

LAB ROTATION FACULTY AVAILABILITY

Last	First	Cred	Inst.	Email	Research Interests	Fall 18	Spring 19	Sum 19
						9/17-12/10	1/7-3/28	4/1-6/7
Bethony	Jeff	PhD	GW	jbethony@gwu.edu	Genetic and parasite epidemiology	Yes	Yes	Yes
Bosque-Pardos	Alberto	PhD, MBA	GW	abosque@gwu.edu	Identification of signaling pathways that reactivate latent HIV-1	Yes	Yes	Yes
Brindley	Paul	PhD	GW	pbrindley@gwu.edu	Molecular aspects of the genome, proteome and biochemistry of the human schistosomes	No	Yes	Yes
Bukrinsky	Michael	PhD	GW	mbukrins@gwu.edu	The effects of HIV infection on cellular cholesterol metabolism using biochemical assays, proteomics, fluorescent microscopy, and genetics.	Yes	No	No
Chiappinelli	Katherine	PhD	GW	kchiapp1@gwu.edu	Responses to stress initiated by a block at metabolic enzymes that cause inborn errors of metabolism	No	Yes	Yes
Chung	Inhee	PhD	GW	inheec@gwu.edu	Biophysical study of metastatic cancer progression	No	Yes	Yes
Colonnese	Matthew	PhD	GW	colonnese@gwu.edu	Neural development	No	Yes	No
Corbin	Joshua	PhD	CNHS	JCorbin@childrensnational.org	developmental genetic mechanisms underlying formation of limbic system circuitry and innate behaviors.	Yes	Yes	Yes
Cruz	C. Russell	MD, PhD	GW	rcruz@gwu.edu	Immune cell therapy for cancer and opportunistic infections	No	Yes	Yes
Efimova	Tatiana	PhD	GW	tefimova@gwu.edu	Understanding how signal transduction pathways regulate skin homeostasis and repair, and how perturbations in this regulation contribute to skin disease	Yes	Yes	Yes
Fernandes	Rohan	PhD	GW	rfernandes@gwu.edu	Developing theranostic nanoparticles, capable of simultaneous therapy and diagnostics, for pediatric inflammatory diseases and cancers. Repurposing Prussian blue, an ancient dye, for theranostic applications in preclinical models.	Yes	Yes	Yes
Gallo	Vittorio	PhD	CNHS	VGallo@childrensnational.org	Neurogenesis and gliogenesis; oligodendrocyte development myelination; glial signaling; regulation of glial ionic channels during brain development	Yes	Yes	Yes
Hashimoto-Torii	Kazue	PhD	CNHS	KHTorii@childrensnational.org	Use of wet and dry analyses [with a focus on the cerebral cortex] to examine interactions among adverse prenatal environment and genetic predisposition which increase disease susceptibility after birth.	Yes	Yes	Yes
Hovel-Miner	Galadriel	PhD	GW	ghovel_miner@gwu.edu	Molecular mechanisms of antigenic variation with an emphasis on this pathogenic process in African trypanosomes.	Yes	Yes	Yes
Hsieh	Michael	MD, PhD	CNHS	mhsieh@childrensnational.org	Anti-pathogenic inflammation in the genitourinary tract induced by bacteria such as uropathogenic E. coli, and chronic inflammation mediated carcinogenesis using models of nitrosamine and Schistosoma haematobium exposure [location: Rockville]	Yes	Yes	Yes
Jaiswal	Jyoti K.	PhD	CNHS	jkjaiswal@childrensnational.org	Dysferin deficits in Myoshi myopathy	Yes	Yes	Yes
Jose	Pedro	MD, PhD	GW	pjose01@gwu.edu	Role of dopamine, adrenergic, and angiotensin receptors subtypes and dopamine regulatory genes (e.g., G protein-coupled receptor kinase 4 [GRK4], sorting nexins, gastrin) or sodium transport in specific nephron segments and their roles in the pathogenesis of genetic hypertension and metabolic syndrome	Yes	Yes	Yes
LaMantia	Anthony	PhD	GW	lamantia@gwu.edu	Bioinformatics-based study of dysphasia [with Dr. Moody] via analysis of RNA-seq data, mouse genetics using the 22q deletion mouse model mimicking the various clinical aspects of dysphasia, and cutting edge confocal microscopy with high powered imaging capacity.	Yes	Yes	Yes
Li	Wei	PhD	CNHS	wli2@childrensnational.org	Using genome editing technology (including CRISPR/Cas9 and CRISPR/Cas9 screening) and new computational algorithms to better understand how coding and non-coding elements function especially in human cancer, and to further identify novel molecular targets to inform precision medicine	Yes	Yes	Yes
Mendelowitz	David	PhD	GW	dmendel@gwu.edu	The ability of hypothalamic paraventricular nucleus of the hypothalamus (PVN) oxytocin neurons to activate parasympathetic cardiac vagal neurons (CVNs) in the brainstem, specifically using selective restoration of oxytocin activity which restores the synaptic release of oxytocin from PVN neurons, the excitatory neurotransmission from PVN to parasympathetic CVNs, improves cardiac function and favorably alters the indices of cardiac ischemia and damage that occurs in untreated animals.	Yes	Yes	Yes
Nazarian	Javad	PhD	CNHS	JNazarian@childrensnational.org	Use of proteomics, genomics and methylation patterns to examine the molecular mechanisms of disease progression in pediatric brain tumors; engineering in vivo and in vitro models to develop therapeutics for treating DIPGs.	No	Yes	Yes
Peng	Wei qun	PhD	GW	wpeng@gwu.edu	Bioinformatics	Yes	Yes	Yes

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Penn	Anna	MD, PhD	CNHS	apenn@childrensnational.org	Use of lentiviral RNA suppression in the placenta, conditional knockout techniques and rodent models of preterm brain injury to test hormonal neurodevelopmental mechanisms at the cellular, anatomical and behavioral level and develop novel neuroprotective replacement therapies.	Yes	Yes	Yes
Polter	Abigail	PhD	GW	ampolter@gwu.edu	Circuit and synaptic-level effects of stress and adversity.	Yes	No	No
Posnack	Nikki	PhD	CNHS	nposnack@childrensnational.org	Use of various cardiovascular models (neonatal cardiac cells, human stem cell-derived myocytes, whole hearts, in vivo radiotelemetry), imaging modalities (confocal, optical mapping, hyperspectral) and phenotypic assays (metabolic, gene expression arrays, calcium and voltage dyes) to investigate the impact of medical devices and procedures on cardiovascular function, with the goal of improving patient outcomes following cardiac surgery and/or transfusion procedures.	Yes	Yes	Yes
Rood	Brian	MD	CNHS	BRood@childrensnational.org	Tumor suppressor genes and brain cancer	Yes	Yes	Yes
Sen	Sabyasachi	MD, PhD	GW	ssen1@gwu.edu	Hemopoetic and mesenchymal stem cell use for treatment of diabetes and obesity; role of stem cells in response to changes in glycemic level in their environment.	Yes	Yes	Yes
Shibata	Maho	PhD	GW	mshibata@gwu.edu	Stem cells and cellular differentiation in prostate cancer initiation and recurrence. Mouse models and organoid culture systems in cancer research.	Yes	Yes	Yes
Torii	Masaaki	PhD	CNHS	MTorii@childrensnational.org	Molecular and cellular mechanisms that govern unique positioning and connections of various neuronal and glial subtypes in normal development of the cerebral cortex; etiology of cognitive and psychiatric disorders in which abnormalities in these processes may be involved.	Yes	Yes	Yes
Tzatsos	Alexandros	MD, PhD	GW	atzatsos@gwu.edu	Epigenetic progression model of pancreatic cancer; Epigenetic regulation of Hematopoietic Stem Cells	No	No	Yes
Vilain	Eric	MD, PhD	CNHS	evilain@childrensnational.org	gender-based and endocrine genetics; the genetics of sexual development, focusing on the molecular mechanisms of gonad development	Yes	Yes	No
Villagra	Alejandro	PhD	GW	avillagra@gwu.edu	Examination of the cellular and molecular mechanism(s) involved in the induction and establishment of anti-tumor responses to develop novel molecularly-based immunotherapeutic treatments.	Yes	Yes	Yes
Wu	Ray-Chang	PhD	GW	rwu@gwu.edu	Oncogenic steroid receptor coactivators and their molecular targets in the development and progression of cancer	Yes	No	Yes
Young	Colin	PhD	GW	colinyoung@gwu.edu	Use of a wide-range of genetic/molecular strategies, advanced in vivo imaging techniques, and whole animal cardiovascular and metabolic physiology to investigate central nervous system mechanisms that contribute to the development of metabolic (e.g., obesity) and cardiovascular (e.g., hypertension) disorders.	No	Yes	Yes
Zheng	Xiaoyan	PhD	GW	xzheng@gwu.edu	Identification of target genes regulated by the Hedgehog signaling pathway and molecular mechanisms activated by Hegehog in regulating cell-cell interactions	Yes	Yes	Yes
Zohn	Irene	PhD	CNHS	IZohn@childrensnational.org	Use of human genetic studies, mouse models, and other strategies to understand the cellular and molecular basis of structural birth defects such as neural tube (spina bifida) and heart defects.	No	No	Yes