentor 	Cell Fate Determination in <i>C. elegans</i>
Potash, James, M.D., M.P.H.	Professor & Chair	Psychiatry (Genetics, Neuroscience, Translational Biomedicine, MSTP)	<ul style="list-style-type: none"> ▪ Mentor 	Depression and Bipolar Disorder
Potthoff, Matthew J., Ph.D.	Assistant Professor	Pharmacology (Genetics, Molecular & Cellular Biology)	<ul style="list-style-type: none"> ▪ New Mentor ▪ Scholarly Integrity/Responsible Conduct of Research Facilitator 	Nutrient Control of Metabolism and Cell Signaling
Prahlad, Veena, Ph.D.	Assistant Professor	Biology (Genetics)	<ul style="list-style-type: none"> ▪ New Mentor 	Neuronal Control of Cellular Stress Responses
Russo, Andrew F., Ph.D.	Professor	Molecular Physiology & Biophysics (Neurology, Genetics, Molecular & Cellular Biology, Neuroscience, Translational Biomedicine, MSTP)	<ul style="list-style-type: none"> ▪ Mentor 	Molecular Basis of Migraine
Scheetz, Todd E., M.S., Ph.D.	Associate Professor	Ophthalmology and Visual Sciences (Biomedical Engineering, Genetics, Informatics)	<ul style="list-style-type: none"> ▪ Mentor ▪ Curriculum Committee 	Utilization and Analysis of Next-generation Sequencing Technology
Sheffield, Val C., M.D., Ph.D.	Professor	Pediatrics (Ophthalmology and Visual Sciences, Genetics, Informatics, Molecular & Cellular Biology, Translational Biomedicine, MSTP)	<ul style="list-style-type: none"> ▪ Mentor 	Molecular Biology of Human Genetic Diseases
Slusarski, Diane C., Ph.D.	Professor	Biology (Genetics, Translational Biomedicine, MSTP)	<ul style="list-style-type: none"> ▪ Mentor ▪ Executive Committee ▪ Curriculum Committee Chair 	Signal Transduction Mechanisms in Vertebrate Development and Disease

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Smith, Richard J., M.D.	Professor	Otolaryngology (Pediatrics, Internal Medicine, Molecular Physiology & Biophysics, Genetics, Informatics, Translational Biomedicine, MSTP)	▪ Mentor	The Genetic Basis of Deafness and Membranoproliferative Glomerulonephritis Type 2
Smolikove, Sarit, Ph.D.	Assistant Professor	Biology (Genetics, Molecular & Cellular Biology)	▪ Mentor	Chromosome Synapsis and DSB Repair in the <i>C. elegans</i> Germline
Stone, Edwin M., M.D. , Ph.D.	Professor	Ophthalmology and Visual Sciences (Genetics, Informatics, Translational Biomedicine, MSTP)	▪ Mentor	Genetics of Inherited Eye Disorders
Tootle, Tina L., Ph.D.	Assistant Professor	Anatomy & Cell Biology (Genetics, Molecular & Cellular Biology, MSTP)	▪ Mentor ▪ Scholarly Integrity/Responsible Conduct of Research Facilitator	Understanding the mechanisms of prostaglandin signaling
Wallrath, Lori L., Ph.D.	Professor	Biochemistry (Genetics, Molecular & Cellular Biology, Translational Biomedicine, MSTP)	▪ Mentor	Chromatin Structure and Gene Expression
Wassink, Thomas H., M.D.	Professor	Psychiatry (Pediatrics, Genetics, Translational Biomedicine, MSTP)	▪ Mentor	Genetic Basis of Psychiatric Disorders
Weiner, Joshua, Ph.D.	Associate Professor	Biology (Psychiatry, Genetics, Neuroscience, Translational Biomedicine, MSTP)	▪ Mentor	Cell Adhesion Molecules in Nervous System Development and Function
Weiss, David S., Ph.D.	Associate Professor	Microbiology (Genetics)	▪ Mentor ▪ Faculty Membership Committee	Cell Division in Bacteria
Welsh, Michael J., M.D.	Professor	Internal Medicine (Molecular Physiology & Biophysics, Neurosurgery, Genetics, Informatics, Molecular & Cellular Biology, Neuroscience, Translational Biomedicine, MSTP)	▪ Mentor ▪ Instructor: Ethics Refresher	Cystic fibrosis (CF) pathogenesis and therapies; Brain pH influence on memory
Willour, Virginia L., Ph.D.	Associate Professor	Psychiatry (Genetics, Neuroscience, MSTP)	▪ Mentor ▪ Executive Committee ▪ Post-Comps Advising Committee Chair	Identifying Genetic and Epigenetic Risk Factors for Suicidal Behavior
Wilson, Mary E., M.D.	Professor	Internal Medicine (Microbiology, Epidemiology, Genetics, Immunology, Molecular & Cellular Biology, Translational Biomedicine, MSTP)	▪ Mentor ▪ Admissions Committee	Molecular Mechanisms of Host-parasite Interactions in Leishmaniasis

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Wu, Chun-Fang, Ph.D.	Professor	Biology (Genetics, Neuroscience, Translational Biomedicine, MSTP)	<ul style="list-style-type: none">▪ Mentor▪ Instructor: Ethics Refresher	Neurogenetics of Drosophila