

# CANCER RESEARCH AT UF HEALTH (FACCA ATTENDEES)

### Yehia Daaka, PhD

Department: Anatomy & Cell Biology Email: <u>ydaaka@ufl.edu</u>

Biological roles of G protein-coupled receptors and their effectors in cancer initiation and progression

### Thomas J. George, MD, FACP

Department: Hematology/Oncology Research Program: Cancer Therapeutics & Immuno-Oncology Email: <u>thom.george@medicine.ufl.edu</u>

- Innovative Clinical trials and trial designs to promote novel cancer drug application in patient care and quality of life/cancer care decision making
- Identification of biomarkers of cancer or the patient to predict response to therapy
- Incorporation of new molecular markers, comprehensive genomic profiling, and pharmacogenomics to optimize outcomes for each unique patient

### Yi Guo, PhD

Department: Health Outcomes & Policy Email: <u>viguo@ufl.edu</u>

- Statistical methodology for sample size estimation, cancer outcomes, prevention and control, and health care delivery
- Eliminating health disparities, studying behavioral health issues, and the environmental and social determinants of health in low-income populations

### Olga Guryanova, MD, PhD

Department: Pharmacology & Therapeutics Research Program: Cancer Genome & Epigenome Integrity Email: <u>oguryanova@ufl.edu</u>

- Molecular mechanisms of altered chromatin dynamics in normal, pre-leukemic and leukemic cells harboring mutations in epigenetic modifier genes
- Role of leukemia-associated DNMT3A mutations in clonal evolution of hematopoiesis
- Mechanistically-guided development and pre-clinical evaluation of novel therapeutic strategies for DNMT3A-mutant acute myeloid leukemia (AML)

### Jaclyn Hall, PhD

Department: Health Outcomes & Policy Email: jaclynha@ufl.edu

- Environmental and demographic datasets to examine how humans interact with the natural environment
- Geocoding, mapping, new spatial data sets, cluster analysis, study group delineation
- Pattern and process of homogenization of neighborhoods within heterogeneous cities; implications for health outcomes; and environmental data to understand health outcomes

## Robert H. Houlihan, DHA, MBA, FACHE, CCRP, CRA

Associate Director for Administration Department: UF Health Cancer Center Email: <u>rhoulihan@ufl.edu</u>

- CCSG Administration
- Strategic Planning and Analysis
- Financial Management
- Center Operations

### Suming Huang, PhD

Department: Biochemistry & Molecular Biology Research Program: Cancer Genome & Epigenome Integrity Email: <u>sumingh@ufl.edu</u>

- Delineate the epigenetic pathways that regulate the normal hematopoiesis and to further determine how these networks are perturbed in anemia and leukemia
- Role of CTCF-mediated 3D genome organization in enhancer/promoter interactions and oncogene transcription and translocation
- Role of long non-coding RNAs in hematopoiesis and leukemogenesis

## Alexander M. Ishov, PhD

Department: Anatomy & Cell Biology Research Program: Cancer Genome & Epigenome Integrity Email: <u>ishov@ufl.edu</u>

- Functions of histone variants in castration-resistant prostate cancer
- Chemoresistance in breast cancer
- Epigenetic regulation of gene expression in cancer and host/pathogen interaction

### **Christian Jobin, PhD**

Department: Gastroenterology, Hepatology & Nutrition Research Program: Cancer Microbiota & Host Response Email: <u>christian.jobin@medicine.ufl.edu</u>

- Bacteria/host interaction and ensuring innate/immunological responses during health and diseases
- Mice and zebrafish housed in germ-free and gnotobiotic conditions, microbiome techniques (next-generation sequencing, microbial gene mutations, etc) to study the differential contribution of bacteria in protecting or exacerbating the development of colitis and colorectal cancer

### Michael P. Kladde, PhD

Department: Biochemistry & Molecular Biology Research Program: Cancer Genome & Epigenome Integrity Email: <u>kladde@ufl.edu</u>

- Epigenetic regulation of eukaryotic transcription
- Epigenetic basis of tumor progression and chemotherapeutic resistance
- Changes in the epigenome in response to low-dose radiation
- Development of novel, integrative methods for epigenetic investigations

### Brian K. Law, PhD

Department: Pharmacology & Therapeutics Research Program: Cancer Therapeutics & Immuno-Oncology Email: <u>bklaw@pharmacology.ufl.edu</u>

- Role of Cyclin-dependent kinases (Cdks) in the initiation of breast tumors, and the development of novel small molecular Cdk inhibitors as anti-cancer therapeutics
- Optimization of novel agents that selectively kill breast cancer cells that overexpress the EGFR or HER2 oncoproteins
- Role of the CDCP1-containing protein complexes in anoikis evasion and disruption of cellcell and cell-substratum adhesion

# Chenglong Li, PhD

Department: Medicinal Chemistry Research Program: Cancer Genome & Epigenome Integrity Email: lic@cop.ufl.edu

- Molecular recognition, with a strong application to structure-based computer-aided drug design
- Computational method development and drug design applications
- Drug discovery targeting cytokine IL-6/STAT3 pathway
- Drug discovery targeting arginine methyltransferase PRMT5 epigenetic complexes

### Jonathan D. Licht, MD

Center Director Department: Hematology/Oncology Research Program: Cancer Genome & Epigenome Integrity Email: jdlicht@ufl.edu

- Aberrant transcriptional regulation as a cause of hematologic malignancy
- Molecular biology of multiple myeloma chromatin changes and gene expression mediated by the MMSET protein over-expressed in a subset of multiple myeloma KDM6A loss of function
- Collaborative effects of MAP kinase signaling and chromatin regulator mutation in solid tumors

#### Steven Madore, PhD

Department: Interdisciplinary Center for Biotechnology Research Email: <a href="mailto:smadore@ufl.edu">smadore@ufl.edu</a>

- Genomics
- Biorepository science

#### Walter G. O'Dell, PhD

Department: Radiation Oncology Research Program: Cancer Population Sciences Email: <u>ODELWG@shands.ufl.edu</u>

- Medical image analysis
- 3D tumor & vessel detection & sizing
- Cardiac MRI

### Rolf Renne, PhD

Department: Molecular Genetics & Microbiology Research Program: Cancer Microbiota & Host Response Email: <u>rrenne@ufl.edu</u>

- How proteins and noncoding RNAs expressed during KSHV latency regulate host and viral gene expression, contributing to our understanding of viral biology and tumorigenesis
- Identifying targets for KSHV-encoded miRNAs by ribonomics approaches including HITS-CLIP and CLASH in disease relevant models

### Alberto Riva, PhD

Department: DiBiG, ICBR Bioinformatics Email: <u>ariva@ufl.edu</u>

- Design, development and use of computational tools for genomics, genetics, and biomedical research;
- Development of complex analysis pipelines for computational biology applications in highperformance cluster computing environments;
- Bioinformatics training and consulting.

### Ramzi Salloum, PhD

Department: Health Outcomes & Policy Research Program: Cancer Population Sciences Email: <u>rsalloum@ufl.edu</u>

- Influence of guidelines and incentives on the demand for health and healthcare across the cancer control continuum
- Behavioral economics techniques to inform policy that can influence health-related decisionmaking among vulnerable populations

#### Prof. W. Gregory Sawyer, PhD

Department: Mechanical & Aerospace Engineering Research Program: Cancer Therapeutics & Immuno-Oncology Email: <u>wgsawyer@ufl.edu</u>

- Surface science and engineering
- Precision engineering and instrumentation
- Soft matter mechanics and engineering
- Biofabrication

## Elizabeth (Betsy) A. Shenkman, PhD

Department: Health Outcomes & Policy Research Program: Cancer Population Sciences Email: <u>eshenkman@ufl.edu</u>

- Combinations of health care delivery, community, and patient factors that influence quality and outcomes of care
- Evidence-based strategies to improve health outcomes
- Evidence-based best practice strategies in health care settings

### Scott A. Tibbetts, PhD

Department: Molecular Genetics & Microbiology Research Program: Cancer Microbiota & Host Response Email: <u>stibbe@ufl.edu</u>

• Viral noncoding RNA functions in gammaherpesvirus infection and lymphomagenesis

### **Zsolt Toth, PhD**

Department: Oral Biology Research Program: Cancer Microbiota & Host Response Email: <u>ztoth@dental.ufl.edu</u>

• Function of specific viral and host factors that are critical for the persistent Kaposi's sarcoma-associated herpesvirus (KSHV) infection and KSHV-induced oncogenesis using KSHV mutants and structural-functional biochemical assays combined with system biology and genomic approaches

### David D. Tran, MD, PhD

Department: Neurological Surgery Research Program: Cancer Therapeutics & Immuno-Oncology Email: <u>david.tran@neurosurgery.ufl.edu</u>

- Understanding the mechanism of cancer metastasis and dormancy
- Determine the role of mesenchymal factors in primary malignant brain tumors
- Translational/clinical research in neuro-oncology
- Genomic bioinformatics & computational biology

#### Jose G. Trevino, MD

Department: Surgery Research Program: Cancer Population Sciences Email: jose.trevino@surgery.ufl.edu

- Pancreatic cancer tumor biology
- Pancreatic cancer cachexia
- Pancreatic cancer health disparities

#### John R. Wingard, MD

Department: Hematology/Oncology Research Program: Cancer Therapeutics & Immuno-Oncology; Cancer Population Sciences Email: wingajr@medicine.ufl.edu

Optimizing outcomes of hematopoietic cell transplantation, by exploring new
immunosuppressive regimens, cellular adoptive immunotherapy, exploration of cord blood
as a stem cell source, reducing infectious complications

#### Mingyi Xie, PhD

Department: Biochemistry & Molecular Biology Email: <u>mingyi.xie@ufl.edu</u>

- Gene expression regulation by non-coding RNAs
- Unique modes of miRNA biogenesis, including Integrator-mediated RNA metabolism

#### Chengguo (Chris) Xing, PhD

Department: Medicinal Chemistry Research Program: Cancer Therapeutics & Immuno-Oncology Email: <u>chengguoxing@cop.ufl.edu</u>

 Isolation, design and synthesis, and identification of biologically active small molecules, employing such candidates as probes to tackle fundamental questions in tumorigenesis and cancer biology, and evaluating their clinical potentials