

# IBS LAB ROTATION FACULTY AVAILABILITY 2023-2024

2.7.24

\* subject to changes / updates throughout the year

| Last            | First          | Cred     | Inst | Email                          | Research Interests   | Fall 23   | Spr 24   | Sum 24   |
|-----------------|----------------|----------|------|--------------------------------|--|-----------|----------|----------|
|                 |                |          |      |                                |  | 9/11-12/8 | 1/8-3/22 | 3/25-6/7 |
| Bethea          | John           | PhD      | GW   | jrb117@gwu.edu                 | Neuroimmune mechanisms of CNS injury and disease, the role of TNFalpha in spinal cord injury, translation of discovery into clinical application.  | N         | Y        | Y        |
| Bollard         | Catherine      | MD       | CNHS | cbollard@childrensnational.org | Development of novel cell therapeutics for cancer and infection  | N         | N        | N        |
| Bosque-Pardos   | Alberto        | PhD, MBA | GW   | abosque@gwu.edu                | HIV cure research, strategies to enhance immune effector functions and eradicate latent HIV infection  | Y         | Y        | Y        |
| Bukrinsky       | Michael        | MD, PhD  | GW   | mbukrins@gwu.edu               | Molecular pathogenesis of HIV-associated metabolic diseases  | Y         | Y        | Y        |
| Chiappinelli    | Katherine      | PhD      | GW   | kchiapp1@gwu.edu               | Epigenetic regulation of immune signaling in cancer, specifically focusing on noncoding regions of the genome and the tumor cell immune response   | N         | N        | N        |
| Chung           | Inhee          | PhD      | GW   | inheec@gwu.edu                 | Biophysical and biomechanical mechanisms of cancer metastasis and cancer dormancy, including single-molecule tracking and super-resolution microscopy  | N         | N        | Y        |
| Colonnese       | Matthew        | PhD      | GW   | colonnese@gwu.edu              | Cellular and circuit mechanisms essential for plasticity in the developing brain   | Y         | Y        | Y        |
| Corbin          | Joshua         | PhD      | CNHS | JCorbin@childrensnational.org  | Genetic and cellular basis for development of mammalian amygdala   | N         | N        | N        |
| Cruz            | Conrad Russell | MD, PhD  | GW   | rcruz@gwu.edu                  | Development of immune based therapies for cancer and opportunistic infections for patients with various degrees of immune deficiency   | N         | N        | Y        |
| Fabbri          | Muller         | MD, PhD  | CNHS | mfabbri@childrensnational.org  | Non-coding RNAs in exosomes and other extracellular vesicles and their role in cancer biology and therapy  | Y         | N        | N        |
| Fernandes       | Rohan          | PhD      | GW   | rfernandes@gwu.edu             | Immunoengineering approaches to treat cancer and HIV; nanoimmunotherapies and cell-based immunotherapies   | N         | N        | N        |
| Hashimoto-Torii | Kazue          | PhD      | CNHS | KHTorii@childrensnational.org  | Environmental factors/pharmacological agents in fetal brain malformations related to mental illnesses in adulthood   | Y         | Y        | Y        |
| Haydar          | Dalia          | PhD      | CNHS | dhaydar@childrensnational.org  | investigating novel designs, additional genetic modifications, or combination therapies that will improve CAR T cells antitumor effects in pediatric brain tumors  | Y         | Y        | Y        |
| Haydar          | Tarik          | PhD      | CNHS | thaydar@childrensnational.org  | Cellular, molecular and behavioral analysis of forebrain development and intellectual disabilities using mouse models and human induced pluripotent stem cells.  | N         | N        | N        |
| Hsiao           | Katie Kuangfu  | PhD      | CNHS | khsiao@childrensnational.org   | Genomic-scale and circuit-level analysis of developmental disorders. In vivo neural activity recordings from synaptic inputs and output of targeted celltypes to decode mechanisms of learning and plasticity.               | Y         | Y        | Y        |
| 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 | N         | N        | N        |
| Hu              | Yanfen         | PhD      | GW   | huy3@gwu.edu                   | BRCA1 in breast and ovarian cancers, including the mechanism of BRCA1 as a tumor suppressor, BRCA1-associated tumor sex- and tissue-specificity, and BRCA1-associated cancer treatment and therapeutic resistance.           | N         | Y        | Y        |
| Ishibashi       | Nobuyuki       | MD       | CNHS | Nshibas@childrensnational.org  | Neurodevelopment and injury in congenital heart disease  | Y         | Y        | Y        |

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| Jaiswal       | Jyoti K.  | PhD      | CNHS | jkjaiswal@childrensnational.org | Cell biology of tissue repair and regeneration with a focus on muscle diseases;<br>Cell biology of viral diseases  | Y         | Y        | N        |
| Jose          | Pedro     | MD, PhD  | GW   | pjose01@gwu.edu                 | Role of dopamine, adrenergic, and angiotensin receptors subtypes and dopamine regulatory genes or sodium transport in the pathogenesis of genetic hypertension and metabolic syndrome  | Y         | N        | N        |
| Keller        | Michael   | MD       | CNHS | mkeller@childrensnational.org   | Adoptive immunotherapy and antiviral T cell immunity in immunocompromised patients   | N         | N        | N        |
| Lee           | Jiyoung   | PhD      | GW   | jiyounglee@gwu.edu              | Molecular signaling mechanisms by which metastasis regulators modify gene expression and functional phenotypes in cancer.  | Y         | Y        | Y        |
| Lee           | Norman H. | PhD      | GW   | nhlee@gwu.edu                   | Cancer disparities in the African American population using animal experiments and molecular biology; cancer genomics; molecular mechanisms of metastasis and cancer drug resistance; regulation of RNA splicing                     | N         | N        | N        |
| Li            | Rong      | PhD      | GW   | rli69@gwu.edu                   | Molecular understanding of major risk factors for breast cancer  | Y         | Y        | Y        |
| Li            | Wei       | PhD      | CNHS | wli2@childrensnational.org      | Genome editing technology 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 | N         | M        | M        |
| Limperopoulos | Catherine | PhD      | CNHS | climpero@childrensnational.org  | Novel, patient-centered clinical and translational research in pregnant women and neurodiagnostic and neurodevelopmental surveillance in high-risk fetuses and preterm infants   | N         | N        | N        |
| Lu            | Hui       | PhD      | GW   | huilu@gwu.edu                   | Neural circuit dysfunction; circuit dysfunctions in MeCP2-deficient mice related to motor function, social interactions, and emotional states.   | Y         | Y        | Y        |
| Lynch         | Rebecca   | PhD      | GW   | rmlync@gwu.edu                  | Harnessing antibodies for HIV therapy and cure and flavivirus antibody responses.  | Y         | Y        | Y        |
| Maggirwar     | Sanjay    | PhD, MBA | GW   | smaggirwar@gwu.edu              | Underlying mechanisms of HIV-associated illnesses such as thrombosis, atherosclerosis, cancers and neurocognitive impairments  | Y         | Y        | Y        |
| Marvar        | Paul      | PhD      | GW   | pmarvar@gwu.edu                 | Characterization of the neurocircuitry in the brain that contributes to stress-induced hypertension and other stress-related disorders such as PTSD  | N         | Y        | Y        |
| Mazumder      | Raja      | PhD      | GW   | mazumder@gwu.edu                | Applied bioinformatics; comprehensive comparative analysis at the genomic level  | N         | N        | N        |
| Mendelowitz   | David     | PhD      | GW   | dmendel@gwu.edu                 | Role of the autonomic nervous system in cardiorespiratory diseases; identification of novel targets for treating diseases such as sleep apnea and heart failure.   | N         | N        | N        |
| Nino          | Gustavo   | MD, MSHS | CNHS | GNino@childrensnational.org     | Developmental immunology of human airway epithelium, pathobiology of respiratory disorders in infants born prematurely, novel tools for respiratory phenotyping in young children  | N         | N        | N        |
| Novak         | James     | PhD      | CNHS | JNovak@childrensnational.org    | Gene therapy strategies for muscular dystrophies; molecular and cellular mechanisms of tissue repair and muscle disease pathogenesis   | M         | Y        | M        |

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| Pei       | Yanxin     | PhD     | CNHS | YPei@childrensnational.org      | Molecular mechanisms underlying tumor development and therapy resistance in pediatric brain tumors and identifying novel therapeutic approaches to treating the disease   | Y         | Y        | Y        |
| Polotsky  | Vsevolod   | MD, PhD | GW   | vsevolod.polotsky@gwu.edu       | Pathogenesis of sleep disordered breathing and its complications  | N         | M        | M        |
| Polter    | Abigail    | PhD     | GW   | ampolter@gwu.edu                | Circuit and synaptic-level effects of stress and adversity.   | N         | N        | N        |
| Posnack   | Nikki      | PhD     | CNHS | nposnack@childrensnational.org  | Cardiovascular physiology, pharmacology, and pediatric heart models   | Y         | Y        | Y        |
| Sepulveda | Antonia    | MD, PhD | GW   | asepulveda@gwu.edu              | Novel regulatory pathways and early biomarkers of cancer of the esophagus, stomach, colorectum, and pancreas using innovative genomics, transcriptomics, and computational image analyses   | N         | N        | N        |
| Seto      | Edward     | PhD     | GW   | seto@gwu.edu                    | Epigenetics; histone deacetylase (HDAC), enzymes that catalyze the removal of acetyl groups from the lysine residues of histones  | Y         | Y        | Y        |
| Shibata   | Maho       | PhD     | GW   | mshibata@gwu.edu                | Prostate stem/progenitor cells, prostate organogenesis and cancer, patient-derived prostate cancer organoids  | N         | N        | M        |
| Shook     | Brett      | PhD     | GW   | brettshook@gwu.edu              | Molecular and cellular regulation of immune cells in mammalian skin   | Y         | Y        | Y        |
| Sidorov   | Michael    | PhD     | CNHS | msidorov@childrensnational.org  | Neural circuits and behavior in autism-like neurodevelopmental disorders; mechanisms of visual encoding and plasticity  | N         | N        | M        |
| Torii     | Masaaki    | PhD     | CNHS | MTorii@childrensnational.org    | Molecular and cellular mechanisms that govern differentiation of neuronal and glial subtypes in normal development of the cerebral cortex; role of these processes of cognitive and psychiatric disorders                             | N         | N        | N        |
| Triplett  | Jason      | PhD     | CNHS | JTriplett@childrensnational.org | Mechanisms of visual circuit development; analysis of visual dysfunction and circuit disorganization in neurodevelopmental disorders  | Y         | Y        | Y        |
| Tzatsos   | Alexandros | MD, PhD | GW   | atzatsos@gwu.edu                | Epigenetic progression model of pancreatic cancer; epigenetic regulation of hematopoietic stem cells  | N         | N        | N        |
| Watkins   | David      | PhD     | GW   | dwatkins832@gwu.edu             | Immune response to viruses including HIV, Zika, Dengue, Yellow fever and the new coronavirus encompassing MHC genetics, viral evolution, CD8+ T cell responses, antibody cloning and expression, vaccine development and diagnostics. | N         | N        | N        |
| Wu        | Ray-Chang  | PhD     | GW   | rwu@gwu.edu                     | Chromatin remodeling proteins in the development and therapy resistance of cancers  | N         | N        | N        |
| Young     | Colin      | PhD     | GW   | colinyoung@gwu.edu              | CNS molecular mechanisms underlying cardiovascular and metabolic diseases   | N         | N        | M        |
| Zheng     | Xiaoyan    | PhD     | GW   | xzheng@gwu.edu                  | Identification of target genes regulated by the Hedgehog signaling pathway and molecular mechanisms activated by Hedgehog in regulating cell-cell interactions  | Y         | Y        | Y        |
| Zhu       | Wenge      | PhD     | GW   | wz6812@gwu.edu                  | DNA replication. DNA damage checkpoint and repair, histone modification, and identification of small molecules for cancer therapy   | N         | Y        | Y        |
| Zohn      | Irene      | PhD     | CNHS | Izohn@childrensnational.org     | Developmental mechanisms mediating gene-environment interactions underlying structural birth defects such as spina bifida and congenital heart defects  | Y         | Y        | Y        |