

**UF Health Cancer Center - Cancer Center Membership Research Interests**

Full Name (Last, First)	Title	Research Program	Summary of Research Interests
Agbandje-McKenna, Mavis, BSc, PhD	Professor	Not Programmatically Aligned (NPA)	My research is mostly directed at structure to function annotation for the ssDNA viruses. My research focus has been mainly directed at members of the Geminiviridae that infect plants and the Parvoviridae that infect a wide range of hosts including invertebrates and vertebrates. Using Structural biology tools, namely X-ray crystallography, cryo-electron microscopy and molecular modeling, combined with biochemical, biophysical, molecular biology and virological approaches, we are interested in mapping the life cycle of these viruses. Our goal is to elucidate essential protein-protein and protein-nucleic acid interactions that facilitate successful host recognition and interactions for infection. We hope to obtain information that can be applied to the development of viral strategies in the form of virus capsid assembly disruptors, antigen delivery systems, and gene delivery vectors.
Aguirre, Jose, PhD	Research Assistant Professor	Not Programmatically Aligned (NPA)	Skeletal effects of bisphosphonates and bone anabolic agents/drugs for the prevention and treatment of local osteopenias (e.g., jaw) and postmenopausal osteoporosis. Pathophysiology of osteonecrosis of the jaw (ARONJ), and other side effects of anti-resorptive drugs. Small animal models of periodontitis. Extended half-life of RANK Ligand antagonists for preclinical testing of osteoporosis treatments in small animals. Comparative medicine.
Allegra, Carmen, MD	Professor	Cancer Therapeutics & Host Response (CTHR)	His primary research effort is focused on developing new therapeutic strategies for patients with GI malignancies through the identification and translation of novel laboratory discoveries and therapeutic agents. This work is underpinned by new target discovery and identification of prognostic and predictive signatures required to personalize oncologic therapeutics.
Alpert, Jordan, PhD	Assistant Professor	Cancer Population Sciences (CPS)	International Association for Communication in Healthcare, National Communication Association, Association for Education in Journalism and Mass Communication.
Alvarado, Michelle, PhD	Assistant Professor	Cancer Population Sciences (CPS)	Chemotherapy; Health Disparities; Radiation Oncology; Skin/Melanoma; Surgical Oncology
Amdur, Robert, MD	Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. Amdur conducts research to advance new and improved radiation therapy treatments for brain, gynecologic, head and neck, thyroid, skin and spine cancers. He is an extensively published researcher with nearly 170 peer-reviewed papers and three medical textbooks under his name.
Anton, Stephen, PhD	Associate Professor	Cancer Population Sciences (CPS)	Dr. Anton's research interests include: Obesity, Metabolic Disease, Aging, Lifestyle, and Botanicals.
Avram, Dorina, PhD	Professor	Cancer Therapeutics & Host Response (CTHR)	Immunoregulation & Suppression
Bacher, Rhonda, PhD	Assistant Professor	Mechanisms of Oncogenesis (MOO)	My research is focused on developing statistical methods for analyzing genetic and genomic data. I'm now interested in connecting genetic data and clinical outcomes particularly related to cancer. I also have expertise in analyzing data from single cell RNA sequencing, an experimental technique which is relevant to answering a number of questions in cancer research (e.g., rare cells, cell type diversity, and heterogeneity in drug response).

Baer, Charles, PhD	Assistant Professor	Mechanisms of Oncogenesis (MOO)	<p>I am a comparative evolutionary geneticist whose research is motivated by theoretical population genetics. My primary research interest is in the factors responsible for the generation and maintenance of genetic variation. I am especially interested in the evolution of mutation rate. There is considerable taxonomic variation in the rate and cumulative effects of new mutations, even among genotypes within species. I begin from the premise that the mutation rate is an evolvable phenotype which is subject to optimizing selection, and which may evolve in predictable ways. My research program has two primary objectives: (1) elucidate the various factors that underlie variation in the mutation rate, and (2) determine the extent to which variation in mutation rate explains variation among taxa in standing genetic variation at the phenotypic and molecular level. Recently, our studies of mutational variation have led me to become interested in the evolution of phenotypic robustness.</p> <p>We use Rhabditid nematodes as our experimental organism, and employ a variety of phenotypic and molecular methods to address the questions of interest. Additional research interests include the evolution of genetic architecture (i.e., genetic covariance), the phylogeography of fresh water fish, and selection experiments in any way, shape, or form.</p>
Bechtel, Sandra, DVM	Associate Professor	Cancer Therapeutics & Host Response (CTHR)	Bone & Soft Tissue Sarcomas; Cell Signaling Pathways; Chemotherapy; Drug Resistance; Immunoregulation & Suppression; Immunotherapy; Quality of Life Issues; Skin/Melanoma; Targeted Cancer Therapy
Bennett, Richard, PhD	Research Assistant Professor	Mechanisms of Oncogenesis (MOO)	Apoptosis & Cell Death Pathways; Cancer Genetics; Cell Signaling Pathways; Epigenetics & Gene Regulation; Hematologic Malignancies/Blood & Marrow Transplant; Immunoregulation & Suppression; Leukemia; Lymphoma; Post-Transcriptional Gene Regulation; RNA Processing; Tumor Virology/Virus-Host Interactions
Berglund, Andy, PhD	Professor	Mechanisms of Oncogenesis (MOO)	The primary goals of the Berglund lab are to understand the molecular basis of the human disease myotonic dystrophy (a form of muscular dystrophy) and the mechanisms regulating pre-mRNA splicing. We are also interested in identifying and studying all RNA motifs and splicing factors that regulate pre-mRNA splicing because it is clear that splicing plays an important role in expanding the diversity of human genes and incorrect splicing causes a variety of diseases.
Bhaduri-McIntosh, Sumita, MD, PhD	Associate Professor	Mechanisms of Oncogenesis (MOO)	Cancer Genetics; Cell Signaling Pathways; DNA Damage & Repair; DNA Replication; Epigenetics & Cancer; Epigenetics & Gene Regulation; Hematologic Malignancies/Blood & Marrow Transplant; Tumor Virology/Virus-Host Interactions

Bian, Jiang, PhD, MS	Assistant Professor	Cancer Population Sciences (CPS)	<p>I have a diverse yet strong multi-disciplinary background and extensive research experience in data science, machine learning, data analytics, network science, distributed parallel computing systems and software engineering. I have developed a solid research record in biomedical informatics. My current research focuses on 1) data-driven medicine with Big Data—applications of machine learning and data mining techniques in medicine especially on solving big data problems; 2) network science—understanding the structure and function of physical, biological, and social networks and how this structure and function relate to health and health care; and 3) design and development of tools and systems using informatics principles and techniques to support clinical and clinical research activities. I have developed several systems and tools including a social network analysis framework for understanding research collaborations, a probabilistic brain connectivity network model for learning psychiatric brain diseases, an analytic framework for mining public health information via social media, an integrated clinical research administration platform for streamlining the management of clinical research projects, and a medical image exchange platform for telemedicine that has been widely used in the state of Arkansas.</p> <p>One of my recently U01 proposal submitted to the NCI focuses on using informatics approaches to improve accessibility of online obesity and cancer information.</p>
Bihorel, Sihem, PharmD, PhD	Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	<p>Dr. Sihem Bihorel has joined the Center for Pharmacometrics and Systems Pharmacology in the Department of Pharmaceutics at the University of Florida as an Assistant Professor in July 1st. Her laboratory is located on the Medical City campus in Lake Nona, Orlando. Dr. Bihorel research interests are in the following areas :preclinical and clinical pharmacokinetic and pharmacodynamic (PK/PD) analysis, pharmacogenomics, PK/PD modeling and simulation, systems pharmacology and population modeling, large molecule therapeutics (proteins, monoclonal antibodies), liposomes, targeted therapeutics, and antiangiogenic therapeutics.</p> <p>Dr. Bihorel utilizes quantitative systems pharmacology approaches to guide the development of new therapies and the identification of promising combination therapies as well as of novel biomarkers in oncology. She integrates quantitative systems pharmacology with PK/PD modeling and simulation to advance drug discovery and development, and leverage the understanding of drugs action which holds great promise to facilitate translational research.</p> <p>Her research is also focused on investigating how priming solid tumors with a pro-apoptotic agent then combining a subsequent antiangiogenic agent can defeat drug resistance in cancer and further enhance the efficacy of targeted anticancer agents, and translating these findings toward clinical settings.</p> <p>Dr Bihorel graduated with a PharmD degree from the University of Paris-Descartes in France and a PhD degree from the Department of Pharmaceutical Sciences at SUNY at Buffalo. She published 18 peer reviewed papers and has been awarded the PhRMA Foundation starter grant award in translational medicine and therapeutics and the scholar award from the Center for Protein Therapeutics.</p>

Black, Lucien, MD, MSc	Clinical Assistant Professor	Cancer Population Sciences (CPS)	Anesthesiology/Pain Management; Bioinformatics; Health Disparities; Pain; Palliative Medicine; Quality of Life Issues
Bloom, David, PhD	Professor	Mechanisms of Oncogenesis (MOO)	My long-term research interest is the molecular basis of pathogenesis of the herpesviruses, and to apply these pathogenic concepts to the development of HSV as a gene therapy vector. My current research is focused in three major areas: 1) determining the molecular basis of HSV latency and reactivation; 2) identifying the molecular determinants of HSV latent gene expression and epigenetic silencing of lytic genes; and 3) exploiting HSV's unique biology to develop improved versions of HSV vectors for expressing biologically relevant peptides in neurons of the peripheral and central nervous systems as well as in the development of HSV as an oncolytic vector for cancer. It is my strong belief that HSV presents itself as a valuable molecular tool to deliver peptides to the nervous system for experimental and therapeutic applications.
Bluck, Susan, PhD	Professor	Cancer Population Sciences (CPS)	My program of research in the UF Life Story Lab (Psychology) examines how individuals recall and integrate the events of their life into a life story and how they use that story as an adaptive resource in the face of challenge. My work focuses on adult development and aging with a particular interest in end-of-life as a developmental phase. Promoting a 'good death' through high quality palliative care should provide benefits to the dying person in finding a fitting end to their story as well as to loved ones who must integrate the loss into their continuing lives. My work also involves death education (teaching Death and Dying annually) and community-based learning (Before I Die Wall, Death over Dinner).
Bobroff, Linda, PhD, RD, LD/N	Professor	Cancer Population Sciences (CPS)	Dr. Bobroff's research focuses on weight management strategies for persons living in medically underserved areas and evaluation of Extension education programs. She currently is co-investigator on an NIH-funded randomized controlled trial investigating weight management approaches for adults in rural counties in Florida.
Bolch, Wesley, PhD	Professor	Cancer Population Sciences (CPS)	Dr. Bolch's research seeks to develop rapid and clinically accessible computational tools for use by radiologists and radiation oncologists to assess radiation organ dose and associated secondary cancer risks to patients following diagnostic imaging or radiation therapy. The Bolch laboratory has used computer animation software and real patient imaging data to create a 350-member library of pediatric and adult males and females that covers a broad range of subject heights, weights and body shapes. These anatomic models are now being used in all three areas of medical imaging: interventional fluoroscopy, nuclear medicine and computed tomography. Therapy applications of the UF patient phantom series include assessment of secondary cancer risks in proton versus photon cancer radiotherapy, and the use of kilovoltage stereotactic radiotherapy for halting the progression of age-related macular degeneration.
Bradley, Julie, MD	Assistant Professor	Cancer Population Sciences (CPS)	Dr. Bradley's research interests include: long-term side effects of radiation therapy; breast cancer; and pediatric malignancies.

Brown, Kevin, PhD	Associate Professor	Mechanisms of Oncogenesis (MOO)	The broad focus of our studies is to understand the mechanisms that maintain genomic stability and how dysregulation of these mechanisms drives cancer development. One of our projects involves analysis of the epigenetics of cervical cancer. Specifically, we are working to define novel DNA methylation marks that can be used as prognostic biomarker. Our second project focuses on ATM, a kinase that activates DNA damage response (DDR) and its role in suppression of breast cancer. One project is focused on uncovering novel tumor suppressive pathways that are activated by ATM within mammary epithelium. Another is aimed at understanding how ATM functions in maintenance of mammary gland homeostasis. These studies are being conducted using a novel conditional knockout mouse line that we have developed as well as appropriate cultured cell models.
Brown, Randy, BS, MD	Clinical Professor	Cancer Therapeutics & Host Response (CTHR)	Major interests include therapy of AML, myelodysplasia and myeloproliferative neoplasms. I am the institutional PI on a pharmaceutical company trial of momelotinib vs best supportive care in patients with myelofibrosis. In cooperation with a team of others, I have recently completed a protocol for treatment of resistant AML with etoposide and ciprofloxacin. This is being done in cooperation with Chris Cogle and Rob Hromas.
Bruijnzeel, Adriaan, PhD	Associate Professor	Cancer Population Sciences (CPS)	Drug addiction is a chronic disorder that is characterized by compulsive drug taking and relapse after periods of abstinence. The research in our laboratory focuses on the development of non-addictive treatments for nicotine, alcohol, and opioid addiction. We use animal models to study the neuronal substrates that mediate the negative mood state and anxiety-like behavior associated with drug withdrawal. The negative mood state associated with drug withdrawal is investigated with the intracranial self-stimulation procedure and anxiety-like behavior is investigated with the elevated plus maze test and other anxiety tests. In addition, we study drug self-administration and stress, drug, and cue-induced reinstatement of extinguished drug seeking behavior. Our research group has shown that corticotropin-releasing factor (CRF) mediates the negative mood state associated with nicotine and alcohol withdrawal and plays a critical role in stress-induced relapse of extinguished nicotine-seeking behavior. These studies may lead to the development of treatments that decrease drug abuse in humans and prevent relapse after a period of abstinence.
Bruner, Steven, PhD	Associate Professor	Cancer Therapeutics & Host Response (CTHR)	Structurally complex natural products, such as the medicinally relevant antibiotics vancomycin and erythromycin, are biosynthesized by large, macromolecular enzyme assemblies. These assemblies frequently orchestrate difficult and interesting chemical transformations to construct diverse molecular scaffolds. Our research group will use the tools of synthetic organic chemistry, enzymology and structural biology to dissect the mechanism of these systems. A detailed understanding of the biosynthesis of natural products will be extended to the development of new synthetic methodology and to the engineering of biological systems to produce novel molecules with desired properties.

Bungert, Jorg, PhD	Professor	Mechanisms of Oncogenesis (MOO)	The main focus of our research is the analysis of gene regulation during the differentiation and development of red blood cells. One project involves the analysis of locus control region (LCR) function in the regulation of the beta globin genes. The LCR is a powerful genetic regulatory element composed of multiple core units and located far upstream of the beta globin genes. We use genetic, molecular, and biochemical assays to test the hypothesis that the LCR serves as the primary attachment site for macromolecular protein complexes involved in chromatin structure alterations and transcription of the globin genes. In another project we analyze the function of upstream stimulatory factor (USF) in erythroid cells. USF is a ubiquitously expressed protein that activates genes expressed in differentiated cells. USF is required for erythropoiesis and expression of the globin genes.
Burne, Robert, PhD	Distinguished Professor	Not Programmatically Aligned (NPA)	The primary interests in my laboratory are in the molecular mechanisms governing the ability of bacteria that are capable of causing diseases in humans to modulate their virulence in response to environmental influences. To accomplish this, a variety of microbiological, biochemical, and recombinant DNA technologies are employed. These include the use of continuous culture techniques to tightly control growth parameters of bacteria, coupled with the use of genetically-engineered bacteria and gene fusion technology, which allows for a detailed molecular analysis of gene expression in response to specific stimuli. These systems are also being utilized for identifying and characterizing signal transduction systems and cis- and trans- acting factors controlling bacterial virulence expression. In addition, there is a major commitment to studying bacterial biofilms grown in custom-fabricated bioreactors using gene fusion techniques and confocal laser microscopy. The specific projects in the lab are focused in four major areas. The first is a detailed study of the genetics and physiology of polysaccharide metabolism and its relationship to virulence and biofilm formation by oral streptococci. The second project is a molecular genetic analysis of the role of the stress regulon in control of gene expression. The third project is a broad-based approach to understanding the genetics and physiology of ureases and arginine metabolism by streptococci and actinomycetes. The final project utilizes a multi-species biofilm model system coupled with the use of genetically engineered bacteria to explore microbial ecology and the pathogenesis of polymicrobial infectious diseases.
Bylund, Carma, PhD	Associate Professor	Cancer Population Sciences (CPS)	Communication in healthcare, specifically in contexts of: cancer prevention, cancer care, cancer survivorship. Other contexts include: patient navigation, genetic counseling, clinical trials. Interventions to improve health care communication (both physician and patient focused).
Cabrera, Roniel, MD, MS	Associate Professor	Cancer Therapeutics & Host Response (CTHR)	Angiogenesis; Apoptosis & Cell Death Pathways; Cell Signaling Pathways; Epigenetics & Cancer; Immunoregulation & Suppression; Immunotherapy; Liver; Targeted Cancer Therapy; Tumor Virology/Virus-Host Interactions

Caglayan, Melike, PhD	Assistant Professor	Mechanisms of Oncogenesis (MOO)	I am particularly interested in oxidative DNA damage and the effects of oxidative stress on DNA repair and genome stability. In living cells, reactive oxygen and nitrogen species are formed continuously as a consequence of metabolic reactions, as well as arising from exposure to environmental agents. The basis of multiple human afflictions such as cancer is rooted in oxidative stress. Oxidative stress is a common threat to genome stability. My research will serve to better understand the importance and mechanism of the sequential flow of DNA intermediates through the DNA repair pathways, and the work will provide novel insight into repair pathway control and modulation enabling genome stability in humans as a function of environmental toxicant-induced cytotoxicity. My research program will explore new areas in DNA repair and genome stability that have been linked to many types of cancer as well DNA ligase inhibitors that have been used as cancer therapeutic agents to target one or different combinations of DNA repair pathways.
Cascio, Matthew, D.O.	Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	Bone & Soft Tissue Sarcomas; Gene Therapy; Immunotherapy; Pediatric Oncology
Castagno, Jacqueline, MD	Chief & Clinical Assistant Professor	Cancer Population Sciences (CPS)	I have research interests in the area of palliative care for gynecologic cancer patients, incorporating integrative cancer care, pain control, and quality of life issues. I am also interested in gynecologic cancer prevention and detection, in differences in health behavior and care disparities among different groups of women, medical system and physician avoidance behaviors, and how to improve cancer prevention, screening, and detection in women.
Castellano, Ronald, PhD	Associate Professor	Cancer Therapeutics & Host Response (CTHR)	Research in my laboratory uses organic synthesis, physical organic chemistry, spectroscopic methods, and computation to design, prepare, and study novel organic molecules that show unique and useful behavior. In this context we are particularly interested in predicting and controlling properties that emerge when individual molecules aggregate, by weak noncovalent interactions, in solution. The phenomenon is called "self-assembly," and it is a process borrowed from nature to achieve complexity rapidly and reversibly (e.g., assembly of the DNA duplex or binding of a receptor to its enzymatic target). It is also the central theme of supramolecular chemistry, an established field that studies chemistry "beyond the molecule." Our specific areas of interest and expertise include: stereoelectronic effects in supramolecular chemistry, construction of novel donor-acceptor molecules with useful electronic or optical properties, functional molecules (for materials and/or sensing applications) from biorelevant building blocks, and molecular-based strategies to novel therapeutics.
Castillo Caro, Paul, MD	Clinical Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	Bone Marrow Transplant

Cavallari, Larisa, PharmD	Associate Chair & Associate Professor	Cancer Population Sciences (CPS)	My clinical and research interests are in the area of pharmacogenomics, particularly in underserved patient populations. While I have historically focused on the pharmacogenomics of cardiovascular agents, I have more recently broadened my interest to include the pharmacogenomics of drug response in other diseases, including response to supportive care therapies in cancer. In my previous position at the University of Illinois at Chicago, I served as co-director of a novel warfarin pharmacogenomics service whereby every inpatient newly starting warfarin was genotyped, with results used to guide dosing. This services stemmed from my research interest in warfarin pharmacogenomics, which led to the discovery of several novel associations with warfarin response in African Americans. I currently serve as an Associate Director of the UF Health Personalized Medicine Program and Director of the UF Center for Pharmacogenomics.
Chang, Lung-Ji, PhD	Professor	Cancer Therapeutics & Host Response (CTHR)	From infections, malignant cancer, to inherited disorders, the immune system plays a critical role in controlling the health state of the host. My lab has been focusing on basic and translational research of engineering stem cells and the immune system to target infections and cancer. For cancer patients, immunotherapy has become an important treatment option. The immune cells in cancer patients are often highly tolerized or dysfunctional against cancer and therefore, generating functional immune cells including dendritic cells and T cells has become an important therapeutic approach. The modified immune cells may target diseased cells at high efficiency. Clinical trials using ex vivo generated immune cells to treat viral, fungal infections and leukemia of hematopoietic stem cell transplant patients have produced promising outcomes.
Cheng, Ting-Yuan (David), PhD	Assistant Professor	Cancer Population Sciences (CPS)	Breast; Cancer Prevention; Cancer Survivorship; Cancer Susceptibility; Environment; Epidemiology; Health Disparities; Lung; Nutrition, Dietary Supplements & Cancer
Close, Julia, MD	Clinical Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. Close's research interests include: Diagnosis and Treatment of Thoracic Malignancies; Geriatric Oncology; Education.
Cogle, Christopher, MD	Professor	Cancer Therapeutics & Host Response (CTHR)	myelodysplastic syndromes, leukemias, hematopoietic stem cell, hemangioblast, oncolytic virus, bone marrow transplantation, bone marrow cell therapy for cardiovascular diseases, salamander, newt, Axolotl
Concannon, Patrick, PhD	Professor	Mechanisms of Oncogenesis (MOO)	As the Director of the UF Genetics Institute, Dr. Concannon's research interests include: Genetics of radiation sensitivity; Type 1 diabetes genetics; Genetic epidemiology of second primary breast cancer; and Genetics of malnutrition - Genetic factors may contribute to a child's risk of stunting in an environmental context of poor sanitation and endemic disease.
Conesa Cegarra, Ana, PhD	Professor	Not Programmatically Aligned (NPA)	My research focuses on the understanding of the functional aspects of gene expression at the genome-wide level and across different organisms. We integrate multi-omics platforms to understand the progression of complex diseases and study how transcriptional complexity is shaped by annotating the functional consequences of alternative splicing. The lab develops statistical methods and user-friendly software to answer all these questions. Examples of our tools are Blast2GO, maSigPro, Paintomics, NOISeq, SQANTI and tappAS.



Cottler, Linda, PhD, MPH	Professor	Cancer Population Sciences (CPS)	Dr. Cottler has conducted numerous studies in several major areas with public health importance. These include: the development of culturally reliable and valid measures for identifying substance use, abuse and dependence, along with psychiatric disorders and their risk factors; innovative methods for conducting national surveys of high risk behaviors; and community based, peer-delivered interventions to change HIV risk behaviors and substance abuse. The Cottler lab has focused its work with underrepresented populations and has had international focus as well, extending to Sydney, Taipei, Bangalore, Kenya and Afghanistan. Dr. Cottler has expanded her community focus to the CTSA Community Engagement Program, first at Washington University as Director and now at UF as Co-director. Pertinent to this effort is her HealthStreet model, a hub for gathering person centered information to link community residents to social and medical referrals, health messages, and research opportunities. Dr. Cottler is currently the PI of a new Fogarty International Center Training Program focused on non-communicable diseases in India, and she also serves as PI on the new NIDA T32 Training program, UF Substance Abuse Training Center in Public Health.
Crispen, Paul, MD	Program Director & Clinical Associate Professor	Cancer Therapeutics & Host Response (CTHR)	I am primarily interested in the following: 1. Improving patient selection for patients presenting with renal tumors 2. Clinical trials evaluating non muscle invasive and muscle invasive bladder cancer.
Curtiss, Roy, PhD	Professor	Cancer Therapeutics & Host Response (CTHR)	I am a geneticist and microbiologist currently interested in curtailing infectious diseases of animals and humans by the design, construction and evaluation of vaccines to prevent diseases, be therapeutic against diseases, deal with zoonoses and alter physiological processes such as reproduction. There were no research interest topics listed to choose from that fit or describe my research interests.
Dagan, Roi, MD	Clinical Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. Dagan treats head and neck cancer, breast cancer, prostate cancer and oligometastatic cancers.
Daily Weinstein, Karen, DO	Clinical Associate Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. Daily also founded the High Risk Program, within UF Health Breast Center, that identifies women at above-average risk of developing breast cancer and offers prevention and early detection strategies. She is dedicated to increasing available clinical trials, both large cooperative group studies and early phase single institution investigations, so that every patient may be offered the opportunity to participate. She is also interested in resolving access to care barriers in disadvantaged populations.
Dallery, Jesse, PhD	Professor	Cancer Population Sciences (CPS)	Behavioral Determinants of Cancer; Cancer Prevention; Environment; Health Disparities

Dang, Long, MD, PhD	Professor	Cancer Therapeutics & Host Response (CTHR)	My research interests have been in the translational and clinical development of combination therapy targeting the tumor vasculature and cancer cell survival mechanisms in the tumor microenvironment. Using gene knockout models in cancer cells, we found that targeted disruption of both the VEGF pathway and the hypoxia-inducible transcription factors (HIF-1 and HIF-2) survival pathway to be synergistic. I am interested in translating this concept to the clinic with currently available agents. Using the knockout cell lines for high through drug screen, I am interested in collaborations to find novel agents that inhibit both HIF-1 and HIF-2, as well as agents that are synergistic with HIF inhibition.
Dang, Nam, MD, PhD	Professor	Cancer Therapeutics & Host Response (CTHR)	My clinical research interest lies in the development of novel therapeutics for hematologic malignancies, specifically lymphoma. We have participated in multiple clinical trials, both as PI and co-PI, and have described the activity of a number of novel biologic and chemotherapeutic agents in lymphoma. We are particularly interested in evaluating the mechanisms of action of novel agents with clinical activity in an effort to design tailored treatment for specific subsets of lymphoma. In addition, my lab has a long-standing interest in studying the role of the surface antigen CD26/DPPIV in tumor development. We have developed a humanized anti-CD26 monoclonal antibody that is currently undergoing first-in-man phase I clinical trial testing in CD26-positive tumors. Furthermore, we are looking to develop novel anti-cancer therapeutic strategies based on our knowledge of CD26 biology.
Daniels, Michael, ScD	Professor	Cancer Population Sciences (CPS)	Bayesian Methodology; Biostatistics; Missing Data; Causal Inference
Datta, Susmita, PhD	Professor	Mechanisms of Oncogenesis (MOO)	Methodological: Bioinformatics, Clustering and Classification, Genomics, Proteomics, Infectious Disease Modeling, Non-linear Regression modeling for Systems Biology, Statistical Issues in Population Biology, Statistical Genetics, Systems Biology, Survival Analysis and Multi state models
DeRemer, David, Pharm D	Clinical Associate Professor, Assistant Director of Experimental Therapeutics and Incubator	Cancer Therapeutics & Host Response (CTHR)	Chemotherapy; Epigenetics & Cancer; Gastro-Intestinal; Hematologic Malignancies/Blood & Marrow Transplant; Lymphoma

Devidas, Meenakshi, PhD	Research Professor	Not Programmatically Aligned (NPA); Cancer Therapeutics & Host Response (CTHR)	Meenakshi Devidas is PI of the U10 grant from the National Cancer Institute (NCI) supporting the Children's Oncology Group Statistics and Data Center (COG SDC). Dr. Devidas is the Lead Statistician for the disease area of Acute Lymphoblastic Leukemia (ALL) and resource statistician for Bone tumors (Ewing Sarcoma and Osteosarcoma). In this role, she is responsible for reviewing concept proposals, trial design, sample size calculations, and developing / implementing safety and efficacy monitoring rules for new clinical trials in these disease areas. She is co-investigator on several NIH grants looking at prognostic significance of minimal residual disease and the biology of ALL in children. Her methodological research has focused on statistical issues related to the design and conduct of clinical trials, and the modeling of dose-response curves. Designing randomized comparative trials in disease areas with very low annual accruals is problematic. Dr. Devidas developed methodology for sample size estimations in Phase II and pilot trials where data from a completed or ongoing study (historical controls) may be effectively used in the design and analysis of a new comparative study. Current research includes efficient two-stage designs for Phase II trials which need to be monitored for insufficient activity (low response rates) and/or excessive early disease progression rates.
Diaby, Vakaramoko (Karam), PhD, Msc, CRA	Assistant Professor	Cancer Population Sciences (CPS)	Biostatistics; Health Disparities; Quality of Life Issues; Targeted Cancer Therapy
Dziegielewski, Peter, BSc, MD, FRCSC	Clinical Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	My research are mainly centered around Head and Neck Oncologic Surgery / Microvascular Reconstructive Surgery Outcomes: <ol style="list-style-type: none"> <li>1. Post treatment swallowing and speech outcomes</li> <li>2. Quality of care outcomes</li> <li>3. Quality of life outcomes</li> <li>4. Reconstructive techniques</li> <li>5. Utilization of robotics and head and neck oncologic surgery</li> <li>6. Minimizing morbidity after head and neck cancer treatment</li> <li>7. Nutrition in head and neck cancer patients</li> <li>8. Antibiotic use in head and neck oncologic surgery</li> </ol>
Ezenwa, Miriam, PhD, RN	Associate Professor	Cancer Population Sciences (CPS)	Cancer Survivorship; Pain; Palliative Medicine
Fan, Z., PhD	Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. Fan's research interests include microfluidics, BioMEMS (Biomedical MicroElectroMechanical Systems), sensors, cancer diagnostics, and bioengineering. His research focus is to develop microfluidics and BioMEMS technologies and apply them to biological applications. Microfluidics is promising to reach the holy grail of "lab-on-a-chip". In analogy to shrinking a computer from the size of a room in the 1950s to a laptop today, instruments for chemical and biological analyses may be miniaturized using modern microfabrication technology. Potential applications of the portable, miniaturized devices may include point-of-care testing (e.g., in emergency rooms), environmental monitoring, and detection of biowarfare agents in the field.

Farhadfar, Nosha, MD	Assistant Professor	Cancer Population Sciences (CPS)	Cancer Prevention; Cancer Surveillance; Chemotherapy; Epidemiology; Hematologic Malignancies/Blood & Marrow Transplant; Nutrition, Dietary Supplements & Cancer; Quality of Life Issues
Fillingim, Roger, PhD	Distinguished Professor	Cancer Population Sciences (CPS)	Our laboratory examines individual differences in responses to pain and its treatment. One major line of investigation has been sex/gender differences in pain perception, as well as sex differences in responses to opioid analgesics, including searching for sex-dependent genetic associations with pain and opioid analgesia. Another area of investigation involves ethnic differences in pain responses. We have completed a multi-year study of responses to multiple experimental pain procedures in African Americans, Hispanic Americans and non-Hispanic whites. We are also investigating laboratory measures of pain sensitivity as predictors of clinical pain in a large multi-center prospective cohort study designed to identify risk factors for onset and persistence of chronic orofacial pain. Given that cancer and its treatment are often associated with substantial pain, our research focused on elucidating individual differences in pain and its treatment is highly relevant for cancer patients.
Fisher, Carla, PhD	Assistant Professor	Cancer Population Sciences (CPS)	My research centers on psychosocial aspects of cancer coping, health promotion, and prevention. In particular, I focus on how family communication can function both adaptively and maladaptively in disease adjustment, how human development/age impact coping preferences, and how family communication patterns can be tied to long-term health outcomes. I tend to conduct translational research that can help families develop healthy communication patterns and habits central to their ability to adapt to a cancer diagnosis, cope during treatment, transition to survivorship or end of life, and engage in risk-reducing behaviors across generations of family members. I utilize mixed-method designs, particularly multi-method qualitative designs, to capture authentic narratives that can be used in behavioral modeling interventions, psychosocial coping resources, and medical education that is family-centered. I have developed a research program on mother-daughter communication, breast cancer coping, and prevention, that has involved collaborations with renowned cancer centers including Mayo Clinic and Memorial Sloan-Kettering Cancer Center ( <a href="http://www.motherdaughterbreastcancer.com">www.motherdaughterbreastcancer.com</a> ) and resulted in the first translational research based book on breast cancer from the mother-daughter perspective across the life span. This research includes work with currently diagnosed women as well as families considered to be at a high or elevated risk due to a genetic mutation as well as with cancer clinicians like genetic counselors, primary care providers, oncologists, and psychologists. I'm currently working to develop interventions and extend the program into multiple cultural groups with the aim of creating culturally tailored resources for clinicians, diagnosed women, and their mothers/daughters.

Flores, Catherine, PhD	Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	Her research interests are primarily in determining biological interactions between various cellular compartments involved in adoptive immunotherapy. Her studies also focus on leveraging systemic toxicity of frequently practiced clinical treatments in order to further enhance anti-tumor efficacy of immunotherapy.
Forsmark, Chris, MD	Professor	Cancer Population Sciences (CPS)	Acute pancreatitis; Chronic pancreatitis; ERCP; Endoscopic Ultrasound; Endoscopy; Gastrointestinal disorders - resources; Pancreatic cancer
Fort, John, MD	Clinical Associate Professor	Cancer Therapeutics & Host Response (CTHR)	Pediatric hematologists/oncologists, a subspecialty of hematologists, deal with diseases of the blood, spleen and lymph glands in children. They treat conditions such as anemia, clotting disorders, sickle cell disease, hemophilia, leukemia and lymphoma.
Fredenburg, Kristianna, MD, PhD	Assistant Professor	Mechanisms of Oncogenesis (MOO)	Kristianna Fredenburg, MD, PhD is a board-certified anatomic and clinical pathologist whose primary interests include head/neck and cardiothoracic pathology. She has a strong research interest in identifying the molecular basis of head and neck cancers among different racial and ethnic groups in the United States.
Friedman, William, MD	Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. Friedman is the Director of the Preston Wells Center for Brain Tumor Therapy at the University of Florida and he is a Gubernatorial Appointee to the Florida Center for Brain Tumor Research.
Frost, Susan, PhD	Professor	Mechanisms of Oncogenesis (MOO)	My laboratory is interested in how carbonic anhydrase IX regulates the microenvironment of breast cancer cells and tumors. Additionally, we are interested in new therapeutic targets for breast cancer using metabolomic screening.
George, Thomas, MD, FACP	Associate Professor	Cancer Therapeutics & Host Response (CTHR)	Clinical research in gastrointestinal malignancies is a primary aspect of Dr. George's academic interests. Specific areas of focus include active participation and development of clinical trials to promote novel drug application in patient care, quality of life/cancer care decision making, and identification of predictive markers for individualized therapy. Dr. George is also involved in the identification of specific markers or elements of a patient or their cancer which will predict, in advance, response to a given therapy is an area of active investigation. The incorporation of new molecular markers, gene expression profiling, and pharmacogenomics into clinical care will help to provide patients with truly personalized care.
Gharaibeh, Raad, PhD	Research Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	Bioinformatics
Ghaseddin, Ashley, MD	Clinical Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	Chemotherapy; Epidemiology; Health Disparities; Quality of Life Issues; Targeted Cancer Therapy

Ghivizzani, Steven, PhD	Professor	Cancer Therapeutics & Host Response (CTHR)	My work has been in collaboration with Dr. Parker Gibbs pursuing an understanding of tumorigenesis and cellular heterogeneity in osteosarcoma. Using transcriptional reporters we have identified tumor initiating cells in osteosarcoma cultures and have been working to identify the molecular mechanisms supporting their enhanced tumorigenic capacity. Evidence to date points to override of G2/M and spindle assembly checkpoints. We have also been working to identify the pathways associated with malignant reversion in the non-tumorigenic cell populations.
Gibbs, C., MD	Professor	Cancer Therapeutics & Host Response (CTHR)	My research interests focus on the role of stem like cells in bone and soft tissue sarcomas. To date we have demonstrated the existence of a subpopulation of cells in osteosarcoma identified by the activity of the human Oct-4 promoter. These cells are over 100 times more tumorigenic in a mouse model than the rest of the tumor cell population. We are working to establish an epigenetic and transcriptional profile of these cells in hopes of identifying potential therapeutic targets. My clinical involves the development of new prosthetic devices to reconstruct large bone defects remaining after skeletal sarcoma resections. We are also working to improve soft tissue attachments to these devices and improve soft tissue coverage after sarcoma resections.
Golde, Todd, MD, PhD	Professor	Cancer Therapeutics & Host Response (CTHR)	My laboratory conduct's disease oriented research with a specific, but not exclusive, focus on neurodegenerative diseases such as Alzheimer's disease (AD) and Parkinson Disease (PD). Our basic road map for this research is to understand the disease process well enough to create models that mimic aspects of the disease process in a time course that is amenable to study, identify targets for intervention, and opportunistically develop and evaluate therapies that might alter the disease course. Current areas of investigation include: i) Strategies to harness innate immunity to treat neurodegenerative diseases ii) Development of novel small molecule therapies that selectively target the pathogenic forms of A $\beta$ iii) Antibodies targeting pathological proteins to treat Neurodegenerative disorders iv) Optimization of gene therapy vectors for delivery of therapeutic genes to the brain and as research tools and v) Repurposing of drugs developed for AD as cancer and immunomodulatory therapeutics. In addition to these scientific foci, in recent years I have been an active advocate for AD research at both the state and national levels.
Guha, Subharup, PhD	Associate Professor	Cancer Population Sciences (CPS)	The primary contribution of my cancer-related research has been the development of innovative, flexible and scalable Bayesian nonparametric frameworks for analyzing multi-domain, complexly structured, and high throughput modern array and next generation sequencing-based 'omics datasets. This body of work is motivated by several investigations related to lung cancer; however, the proposed methods and computational tools are broadly applicable in a variety of contexts involving high dimensional data.
Guo, Yi, PhD, MSPH	Research Assistant Professor	Cancer Population Sciences (CPS)	Behavioral Determinants of Cancer; Biostatistics; Cancer Communications; Cancer Information; Cancer Prevention; Cancer Surveillance; Cancer Survivorship; Epidemiology; Health Disparities; Quality of Life Issues

Guo, Zhongwu, PharmD, PhD, PDF	Professor	Cancer Therapeutics & Host Response (CTHR)	Our research focus is at the interfaces of organic synthesis, carbohydrate chemistry, glycobiology, glycoimmunology, and drug discovery. Our major research interests are centered on the development of new synthetic methodologies for carbohydrates, glycopeptides and glycolipids, chemical and chemoenzymatic synthesis of natural and unnatural glycans and glycoconjugates, their applications to biology and medicine, investigation of molecules on the cell surface for the discovery of new molecular markers, and development of novel therapeutics for cancer and other diseases.
Gururangan, Sridharan, FRCP	Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. Gururangan's research interests are in developing new strategies for treatment of children with brain tumors with a special focus in the development of phase I and II trials of new drugs, including novel chemotherapy agents, small molecule inhibitors targeting receptor tyrosine kinases, anti-angiogenesis inhibitors, pharmacologic strategies that lead to reversal of drug resistance to alkylating agents, immunotherapy approaches to the treatment of recurrent medulloblastoma, and oncolytic viral therapy for neoplastic meningitis. His clinical research has led to more than 100 peer-reviewed publications in prestigious journals, five book chapters and more than 115 abstracts presented at various national and international scientific meetings.
Guryanova, Olga, MD, PhD	Assistant Professor	Mechanisms of Oncogenesis (MOO)	Mutations in the epigenetic modifier genes are among the most common genetic events in many types of cancers, including malignancies of the blood system. Our lab is interested in the interplay between epigenetic regulation and chromatin organization, and their contribution into malignant transformation and development of therapeutic resistance. We employ clinically-accurate genetic mouse models to study the functional and mechanistic consequences of these mutations. The primary goal of these studies is to identify molecular vulnerabilities that can be targeted therapeutically, and to pre-clinically evaluate these potential treatment strategies.
Gutter, Michael, PhD	Associate Professor	Cancer Population Sciences (CPS)	My current research begins with the Behavioral Life Cycle Model and uses Behavioral Economics to explore key choices families make. My most recent work has focused on the role of information as influencers of decisions regarding mortgages, borrowing for education, and retirement decision making. We have used experimental design in an online setting to explore the role cognitive biases can have in the context of intertemporal resource allocation over the lifespan. Our results have suggestions for policies, additional research, and outreach education. All of the aforementioned issues have been shown to have substantial long term implications for economic well being for families but also have implications for society and the economy as a whole (e.g. some of the recent housing crisis). Current work is shifting into applying these concepts within the intersection of financial and healthcare decision making.
Hall, Jaclyn, PhD	Assistant Scientist	Cancer Population Sciences (CPS)	Behavioral Determinants of Cancer; Cancer Prevention; Environment; Epidemiology; Health Disparities

Harrison, Jeffrey, PhD	Professor	Cancer Therapeutics & Host Response (CTHR)	Our laboratory is interested in understanding the functional significance of chemokine networks in the central nervous system with a recent focus on determining roles for these molecules in brain cancer. We study mechanisms involved in tumor-immune cell interactions as well as direct effects of chemokines on glioma initiating cells. Experimental approaches encompass in vitro and in vivo methods and include use of chemokine receptor selective pharmacological agents.
Heldermon, Coy, MD, PhD	Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	My lab primarily studies the establishment of microchimerism and the effects of microchimerism on disease. We use mouse models of lysosomal storage diseases as a paradigm to allow determination of cell trafficking and the ability of microchimeric cells to modulate disease progression. Additionally, my lab performs gene therapy studies to attempt disease correction.
Henderson, Randal, MD	Clinical Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. Henderson specializes in the areas of prostate cancer, gynecological malignancies and cancers of the lung.
Hiemenz, John, MD	Clinical Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. Hiemenz' academic interests include the diagnosis and treatment of hematological malignancies and primary bone marrow disorders, the use of hematopoietic stem cell transplantation for the treatment of malignant and non-malignant diseases, and supportive care for the patient undergoing intensive induction therapy and/or hematopoietic stem cell transplantation with particular interest in the diagnosis and management of graft versus host disease and infectious complications in the immune compromised host.
Hogan, William, MS, MD	Program Director & Professor	Cancer Population Sciences (CPS)	Dr. Hogan has expertise in clinical informatics, public health informatics, biosurveillance, electronic health records, clinical decision support, research informatics, and data standards in clinical, research, and public health information systems. His current research studies how formal ontology can improve reuse of information and enable the construction of larger systems and datasets to improve patient care, research, public health, and education. He also has experience in the study of data and algorithms for early case and outbreak detection in infectious disease.
Hoppe, Bradford, MD, MPH	Associate Professor	Cancer Therapeutics & Host Response (CTHR)	Lymphoma, Lung, Thoracic, Prostate, GI, Immunoregulation & Suppression, Metastasis
Horn, Biljana, PhD	Clinical Professor	Cancer Therapeutics & Host Response (CTHR)	Bone marrow transplant; Graft-versus-host disease; Leukemia; Leukemia - resources; Lymphoma - Overview; Non-Hodgkin lymphoma
Hsu, Jack, MD	Clinical Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. Hsu is active in developing new agents for the treatment of acute leukemia and GVHD. He is interested in resource utilization and tracks outcomes in transplant and non-transplant patients with hematologic malignances. Dr. Hsu is very closely involved with hematopathology in the development and interpretation of tumor markers for acute leukemia, and is interested in apheresis and stem cell mobilization/collection and factors which can influence collection efficiency.



Huang, Shuang, PhD	Professor	Mechanisms of Oncogenesis (MOO)	Research in the Huang lab is concentrated on elucidating molecular mechanisms associated with breast and ovarian cancer metastasis. One of the current projects is to investigate how homeobox domain-containing proteins SHOX2 and HOXC8 regulate breast cancer metastasis with the focus on their role in epithelial-mesenchymal transition (EMT). Another project is based on our early discovery that the integrity of EPS8/ABI1/SOS1 tri-complex is critical for ovarian cancer metastasis. In this project, we are currently dissecting the players and pathways pertinent to the metastasis-promoting role of EPS8/ABI1/SOS1 tri-complex in ovarian cancer. In addition, the Huang lab is also working on identifying cancer driver genes/pathways in ovarian cancer, with the emphasis on developing targeted therapeutic strategies against ovary malignancies.
Huang, Jianping, MD, PhD	Research Associate Professor	Cancer Therapeutics & Host Response (CTHR)	My research interest is to find novel therapeutic tumor targets, and using immunotherapy approaches to treat patients with cancer.
Huang, Yong, PhD	Professor	Cancer Therapeutics & Host Response (CTHR)	Angiogenesis; Apoptosis & Cell Death Pathways; Breast; Cell Signaling Pathways; DNA Damage & Repair; Metastasis; Tumor Virology/Virus-Host Interactions
Hughes, Steven, MD	Associate Professor	Cancer Therapeutics & Host Response (CTHR)	My current research interest is focused upon tyrosine kinase receptor inhibition as therapy for GI malignancies with a particular emphasis on the MET and EGFR pathways. We are particularly interested in the identification of molecular biomarkers predictive of response to these various biological anti-tumor therapies, and eliciting potential additive or synergistic effects with conventional chemotherapeutics.
Huh, Soon Nyung, PhD	Clinical Associate Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. Huh is an Associate Professor in the Department of Radiation Oncology at the University of Florida. He has extensive experience in developing treatment plans and quality assurance procedures for advanced radiotherapy devices such as Stereotactic Radiosurgery (SRS) using Electa/Vero/TrueBeam linear accelerators and proton therapy. Dr. Huh also specializes in techniques such as Image Guided Radiation Therapy (IGRT), Cone-beam Computer Tomography (CBCT) and Magnetic Resonance imaging (MRI) to assure high-quality images and accurate treatment of more than a dozen types of tumors in adults and children. He has collaborated with other academic medical centers to develop proton therapy protocols for treatment of pancreatic, anal, rectal and cervical cancers. He has fabricated various phantoms for quality assurance such as breast deformable phantom, moving lung phantoms, and MR-safe headset to immobilize pediatric cancer patients and to provide music during scans. Dr. Huh is an accomplished researcher and his work has been published in multiple journals. He trains radiation therapists, medical/physics residents and dosimetrists. He is an American Board of Radiology (ABR)-certified physicist.
Huigens, Robert, PhD	Assistant Professor	Not Programmatically Aligned (NPA)	A major goal in our lab is to develop novel small molecules as personalized cancer treatments. Historically, compounds that demonstrate potent toxicity against the largest number of cancer cell lines.
Huo, Jinhai Stephen, PhD, MD, MSPH	Assistant Professor	Cancer Population Sciences (CPS)	Behavioral Determinants of Cancer; Breast; Cancer Prevention; Cancer Survivorship; Epidemiology; Genital-Urinary/Prostate; Health Disparities; Liver; Lung; Palliative Medicine

Indelicato, Daniel, MD	Associate Professor	Cancer Therapeutics & Host Response (CTHR)	Proton therapy, sarcoma, pediatric oncology
Iqbal, Atif, MD, FACS	Clinical Associate Professor	Cancer Therapeutics & Host Response (CTHR)	<p>Primarily interested in Rectal Cancer with a focus on:</p> <ul style="list-style-type: none"> <li>- Health care disparities among minorities, younger patients and by treatment location.</li> <li>- Outcome-based research in rectal cancer and ileostomy patients. Have implemented novel clinical protocols in this population at UF with demonstrated considerable improvement in quality of care metrics (e.g. UF has gone from being 2.5 times national average to just over half of national average in our length of stay for this population with a decrease in morbidity based on UHC data).</li> <li>- Participating in multiple trials for Rectal cancer such as the PROSPECT trial and the soon to recruit TNT trial.</li> <li>- Clinically have been the lead physician representing a multi-disciplinary team at UF in efforts to establish CoC-accredited Rectal Cancer Center of Excellence. This includes UF OSTRICH Membership (11-2015 to present) and UF GI Oncology Colorectal Care Pathways &amp; Quality Improvement with standardized CRC management pathways, standardized CRS clinical and operating procedures, standardized disease-based outpatient protocols, patient education sheets, standardized Rectal Cancer MRI and pathology reporting.</li> </ul>
Irani, Tracy, PhD	Professor	Cancer Population Sciences (CPS)	<p>My research examines the influence of public opinion and strategic communications strategy on attitudes and behavior in the context of controversial science and technology issues and policies. My research builds on my previous work in science and health communication, community based participatory research and community outreach. Much of my work focuses on examining influences on decision making and exploring the linkage between cognition, message framing and behavior. I've looked at cognitive tendencies, in particular, critical thinking and problem solving, and been able to demonstrate their relationship and influence on decision making behavior. This work led to development of a proprietary instrumentation scale, the UF Critical Thinking Inventory, or UF-CTI, which has been validated for use in determining critical thinking. By applying message framing constructs to persuasion models like the Elaboration Likelihood model and the Theory of Planned Behavior, I have been able to show the connection between message framing and attitudinal and behavioral response in public communication and education campaigns and outreach activities. This research has led to the expanded use of strategic communications methodologies in public education/communication in agricultural and environmental settings. My research concentrates on decision-making, critical thinking, strategic communications, framing.</p>

Ishov, Alexander, PhD	Associate Professor	Mechanisms of Oncogenesis (MOO)	Daxx as a biomarker of breast cancer progression. I. Chemoresistance in breast cancer. Current project is to examine the function of Daxx as a paclitaxel sensitivity factor that can be used as a predictive marker in selection of breast cancer patients to receive taxane therapy. Specifically, we will: 1. examine the role of Daxx in paclitaxel induced cell death, and 2. elucidate the function of Daxx in mitotic progression as a mechanism of Daxx-dependent resistance to paclitaxel treatment. II. Metastasis suppression by Daxx. The main goal of this project is to evaluate protein Daxx as an early predictive marker for increased probability of metastasis development. Specifically, we will: 1. determine the mechanism of Daxx mediated repression of human c-met promoter upon hypoxic conditions; 2. determine the physiological consequences of Daxx reduction upon hypoxic condition. 3. validate Daxx as an early predictive marker for metastasis potential in breast cancer. Functions of Histone Variants in Castration-Resistant Prostate Cancer; Chemoresistance in Breast Cancer; Nuclear Structure and Function; Epigenetic Regulation of Gene Expression; Tumor Suppression.
James, Margaret, PhD, DSc	Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. James investigates factors affecting the metabolism and toxicity of drugs and other xenobiotics in humans and animal species, including aquatic species. She was chosen as the Jack C Massey Professor of Pharmacy in 2006, and as a University of Florida Research Foundation Professor, 1997-2000. Her laboratory studies mechanisms of uptake, biotransformation, excretion and toxicity of xenobiotics, especially environmental chemicals. Dr. James also investigates the influence of xenobiotics on the metabolism of steroid hormones.
Jiang, Qiu-Xing, PhD	Associate Professor	Mechanisms of Oncogenesis (MOO)	My laboratory is working in two general directions. One is the structural and functional studies of membrane proteins and intracellular signaling complexes. The second general direction in my laboratory is the development of new techniques for both single particle cryoEM and for studying eukaryotic membrane proteins in lipid environments.
Jin, Lei, PhD, MSc	Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	Cancer Susceptibility; Immunoregulation & Suppression; Immunotherapy
Jobin, Christian, PhD	Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. Jobin is interested in bacteria/host interactions and ensuring innate/immunological responses during health and diseases. The intestine poses an interesting conundrum – it must peacefully cohabit with a sea of commensal bacteria (~100 trillion) and a high load of bacterial products, but swiftly respond to the presence of pathogenic microorganisms that threaten its integrity. A major clinical consequence of deregulated bacteria/host interaction in the intestine is the development of inflammatory bowel diseases (IBD) and colorectal cancer. Using mice and zebrafish housed in germ-free and gnotobiotic conditions, microbiome techniques (next-generation sequencing, microbial gene mutations, microbial RNA-sequence, etc.), Dr. Jobin studies the differential contribution of bacteria in protecting or exacerbating development of colitis and colorectal cancer. Dr. Jobin has contributed to the understanding of the cellular and molecular mechanism regulating host response to bacterial colonization, and has published numerous papers on innate signaling events taking place in the intestine and how these impact intestinal homeostasis.

Johnson, Julie, Pharm D	Dean & Distinguished Professor	Not Programmatically Aligned (NPA)	Dr. Johnson's research program focuses on inter-patient variability in drug response, particularly cardiovascular drug pharmacogenomics, and translation of pharmacogenomics into clinical practice. Her discovery research centers around the pharmacogenomics of antihypertensive drugs, and drugs used to prevent clot formation.
Johnson-Mallard, Versie, PhD, MS, BS, MS	Chair & Associate Professor	Cancer Population Sciences (CPS)	A board certified Women's Health Nurse Practitioner, the primary aim of her clinical practice is to improve the health of women, their families, and communities. As nurse scientist, Dr. Johnson-Mallard's scholarship is focused on assuring the effective translation of knowledge for new approaches related to prevention, diagnosis and treatment of Human Papillomavirus (HPV) related cancers. Her research goals include prevention, detection and management of persistent Human Papillomavirus infection as well as identifying strategies which may be used to inhibit the oncogenic activity of high risk HPV genotypes.
Jones, Dennie, MD	Professor	Cancer Therapeutics & Host Response (CTHR)	In recent bench and clinical studies evaluating alterations in signal transduction and epigenetic changes in lung cancer as markers of carcinogenesis, and therapeutic targets for prevention and therapy, I have worked closely with basic researchers across several campuses. I have designed phase I-II trials of novel signal transduction inhibitors in lung cancer, and have designed and conducted phase I trials of epigenetic modifiers in cancer to support phase II trials of epigenetic modifiers for both chemoprevention and therapy of aerodigestive tract malignancies. My academic focus will be in thoracic neoplasia—particularly, design and conduct of translational research efforts that may lead to the evaluation of novel treatment regimens for established disease with signal transduction inhibitors, as well as development of chemoprevention regimens based upon signal transduction inhibitors and chromatin modifying agents. I will continue my interest in novel drug development for lung and other cancers through collaboration with the basic and clinical researchers here.
Judge, Andrew, PhD	Associate Professor	Cancer Population Sciences (CPS)	My lab uses gene transfer into skeletal muscle using an experimental model of lung cancer to study the regulation of specific cell signaling pathways that cause muscle wasting during cancer. The current signaling pathways of interest are the Forkhead box O (FOXO) and nuclear factor kappa B (NF-kB) pathways. Current work is determining the relative contribution of these pathways to skeletal muscle wasting during cancer by expressing a dominant negative FOXO or dominant negative inhibitor of kappa B alpha (IkBa, an inhibitor of NF-kB) protein in whole skeletal muscle in a Lewis Lung Carcinoma mouse model.
Kahveci, Tamer, PhD	Professor	Mechanisms of Oncogenesis (MOO)	Dr. Kahveci's research interests include: Indexing, storing, retrieval, summarization, and mining of biological databases.

Kaye, Frederic, MD	Professor	Mechanisms of Oncogenesis (MOO)	The Kaye laboratory is focused on the discovery, the functional consequences, and the therapeutic implications of new molecular targets in thoracic malignancies. For example, our lab identified the RB gene as the first tumor suppressor gene in lung cancer and we subsequently identified the presence of a critical RB/p16 cancer gene pathway in the development of human cancer. More recently we discovered the molecular basis for malignant salivary gland tumors and have identified activation of the Crtc gene family as a novel mechanism to link glucose and fatty acid metabolism with tumorigenesis. In the course of this work, we are interested in studying the basis for common adult lung cancer as well as uncommon tumor entities such as malignant mesothelioma, salivary gland cancer, and lung tumors that arise in younger adults. Ultimately, our goal is to apply this new information into improved strategies for diagnosis, prevention, and therapy.
Keenan, Gail, PhD	Endowed Professor	Cancer Population Sciences (CPS)	Cancer Communications; Cancer Genetics; Cancer Prevention; Cancer Susceptibility; Epigenetics & Gene Regulation; Health Disparities
Kelly, Debra, PhD	Assistant Professor	Cancer Population Sciences (CPS)	My primary research goals are directed toward understanding the biological mechanisms and behaviors that mediate symptoms of chronic illness, with a population focus in oncology. As a clinician, project director, and now co-investigator and project director on two R01-level breast cancer grants, I have worked closely with cancer survivors managing persistent, distressing symptoms and have studied the effects of inflammation on symptoms. My future research plans are aimed at further describing the relationship of inflammatory and genetic markers and symptom expression in individuals with cancer. My ultimate aim is to explore interventions that may be used as adjuvant therapies to mitigate distress of symptoms.
Kilberg, Michael, PhD	Professor	Mechanisms of Oncogenesis (MOO)	We study the transcriptional control of the asparagine synthetase (ASNS) gene which has two cis-elements that comprise an Amino Acid Response Element (AARE) that mediates enhanced transcription following nutrient stress. We have shown that the transcription factors ATF4, ATF3, and C/EBP $\beta$ bind to the AARE in a specific temporal sequence to regulate transcription from the ASNS gene. Asparaginase (ASNase) therapy is used in the treatment of childhood acute lymphoblastic leukemia (ALL). ASNase-resistance can develop likely increased ASNS expression via the AARE, and ASNase-resistant cells exhibit a 20-fold increase in ASNS mRNA content. Current studies are designed to establish the mechanism of drug resistance and to establish in more detail the ASNase-induced transcriptional changes in human ALL cells.

Kladde, Michael, PhD	Associate Professor	Mechanisms of Oncogenesis (MOO)	Our research focus concerns how epigenetic events regulate transcription in eukaryotes. First, using the experimentally tractable model organism of <i>S. cerevisiae</i> or budding yeast, we are studying transactivation of PHO5, a proven system for investigating how chromatin-mediated repression is overcome by histone modifications (e.g., acetylation) chromatin remodeling. We have recently identified novel cell cycle factors at the PHO5 promoter and are currently examining their regulatory mechanisms. Second, in mammalian cell culture, we are investigating the role of epigenetic DNA methylation in tumor progression. We have recently discovered epigenetic silencing of a novel mammalian tumor suppressor gene associated with elevated invasiveness of breast cancer and are elucidating mechanisms by which this methylation is established and maintained. Both areas of study take advantage of our powerful MAP-IT single-molecule technology for probing chromatin structure with DNA methyltransferases.
Krieger, Janice, PhD	Associate Professor	Cancer Population Sciences (CPS)	My research program focuses on translational communication in health and risk decision-making contexts, such as clinical trials, substance use prevention, and the HPV vaccine. Within this broad framework, I have three specific lines of inquiry. First, I study how message design influences health literacy and the cognitive processing of cancer risk messages. Second, I am interested in social influence dynamics in healthcare decision-making, such as how healthcare providers and family members influence patient participation in cancer research. Third, my work examines how interpersonal communication enhances as well as minimizes the effects of mediated interventions.
Kusmartsev, Sergei, PhD	Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	One focus of our studies is how to reverse the tumor-induced immune dysfunction. We and others have recently identified specific immunosuppressive population in patients with renal cell carcinoma (RCC). MDSC may greatly contribute to immune evasion thus promoting tumor growth. Our data underlie an important role of tumor-induced oxidative stress in immunosuppressive function in myeloid cells. These immunosuppressive cells represent a significant obstacle for cancer immune therapy because they may inhibit the vaccine-induced T cell response. Therefore, there is considerable interest in developing strategies that allow targeting and eliminating MDSC in immunotherapy protocols. Future studies will focus on characterization of MDSC cell population in patients with bladder and prostate cancers, and better understanding the mechanisms of tumor-induced immune dysfunction. Another interest concerns improving function of dendritic cells and development of new methods of cancer immunotherapy.
Lagmay, Joanne, MD	Clinical Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. Lagmay leads the Pediatric Solid Tumor program. She is collaborating with members of the Departments of Veterinary Medicine, Radiological Engineering, Chemistry, Materials Science and Radiation Oncology, in the development of polymer-mediated radionuclide therapies in a canine model for targeting osteosarcoma. Her direct collaboration with pediatric oncology colleagues in Florida has brought about phase I clinical trials for pediatric cancer patients in the state.

Lamba, Jatinder, PhD	Associate Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. Lamba's research is focused on identification, characterization and clinical validation of genomic/epigenomic markers predictive of therapeutic outcome cancer patients. Long-term goal of her research is to move pharmacogenetic testing into the clinical setting to improve safety and efficacy of drug therapy. Dr. Lamba's research on pharmacogenomics of anti-leukemic agents has been funded by NIH/NCI since 2008 and through other foundations as American Society of Hematology. Specifically, her current NCI funded R01 focuses on pharmacogenomics/epigenomics of cytarabine (ara-C), a nucleoside analog that is the backbone of anti-leukemia chemotherapy in pediatric AML patients. Another NCI funded project focuses on pharmacogenomics of Gemtuzumab ozogamicin (GO), an immunoconjugate between an anti-CD33 antibody and a DNA-damaging cytotoxic derivative utilized in treatment of AML. Her research spans from preclinical basic research comprising the discovery phase to translational/clinical phase in patient populations. To pursue the translational aspects of her research in AML patients from large multi-institute clinical trials, Dr. Lamba have developed successful collaborations with investigators at St. Jude Children's Research Hospital, and in Children's Oncology Group (COG). Other projects ongoing in her lab include integrative systems pharmacogenomics in ovarian cancer patients. Her research utilizes state of the art genomic measures as next-gen sequencing, gene-expression profiling, genome-wide methylation profiling and high-throughput siRNA screening, to identify and functionally validate the markers predictive of therapeutic outcome. Dr. Lamba has served as chair of Pharmacogenomics –SIG at AACP and is vice-chair of Pharmacogenomics focus group with AAPS. She has published more than 65 research articles in peer-reviewed journals and is on the editorial boards of Leukemia and Lymphoma, Pharmacogenomics and Frontiers in Pharmacogenomics and genomics journal.
Law, Brian, PhD	Associate Professor	Cancer Therapeutics & Host Response (CTHR)	We focus primarily on the role of Cyclin-dependent kinases (Cdks) in the initiation of breast tumors, and the development of novel small molecule Cdk inhibitors as anti-cancer therapeutics. Several interrelated research interests include: (1) Determining the role of different Cdk complexes in initiating distinct subtypes of breast cancer; (2) Understanding the relationship between the tumor-initiating Cdk complex and tumor invasiveness; (3) How signaling pathways such as the TGF $\beta$ and mTOR signaling pathways regulate Cdk activity and how this becomes altered in breast cancers; (4) The molecular mechanisms by which hyperactivation of Cdks results in aneuploidy through endoreduplication and/or centrosome amplification; (5) Cdk inhibitors as chemopreventative agents; and (6) The biological significance of the observation that specific Cyclin/Cdk complexes bind different subsets of cell cycle and DNA repair proteins including p21, PCNA, E2F4/5, p107, p130, and p27.
Lee, Yu-Hao, PhD	Assistant Professor	Cancer Population Sciences (CPS)	Cancer Information
Lee, Ji-Hyun, PhD	Professor & Director	Cancer Population Sciences (CPS)	Biostatistics

Lele, Tanmay, PhD	Associate Professor	Mechanisms of Oncogenesis (MOO)	Cells in our body perform complex tasks, including movement across tissues, adhesion to polymeric scaffolds in the body and the sensing of chemical and mechanical signals. These complex processes depend in large part on the intracellular cytoskeleton. Specialized 'motor' proteins that convert chemical energy into mechanical work associate and move along the polymeric cytoskeleton enabling critical cell functions including intracellular mechanical force generation. We are interested in how the cytoskeleton and associated motor proteins generates forces inside the living cell. This work has applications in understanding diseases of the cardiovascular and muscular system, as well as cancer. We are also developing new biomaterials and nanotechnologies for characterizing and controlling cellular forces.
Li, Ying, MD, PhD	Clinical Professor	Cancer Therapeutics & Host Response (CTHR)	My research work is to develop a panel of aptamers as novel molecular probes for molecular profiling of leukemia cells. Using cell-SELEX (Systematic Evolution of Ligands by Exponential enrichment), a group of cell-specific aptamers can be selected and be used to profile tumor cells without even knowing their target molecules. In addition, aptamer probes can be used as tools for identifying new biomarkers expressed by tumor cells. In collaboration with Dr. Weihong Tan in the Department of Chemistry, we began our studies with well-characterized leukemia cell lines to develop the cell-based SELEX methodologies and then used the selected aptamer probes to recognize patients' leukemic cells. In order to translate the basic research studies into clinical practice of leukemia diagnosis, we are using patients' leukemia specimens to select aptamers that can recognize the patients' leukemia cells. Cell-specific aptamers can be valuable probes for molecular diagnosis of tumors.
Li, Zuofeng, DSc	Clinical Professor	Cancer Therapeutics & Host Response (CTHR)	Bioinformatics; Radiation Oncology
Li, Chenglong, PhD	Professor	Mechanisms of Oncogenesis (MOO)	Interests range from organic chemistry, biochemistry, medicinal chemistry to physical chemistry, computational chemistry, molecular biophysics and pharmacology. His research focuses on molecular recognition, with a strong application to structure-based computer-aided drug design. He combines molecular simulation, synthetic chemistry, X-ray protein crystallography, thermodynamic measurements, cellular techniques and in vivo animal models to explore molecular interactions, especially protein-ligand interactions, at molecular, cellular and organismal levels.
Li, Zhigang, PhD	Associate Professor	Cancer Therapeutics & Host Response (CTHR)	I started as an associate professor in the Department of Biostatistics at UF on Aug 1. Prior to UF, I have been a member in the NCI-designated Norris Cotton Cancer Center (NCCC) at the Geisel School of Medicine at Dartmouth College from 2011 to 2018. I have been in the Clinical Trials Review Committee at NCCC from 2011 to 2017 where I review cancer-related clinical trial (phase I-IV) protocols along with other MD's. My own cancer related research focuses on palliative care research although I have been involved in a wide spectrum of cancer research including cancer prevention, lung cancer, skin cancer, etc.



Liao, Daiqing, PhD	Associate Professor	Mechanisms of Oncogenesis (MOO)	Our research focuses on understanding function and regulation of p53 and its homologous transcriptional activator p73 by viral and cellular proteins. We have been studying how adenovirus E1B 55-kDa protein impacts on p53 pathway and its roles in cell transformation induced by adenovirus, a DNA tumor virus. We also investigate the interplay between acetylase and coactivator PCAF and p53 family of proteins and the impact of their interactions on the expression of p53 target genes and on tumor suppression. We are also interested in understanding how stresses relay signals to p53. We focus on roles of posttranslational modifications of lysines in signaling pathways converging on p53. Finally, we are attempting to understand how p53 interacts with Daxx and the functional significance of this interaction in transcriptional regulation, apoptosis, and cell cycle control. Our long-term goal is to understand the cellular regulatory circuitries that govern cell growth and transformation.
Licht, Jonathan, MD	Professor	Mechanisms of Oncogenesis (MOO)	Dr. Licht's laboratory studies aberrant gene regulation, specifically the role of abnormal function of histone methyl transferases and histone demethylases in diseases such as multiple myeloma and is developing small molecule strategies to normalize gene regulation and treat disease.
Ling, Chen, PhD	Research Assistant Professor	Mechanisms of Oncogenesis (MOO)	My research interest mainly focus on developing efficient recombinant adeno-associated virus (rAAV)-based vectors for the selective and efficient transduction of human liver cancer.
Lu, Jianrong, PhD	Associate Professor	Mechanisms of Oncogenesis (MOO)	Research in my laboratory is focused on understanding the molecular mechanisms of cancer and exploring potential anticancer therapeutic targets. One project is on the orphan nuclear receptor estrogen-related receptors, which play an important role in metabolism, hypoxic signaling, and tumor angiogenesis. The other is aimed at defining epigenetic regulators, in particular histone modifying enzymes, involved in epithelial-to-mesenchymal transition (EMT) and cancer metastasis.
Luesch, Hendrik, PhD	Professor	Cancer Therapeutics & Host Response (CTHR)	Research in our lab lies at the interface of chemistry and biology and addresses multiple aspects of the drug discovery process ranging from assay development, identification and structure determination of bioactive small molecules, chemical synthesis and drug development of promising agents, to studies toward their mechanism of action and the discovery of novel drug targets. Other products of our research are unique small molecule tools for chemical biology to probe gene and protein functions.
Lyon, Debra, PhD, RN	Professor	Cancer Population Sciences (CPS)	Dr. Lyon's research focuses on biobehavioral aspects of cancer and symptom management in women with breast cancer, and she is currently the principal investigator on two National Institutes of Health-funded studies totaling \$4.8 million. She is a fellow of the American Academy of Nursing and currently serves as the co-chair of its genetic nursing and health care expert panel.
Madore, Steven, PhD	Associate Director / Associate Scientist	Not Programmatically Aligned (NPA)	Associate Director Core Technologies, UF Health Cancer Center

Mai, Volker, PhD, MPH	Associate Professor	Cancer Therapeutics & Host Response (CTHR)	My main research interest is in the associations between diet, composition of the intestinal microbiota and human health/disease. A special emphasis of the lab is on colorectal carcinogenesis and the mechanisms contributing to the increased burden of this disease in African Americans. In our studies we are using animal cancer models as well as epidemiological approaches in human populations. An important part of our research is the determination of the diversity and the dynamics of the gut microbiota in healthy as well as in diseased subjects. In both animal models and human studies our group has begun to investigate how diet and microbiota are associated with health. As an alternative probiotic approach we are evaluating the potential of using a bacteriophage mix to improve gut microbiota composition. My group is also involved in developing and applying molecular methods and metagenomic approaches for the detection of novel diarrhea pathogens in developing countries.
Maldonado-Molina, Mildred, PhD, MS	Associate Professor	Cancer Population Sciences (CPS)	The goal of Dr. Maldonado-Molina's research is to reduce health disparities in alcohol use and alcohol-related consequences, with particular focus on improving the health of minority children and adolescents.
Manini, Todd, PhD	Associate Professor	Cancer Population Sciences (CPS)	Women over the age of 65 years diagnosed with breast cancer will increase by 72% in the next 20 years <sup>2</sup> . As the effectiveness of adjuvant chemotherapy increases, it will become increasingly recommended to older adults. Yet survivorship studies have primarily focused on young adults, neglecting older women who are now the largest proportion of breast cancer survivors. Functional dependence is a key determinant of poor quality of life, and a major source of health care and social costs.
Markham, Merry Jennifer, MD	Clinical Associate Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. Markham's research interests include - experimental therapeutics and prognostic factors for non-Hodgkin's lymphoma and Hodgkin's lymphoma; experimental therapeutics and prognostic factors for gynecological malignancies; quality of cancer care and quality improvement strategies; and the emerging role of social media and web-based interaction in medicine, patient education, patient decision making and empowerment, and medical education.
May, W., MD, PhD	Professor	Cancer Therapeutics & Host Response (CTHR)	My research centers around dissecting the complicated interplay of signaling molecules involved in both intra and extracellular regulation of Apoptosis and Cell Death Pathways. Understanding of critical regulating steps in these pathways is making it possible to design novel anticancer strategies ultimately leading to new drug design.

McDaniel, Anna, PhD	Professor	Cancer Population Sciences (CPS)	<p>Dr. McDaniel's research has been characterized by the innovative use of information technology to enhance decision-making by clinicians and to promote positive health behaviors in consumers. Her history of funded research focuses on cancer control, from prevention (tobacco use prevention and cessation) through survivorship (symptom management). Areas of expertise:</p> <ul style="list-style-type: none"> <li>• Nursing leadership and administration</li> <li>• Health Informatics</li> <li>• Tobacco prevention and cessation</li> <li>• Cancer prevention and control</li> <li>• Translational research</li> </ul>
McGorray, Susan, PhD	Research Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	I have been associated with the UF Cancer Center since January, 2017. I have served on the SRMC and DISC committees and collaborated with investigators, primarily regarding the design of studies. Throughout my career I have worked on cancer-related studies in a variety of areas. I am particularly interested in the design and analysis of Phase I studies and therapeutic clinical trials.
Mehta, Hiren, MD	Clinical Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	1, Lung Cancer diagnosis, staging and molecular research especially role of macrophages in lung cancer; 2. Lung cancer screening & pulmonary nodule management; 3. Interventional pulmonary including advanced diagnostics, therapeutics and airway interventions & advanced pleural procedures; 4. Pleural diseases.
Mendenhall, Nancy, MD	Professor	Cancer Population Sciences (CPS)	Dr. Mendenhall is a leader in research in the areas of breast cancer, Hodgkin's disease, lymphomas and pediatric cancers. She has extensive experience in cooperative group trials (COG) and has produced more than 137 published works, including articles in such publications as American Journal of Clinical Oncology, Cancer, and the Journal of the American Medical Association.
Mendenhall, William, MD	Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. Mendenhall is principal investigator on cooperative group trials and has performed or participated in multiple outcomes studies evaluating disease, control, survival, and toxicity associated with the treatment of various head and neck malignancies.
Michailidis, George, PhD	Professor	Mechanisms of Oncogenesis (MOO)	Dr. Michailidis' research interests include: Multivariate Analysis and Machine Learning; Computational Statistics; Change-point Estimation; Stochastic Processing Networks; Bioinformatics; Network Tomography; Visual Analytics; and Statistical Methodology with Applications to Computer, Communications and Sensor Networks.

Migliorati, Cesar, DDS, MS, PhD	Professor, Department of Oral and Maxillofacial Diagnostic Sciences, Division of Oral Medicine Associate Dean of Clinical Affairs and Quality Assurance	Cancer Population Sciences (CPS)	Head & Neck; Hematologic Malignancies/Blood & Marrow Transplant; Integrative Medicine; Palliative Medicine; Radiation Oncology; Targeted Cancer Therapy
Milner, Rowan, BVSc, MMedVet	Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. Milner's research interests include: Osteosarcoma; Melanoma vaccine; Stereotactic radiosurgery; Targeted radiotherapy; and Tumor suppressor genes.
Mitchell, Duane, MD, PhD	Associate Professor	Cancer Therapeutics & Host Response (CTHR)	I currently direct the UF Brain Tumor Immunotherapy Program which focuses on the immunologic treatment of invasive brain cancers and brain metastases. We deploy cellular immunotherapy, RNA-based vaccines, and nanotechnology-based immune modulators to enhance anti-tumor immunity. Our research spans from preclinical evaluation through phase 1 and phase 2 clinical trials of investigational therapies developed within the UFBTIP laboratory.
Modave, François, PhD, MS	Associate Professor	Cancer Population Sciences (CPS)	My general research interest is in biomedical informatics, a multi-disciplinary field including health care, public health, computer science, statistics, engineering, IT, applied to biomedical questions. More specifically, I am interested in shared and informed decision-making in a clinical environment, in the development of algorithms and informatics tools that support improved decisions, in particular in the context of cancer prevention and obesity.
Mohamadzadeh, Mansour, PhD	Professor	Cancer Therapeutics & Host Response (CTHR)	my projects center on an oral targeted vaccine that elicit humoral and T cell mediated immune responses against pathogens and breast cancer. additionally, we generated a L. acidophilus strain that significantly mitigate induced intestinal inflammation that might lead to colon cancer.
Moreb, Jan, MD	Professor	Cancer Therapeutics & Host Response (CTHR)	1. Immunotherapy project for myeloma patients in Collaboration with Dr Lung-Ji Chang, Dept of Molecular Genetics & Microbiology. 2. Aldehyde dehydrogenase and Drug resistance, use of inhibitors and siRNA approaches 3. Aldehyde dehydrogenase and cancer stem cells, using lung cancer and multiple myeloma cell lines and primary cells. 4. Clinical studies for myeloma patients
Muller, Keith, MA, PhD, MS	Professor	Cancer Population Sciences (CPS)	I began collaborating specifically in cancer research in 1989. The work centers on medical imaging in the context of breast cancer, brain cancer, and radiotherapy treatment planning. My biostatistical methodology research centers on adaptive design and sample size selection in the context of repeated and multivariate continuous data, including High Dimension, Low Sample Size (more variables than subjects as in imaging and many kinds of -omics data).
Murad, Gregory, MD	Clinical Associate Professor	Cancer Therapeutics & Host Response (CTHR)	Use of experimental therapeutics for brain tumor treatment
Murthy, Hemant, MD	Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	Hematologic Malignancies/Blood & Marrow Transplant; Immunotherapy; Lymphoma; Palliative Medicine; Quality of Life Issues; Stem Cell; Targeted Cancer Therapy

Muzyczka, Nicholas, PhD	Eminent Scholar	Cancer Therapeutics & Host Response (CTHR)	We developed the AAV vector system, which is one of two vector systems currently in use for long term expression of genes. This system is being used for a variety of gene therapy applications, including cancer therapy. In addition to expertise in AAV vectors, we study the biology of AAV, including its DNA replication, transcription, cell entry and viral assembly. Our studies are at genetic, biochemical, and molecular biology levels. Finally, we are also using AAV vectors as functional genomic tools to make local transgenic rat models of Parkinson Disease and learning and memory. We are also using AAV to test approaches to treat Alzheimer's and Parkinson disease.
Najmunnisa, Nasreen, PhD	Research Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	Research interests include: <ul style="list-style-type: none"> <li>* Receptor EphA2/EphrinA1 signaling in thoracic malignancies (NSCLC &amp; malignant mesothelioma)</li> <li>* Micro RNA regulation in thoracic malignancies</li> <li>* Epithelial cell injury and airway remodeling in COPD</li> <li>* Pleural mesothelial epithelial mesenchymal transition in lung fibrosis.</li> </ul>
Naranjo, Arlene, PhD	Research Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	As a senior statistician in the areas of neuroblastoma and renal tumors with the Children's Oncology Group Statistics and Data Center, Dr. Naranjo is responsible for designing future studies, performing sample size and power calculations, monitoring open studies, and analyzing results from pediatric clinical trials. Her research interests include clinical trials design & analysis, survival analysis, longitudinal data analysis, and hierarchical linear models.
Nelson, David, MD	Professor	Cancer Population Sciences (CPS)	Our current interest is focused on translational research and clinical trials related to hepatocellular carcinoma.
Nichols, Romaine, MD	Clinical Associate Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. Nichols' interests include: Radiotherapy for pancreatic cancer, localized prostate cancer, unresectable non-small cell lung cancer, and limited stage small cell lung cancer.
Nixon, Sara, PhD	Professor	Cancer Population Sciences (CPS)	Dr. Nixon uses neurobehavioral methods and models to examine the acute and chronic effects of alcohol and other drugs. Within her clinical research, her team also explores sex differences, the effects of age, and the import of ethnic/racial minority status.
Norkin, Maxim, MD, PhD	Clinical Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. Norkin focuses on design and conduction of clinical trials involving patients with refractory/relapsed leukemia and myelodysplastic syndromes. He is also interested in improving outcomes after allogeneic hematopoietic stem cell transplantation in patients with a wide variety of hematologic disorders. Improvement of outcomes after haploidentical transplantation in patients lacking suitable HLA matched donors is also a research focus.

Odedina, Folakemi, PhD	Professor	Cancer Population Sciences (CPS)	Dr. Odedina's research program focuses on the predictors of health disparities and cost-effective, community-based behavioral interventions to improve the health of Black men. She has directed over 20 research projects, including a landmark Department of Defense prostate cancer research project which accrued over 3,000 Black men in Florida. Her initiatives include the Men's Health Initiative and the Black men's Health Consortium in Florida. Her research traverses across the world with an international consortium group in Africa, Caribbean Islands, Europe and the United States. She has received numerous awards for her work, including the 1st American Society of Health-Systems Pharmacy/ Association of Black Health-System Pharmacists Leadership Award for Health Disparities (2009) and the US Fulbright Scholar award (2006 - 2007). Dr. Odedina currently serves on several international, national and state initiatives for cancer.
O'Dell, Walter, PhD	Assistant Professor	Cancer Population Sciences (CPS)	Dr. O'Dell has extensive experience in the development of image acquisition hardware, in cardiac imaging and finite element modeling, in image registration and image fusion, and automatic target detection and tracking, and in modeling radiation delivery to mobile targets. He is internationally recognized for his physiological motion tracking techniques in cardiac tissue. He also has worked extensively with MatLab, NIH ImageJ, and C++ in the design of customized macros for the automation of: (a) target identification, (b) target tracking, (c) deformable image registration, (d) complex sequences of image processing operations, and (e) the presentation of complex multi-parameter data sets. He has mentored 3 BME PhD students, 6 MS students, and 16 BME undergraduate students doing independent research projects.
Okunieff, Paul, MD	Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. Okunieff's research interests include: Stereotactic radiosurgery, Oligometastases, Translational research, and Countermeasures research.
O'Neal, Latoya, PhD	Assistant Professor	Cancer Population Sciences (CPS)	My research program focuses on obesity-related chronic disease disparities among health vulnerable populations. This research is guided by a broad primary question: How do we reduce health disparities among rural, low-income, and/or racial/ethnic minority populations (priority population)? Utilizing the social-ecological model, my team and I investigate the relationship between interpersonal, intrapersonal, community, and environmental factors and healthy eating and physical activity among the priority population. My current projects include: 1) The Rural HEALTH Study, which seeks to expand our knowledge of factors influencing health behaviors among the priority population, 2) The HomeStyles Project, a middle-childhood obesity prevention intervention for parents, and 3) The Let's Walk Program, which seeks to develop a physical activity intervention focused on weight management. My research concentrates on Health Disparities, Minority Health, Obesity Prevention, Weight Management, Rural Health.

Opavsky, Rene, PhD	Associate Professor	Mechanisms of Oncogenesis (MOO)	Cytosine methylation is a heritable epigenetic modification affecting gene transcription and the integrity of the genome. In human malignancies, aberrant DNA methylation is the most commonly observed epimutation, often manifested by promoter hypermethylation of tumor suppressor genes and hypomethylation of intergenic non-coding regions. The DNA methyltransferases (DNMTs) DNMT1, DNMT3A, and DNMT3B are the enzymes primarily responsible for methylation of CpG dinucleotides in mammalian DNA. Mutations in the coding sequence of DNMT3A are frequently found in human hematologic malignancies indicating that decreased DNMT3A activity may promote tumorigenesis in multiple hematopoietic lineages.
Ostrov, David, PhD	Associate Professor	Cancer Therapeutics & Host Response (CTHR)	We use X-ray crystallography to answer questions regarding immune recognition. In addition, we use methods in structure-based drug design to discover and develop novel therapies for human diseases. We are actively targeting cardiovascular diseases, cancer and diabetes by high-throughput virtual screening combined with functional testing in vitro and in vivo.
Papp, Bernadett, PhD	Research Assistant Professor	Mechanisms of Oncogenesis (MOO)	My research focuses on molecular mechanisms that control cellular identity. While cellular identity changes occur naturally during development or regeneration, we can also trigger cellular identity changes for our benefit, however its deregulation can also cause diseases such as cancer. Cell identity can also be deregulated due to pathogens, which can lead to diseases such as cancer. My studies use reprogramming of somatic cells to induced pluripotent stem cells as a model system for characterizing the intricate link between signaling pathways and epigenetic regulation from single-cell level to the global genome-wide level. My second main focus, in collaboration with other UF Cancer Center faculties, I use next-generation genomics approaches in order to understand the role of cellular and viral transcription factors in the epigenetic reprogramming of human cells during oncogenic viral infection. By defining the critical transcription factor and signaling pathway circuits, we can pinpoint novel targets for therapies.
Parekh, Hiral, MD, MPH	Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	Retrospective review of implication of the integration of early palliative care in the management of metastatic non-small cell lung carcinoma in a single institution. Protocol, final phase of editing and resubmission– A phase II study of neoadjuvant chemoradiation plus pembrolizumab followed by consolidation pembrolizumab in resectable stage 3A non-small cell lung cancer.
Pereira, Deidre, PhD	Associate Professor	Cancer Population Sciences (CPS)	Psychoneuroimmunology influences on health and quality of life in cancer; psychological intervention effects on health and quality of life in cancer
Perri, Michael, PhD, ABPP	Professor	Cancer Population Sciences (CPS)	Dr. Perri's research focuses on health promotion and disease prevention through changes in diet and physical activity. His current studies involve the development of effective programs for the management of obesity in underserved rural communities. The empirical findings from the 16 randomized controlled trials conducted by Dr. Perri's research team have had a significant impact on theory, research, and clinical care related to behavioral treatment of obesity.

Polfer, Nicolas, PhD	Associate Professor	Cancer Therapeutics & Host Response (CTHR)	<p>Research in our group focuses on increasing the structural information from mass spectrometry measurements for bioanalytical applications. We make use of physical chemistry tools, such as lasers, and develop methods and instrumentation that allow other physical parameters of the ions to be characterized (e.g. infrared absorption, collision-cross-section), so that “more than the mass” of the ions can be determined. Topical projects include 1) the chemistry underlying peptide sequencing in mass spectrometers — what chemical reactions take place in the gas phase, and how can they result in a loss of the sequence information? 2) the differentiation of carbohydrates, as these are among the most complex classes of (bio)molecules, thus remaining a challenging problem in mass spectrometry: we employ a multi-dimensional approach, where the structure of the sugars can be mapped based on the complementary structural information from multiple techniques.</p>
Prosperi, Mattia, MEng, PhD	Associate Professor	Cancer Population Sciences (CPS)	<p>My research interests are in the areas of biomedical modelling and ‘big data’ mining focused on precision medicine and translational science. My approach to big data analytics is layered and integrates multi-source data, such as demographic, environmental, clinical, genetic, sensor technology, and beyond. Presently, I lead my research group towards the development of original methods and applications for personalized medicine –exploiting machine learning from a rigorous statistical point of view– and the implementation of software with optimized usability.</p>
Qian, Zhijian, PhD	Associate Professor	Mechanisms of Oncogenesis (MOO)	<p>The myelodysplastic syndrome (MDS) are clonal disorders of hematopoietic stem cells (HSCs), characterized by ineffective hematopoiesis with a high rate of leukemia transformation. MDS can arise de novo or as a result of previous cytotoxic therapy, including chemotherapy, radiation therapy, and immunosuppressive therapy (t-MDS). We are interested in understanding the stem cell biology of MDS and t-MDS, with a focus on studying the molecular events during the initiation of transformation of a normal stem or progenitor cell into a leukemia-initiating cell (LIC). We will determine the genetic pathways that control the proliferation, survival and self-renewal of normal or leukemic hematopoietic stem cells by genetic and genomic approaches, and evaluate the role of these pathways in the pathogenesis of MDS and t-MDS. Emerging evidence suggests that LICs play a central role in the development and maintenance of acute myeloid leukemia (AML). Since LICs can self-renew, but the majority of LICs are in the G0 phase of the cell cycle, LICs are substantially more resistant to conventional chemotherapy regimens than proliferating leukemia blasts, further supporting the hypothesis that failure to sustain durable remission may result from drug resistant LICs. We are interested in determining the molecular pathways that specifically regulate the self-renewal and survival of LICs, and identifying the new therapeutic treatment for MDS and t-MDS patients by targeting the LICs.</p>
Qiu, Yi, PhD	Assistant Professor	Mechanisms of Oncogenesis (MOO)	<p>The research interest in our group are mainly focused on the role of histone deacetylases on epigenetic regulation and cancer. We also study the regulation of histone deacetylases activity through post-translational modification.</p>



Rahman, Maryam, MD	Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	<p>Our clinical and translational research focuses on finding better therapies for malignant brain tumors:</p> <ul style="list-style-type: none"> <li>-Using immunotherapy (vaccines, T cells and checkpoint inhibitors) to activate the patient's immune system against their brain tumor</li> <li>-Using chemotherapy as an immunomodulator to synergize with immunotherapy to overcome brain tumor drug resistance</li> <li>-Studying factors that impact outcomes and quality of life in patients with glioblastoma</li> </ul> <p>We are very interested in translational science and our goal for all of our laboratory investigation is to translate these therapies into real options for patients. We currently are recruiting patients for a phase II study (ATTAC II) evaluating the efficacy of a CMV vaccine for newly diagnosed glioblastoma patients. Our phase I results were published in Nature in 2015 and in Clinical Cancer Research in 2017. We found patients treated with the vaccine had durable responses including multiple patients who are disease free five years after treatment.</p>
Ratnayake, Ranjala, PhD	Research Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	Drug discovery and development; Natural product chemistry
Renne, Rolf, PhD	Professor	Mechanisms of Oncogenesis (MOO)	<p>The role of LANA and microRNAs in pathogenesis and tumorigenesis of Kaposi's Sarcoma-associated herpesvirus (KSHV/HHV-8); A hallmark feature of g-herpesviruses such as Kaposi's sarcoma-associated herpesvirus (KSHV) is their ability to establish life-long latency in lymphoid cells. After primary infection the viral genome is circularized and persist extrachromosomally in dividing cells. While the majority of the viral genome is transcriptionally silenced a single latency-associated region controls the expression of 4 viral proteins, including the Latency-associated nuclear antigen (LANA) and 17 microRNAs. In short, we are studying how LANA and virally-encoded miRNAs contribute and function in the biology and pathogenesis of KSHV.</p>
Reynolds, Brent, PhD	Professor	Cancer Therapeutics & Host Response (CTHR)	<p>The Reynolds' lab is focused on investigating the role precursor cells play in normal brain function and in states of injury and disease. Our approach to understanding the problem is diverse and ranges from developing enabling technologies to identify and measure precursor activity through to translational therapeutic development, via drug screening, leading to activation and deactivation (in the case of cancer stem cells) of stem cells in the adult brain. In general there are three research streams:</p> <ol style="list-style-type: none"> <li>1. New Technologies</li> <li>2. Cancer Stem Cells</li> <li>3. Cell Replacement Strategies.</li> </ol>

Rice, Lori, PhD	Research Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	My research interests include studying signaling pathways that are important in the development and spread of cancer. By studying drugs, dietary supplements, and other pharmacologic agents, as well as radiotherapy, we can identify molecular and biological components that can be the targets of drug design and development. Evaluating the effects of combination therapy, such as vascular targeting agents, chemotherapeutics, and radiation, we may identify treatment regimens to be used in future clinical trials. My particular interest is in prostate cancer, but many of the agents tested and pathways targeted can be applicable to other cancers studied in the lab, including head and neck, breast cancer, colorectal cancer, lung cancer, and renal cell carcinoma.
Rinaldi, Carlos, PhD	Professor	Cancer Therapeutics & Host Response (CTHR)	We are interested in cancer nanotechnology. We have expertise in synthesis and surface modification of magnetic nanoparticles; physical, chemical, and magnetic characterization; and understanding of the coupling of magnetic, hydrodynamic, and Brownian forces and torques on the behavior of these materials. We have demonstrated greater efficacy at killing cancer cells using heat delivered by magnetic nanoparticles in alternating magnetic fields compared to other forms of heat treatment, synergy between heat treatment with magnetic nanoparticles and chemotherapeutics, and targeted, selective killing of cancer cells through local energy deposition using magnetic nanoparticles. Most of our prior work has been in vitro and in a breast cancer context. We are interested in extending our work to animal studies with breast cancer models, exploring applicability in other types of cancer, and developing new applications in cancer treatment for magnetic nanoparticles.
Rivkees, Scott, MD	Eminent Scholar	Cancer Population Sciences (CPS)	I am a pediatric endocrinologist. We are studying thyroid cancer, focusing on cancer risk factors, optimization of treatment, and risks of therapy.
Rong, Libin, PhD	Associate Professor	Mechanisms of Oncogenesis (MOO)	Epidemiology
Rotondo, Ronny, MDCM	Clinical Assistant Professor	Cancer Population Sciences (CPS)	<ul style="list-style-type: none"> <li>- Adult Brain tumors</li> <li>- Chordoma and Chondrosarcoma of the skull base and spine</li> <li>- Pediatric malignancies</li> <li>- Decreasing acute and late side effects of radiation in children</li> </ul>
Salloum, Ramzi, PhD, MA, MBA	Assistant Professor	Cancer Population Sciences (CPS)	Dr. Salloum is a health economist and health services researcher with applications to cancer prevention and control. His research considers the influence of guidelines and incentives on the demand for health and healthcare across the cancer control continuum. His research interest lies in applying behavioral economics techniques to inform policy that can influence health-related decision-making among vulnerable populations.
Sarkisian, Matthew, PhD	Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	Our laboratory studies the functions of neural cilia in brain development and disease. Cilia are tiny yet sophisticated 'cellular antennae' believed to be required for neural cell proliferation...
Sawyer, W., PhD	Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. Sawyer researches friction wear and lubrication (tribology), measurement (surface metrology) and life prediction.
Sayour, Elias, PhD	Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	Immunotherapy; Nanotechnology; Neuro-Oncology; Pediatric Oncology

Scarborough, Mark, MD	Professor	Cancer Therapeutics & Host Response (CTHR)	Scarborough's clinical practice focuses heavily on complex limb salvage in the treatment of conditions such as bone cancer.
Schmittgen, Thomas, PhD	Professor	Cancer Therapeutics & Host Response (CTHR)	Research focus on noncoding RNAs and cancer with emphasis on the use of microRNAs as therapeutic or diagnostic agents. Development of exosomes/microvesicles as targeted drug delivery systems for the treatment of cancer.
Scott, Edward, PhD	Professor	Cancer Therapeutics & Host Response (CTHR)	The role of gene regulation during white-blood cell development and the biology of hematopoietic progenitor cells: We are attempting to elucidate factors required for lineage commitment during hematopoietic (blood cell) development. Of particular interest are transcription factors thought to influence lymphoid and myeloid differentiation.
Setlow, Barry, PhD	Professor	Cancer Population Sciences (CPS)	Behavioral Determinants of Cancer; Environment
Sharma, Blanka, PhD	Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	My research focuses on the development of bio/nano-materials for tissue regeneration, tissue/tumor modeling, and for targeted drug delivery in cancer and regenerative medicine.
Shaw, Christiana, MD, MS	Clinical Associate Professor	Cancer Population Sciences (CPS)	Dr. Shaw is interested in cancer and obesity, including adipokines, and measurements of obesity and cancer.
Shenkman, Elizabeth, PhD	Professor	Cancer Population Sciences (CPS)	Dr. Elizabeth Shenkman is Chair of Health Outcomes and Policy and Director of the Institute for Child Health Policy. In addition, she is a health outcomes researcher working to achieve two goals: (1) determine which combinations of health care delivery, community, and patient factors influence quality and outcomes of care; and (2) the development of corresponding evidence-based health care delivery system and patient-centric interventions to improve outcomes of care. A substantial portion of Dr. Shenkman's work in these two areas focuses on reducing cancer-related health disparities for adults and children through the implementation of evidence-based best practices for risk detection and treatment in a range of health care settings. Dr. Shenkman is the Principal Investigator of the OneFlorida Cancer Control Alliance funded through Florida's James and Esther King Biomedical Research Program. This statewide network is a partnership among UFHealth, Florida State University and the University of Miami. Dr. Shenkman is also the Principal Investigator of a Centers for Medicare- and Medicaid-funded five-year pragmatic randomized trial. The trial tests the effectiveness of a personal navigator and a flexible wellness account on cardiovascular risk reduction among disabled individuals with co-occurring physical and mental health conditions, including those who have cancer. The project is one of ten in the US, funded as part of CMS's Medicaid Incentives for the Prevention of Chronic Conditions portfolio. Dr. Shenkman also serves as Co-Director of the Implementation Science Program within UF's NIH-funded Clinical and Translational Science Institute (CTSI). In this role, Dr. Shenkman collaborates with faculty and staff to provide technical assistance in developing implementation science and patient-centered outcomes studies.

Siemann, Dietmar, PhD	Professor	Cancer Therapeutics & Host Response (CTHR)	The primary focus of research in our lab is the study of approaches to improve cancer treatment. We are particularly interested in molecular targeting strategies directed against critical processes of tumor development, progression and metastatic spread; key factors associated with treatment failures. The application of such strategies either alone or as adjuvants to conventional anticancer treatments are investigated in a variety of human and rodent preclinical cancer models. The ultimate goal is to develop and advance new treatment strategies for the clinical management of cancer.
Silver, Natalie, MD, MS	Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	Molecular therapeutics used to improve the outcome of head and neck squamous cell carcinoma patients who harbor deleterious TP53 mutations. Expression of soluble vascular endothelial growth factor (VEGF) receptor-2 in head and neck cancer patients. Epidermal growth factor receptor and downstream molecular signaling proteins in head and neck squamous cell carcinoma and salivary gland tumor cell lines.
Slayton, William, MD	Associate Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. Slayton's research includes a laboratory based component studying bone marrow vasculature as it affects normal megakaryocyte development and leukemogenesis. He is also involved in international clinical trials for children with acute lymphoblastic leukemia (ALL) conducted by the Children's Oncology Group (COG). He participated in the Infant Leukemia trial where he was a member of the transplant and basic science subcommittee. He also was a member of the Very High Risk Leukemia Committee which tested the role of imatinib in the treatment of Philadelphia Chromosome positive ALL. He has developed and is chairing the successor trial for Ph+ acute lymphoblastic trial using a second generation targeted tyrosine kinase inhibition (dasatinib) in combination with an intensive chemotherapy backbone. He is looking at ways of combining targeted therapies for Ph+ leukemia to reduce toxicity.
Slopsema, Roelf, MSc	Clinical Associate Professor	Cancer Therapeutics & Host Response (CTHR)	His research is focused on the effect of motion in scanned proton beams, proton delivery techniques, and commissioning methods.
Spiguel, Lisa, MD	Clinical Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. Spiguel's research interests focus on clinical outcomes for breast cancer treatment to promote advances in surgical care. Her previous research has focused on nipple-sparing mastectomy procedures and defining oncologic safety and surgical techniques to optimize results, as well as the role of axillary node dissection in patients with limited axillary disease undergoing breast conservation surgery.

Srivastava, Arun, BSc, MSc, PhD	Professor	Mechanisms of Oncogenesis (MOO)	For the past nearly three decades, our research focus has been on the following two human parvoviruses - a non-pathogenic adeno-associated virus (AAV), and a common pathogen, the parvovirus B19 - and the development of parvovirus vectors for their potential use in human gene therapy. We have identified the cellular co-receptors for both AAV and B19, defined the roles of key cellular proteins and enzymes involved in viral intracellular trafficking, transgene expression, and developed transgenic and knockout mouse models to evaluate the safety and efficacy of parvovirus vectors. More recently, we have developed the next generation of AAV vectors with which high-efficiency gene transfer can be achieved in at reduced vector doses. The current emphasis is on the development of parvovirus vectors for the potential gene therapy of genetic diseases such as beta-thalassemia and sickle cell disease, and malignant disorders such as erythroleukemia, hepatoblastoma, and hepatocellular carcinoma.
Staal, Stephen, MD	Clinical Professor	Cancer Therapeutics & Host Response (CTHR)	Primary interests are application of new and novel therapies in cancer treatment. This encompasses Ph 1 and 2 trials of new agents targeting the signalling pathways and metabolic/micorenvironmental changes that occur in cancer. This necessarily encompasses personalized therapy. Breast cancer is my primary area of clinical concentration. I am also interested in the effects of natural products on cancer cells.
Staras, Stephanie, PhD	Assistant Professor	Cancer Population Sciences (CPS)	I am interested in improving cervical cancer prevention among low-income adolescent girls by increasing HPV vaccination rates. The HPV vaccine provides a tool to prevent cervical cancer, but the reduction of cervical cancer will depend on achieving high vaccination rates. My research interests follow two paths to achieving high HPV vaccination rates: (1) epidemiological research on predictors of HPV vaccination and (2) preventive interventions to increase HPV vaccination rates. I am currently working on a collaborative project with Moffitt investigators to assess adolescent, parent, and provider characteristics that predict HPV vaccination among 9-17 year old female Medicaid beneficiaries. Along with additional epidemiologic studies (i.e., assess factors associated with completing the three dose series), we will build upon our current work by developing and testing a preventive intervention to increase HPV vaccination rates among low-income adolescents among Medicaid recipients.
Stechmiller, Bruce, MD	Clinical Associate Professor	Cancer Therapeutics & Host Response (CTHR)	Cancer, Cancer treatment information, Head and Neck cancer, Melanoma, Oral cancer, Prostate cancer, Skin cancer, Testicular cancer, Throat and Larynx cancer, Thyroid cancer, Tongue problems
Strekalova, Yulia, PhD, MS, MBA	Research Assistant Professor	Cancer Population Sciences (CPS)	Research interests are in how information is disseminated and accessed through technology-mediated channels and how uncertainty about scientific evidence influences decision-making and behaviors.
Striley, Catherine, PhD, MSW, ACSW, MPE	Assistant Professor	Cancer Population Sciences (CPS)	As a psychiatric epidemiologist, Dr Striley conducts community-engaged research that aims to increase the recognition of need for behavioral, neurological and mental health treatment and decrease barriers to that treatment.
Su, Zhong, PhD	Clinical Associate Professor	Cancer Therapeutics & Host Response (CTHR)	His research expertise is in flat-panel imaging physics and imager performance analysis and its applications.

Swarts, Steven, PhD	Research Associate Professor	Cancer Population Sciences (CPS)	1) Determine the reaction mechanisms involved in the formation of radiation- and oxidatively-induced damage in DNA and proteins, from free radical precursors to stable end-products, and how their immediate environment (i.e. hydration, radical scavengers, etc.) affects these mechanisms. 2) Synthetic modifications of natural compounds towards developing new anti-cancer and radiation mitigator agents , characterization of new agent properties (ie electrochemical, stabilities, etc.) and their pharmacology. 3) Development, validation and application of trace small biomolecule analytical methods for the detection of chemical alterations in DNA and proteins using HPLC and GC, including MS detection techniques. This also includes quantitative analytical methods for the detection and quantification of trace bioorganic compounds in biological matrices (cells, tissues, urine) as biomarkers for use in both small and large scale clinical, pharmacological, and epidemiological studies.
Tan, Weihong, PhD	Distinguished Professor	Cancer Therapeutics & Host Response (CTHR)	CHEMICAL BIOLOGY: We elucidate the molecular foundation of disease or biological function using aptamers. We use cell-SELEX to identify aptamers for cancer cell recognition and cellular proteomics. This enables the development of molecular tools for molecular medicine in early disease diagnosis, targeted therapy and basic mechanistic studies. MOLECULAR ENGINEERING: We make functional DNA molecules and develop them for applications in living cell, biosensors, and drug development. We also investigate the use of optical spectroscopic methods in making these molecules suitable for optical monitoring and molecular imaging. BIONANOTECHNOLOGY: We develop and apply novel nanomaterials for better understanding of biological phenomena on nanoscale. We also make nanomaterial (nanoparticles, nanosensors and nanoassembly) for enhanced biomedical studies; and also study molecular motors for energy creation at the nanoscale and the conversion of photonic energy into useful forms.
Tang, Xin, PhD	Assistant Professor	Mechanisms of Oncogenesis (MOO)	I am setting up an interdisciplinary research group working at the interface of mechanical engineering, physics, chemistry, and biology. We combine quantitative fluorescent functional imaging, nanofabrication, electrophysiology, computational modeling, and genome editing tools to tackle challenging multi-faceted problems in cancer, as well as other human diseases. We aim to apply our discoveries and earned understanding to developing of innovative technologies to improve human health.

Terada, Naohiro, MD, PhD	Professor	Mechanisms of Oncogenesis (MOO)	Small Molecules Targeting Adenine Nucleotide Translocases (ANT): ANT is expressed on the inner mitochondrial membrane and facilitates ADP/ATP exchange between the mitochondria and the cytosol, thus playing an essential role for energy metabolism in eukaryotes. Humans have four ANT isoforms whose expression is dependent on tissue types and varying external oxygen and nutrient conditions. ANT4 is exclusively expressed during male germ cell meiosis and essential for spermatogenesis. ANT2, which is responsible for importing glycolytic ATP into mitochondria under anaerobic condition, is particularly crucial for cancer cell growth. Using a molecular docking approach, we are identifying small molecules that specifically inhibit ANT4 and ANT2, to develop novel male contraceptives and cancer chemotherapeutics, respectively. As an additional project, we also study mechanisms underlying how once differentiated cells are reprogrammed into pluripotent stem cells.
Thomas, Ryan, MD	Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	I am board-certified in complex general surgical oncology and have a research interest in pancreatic carcinogenesis. Specifically, I am currently investigating the role of the host microbiota in pancreatic cancer susceptibility, development, and resistance to chemotherapy.
Tibbetts, Scott, PhD	Associate Professor	Mechanisms of Oncogenesis (MOO)	Our research program is focused on determining the mechanisms that Gammaherpesviruses use to establish latency in vivo, with the long-term goal of elucidating new targets for the prevention and treatment of gammaherpesvirus diseases.
Tighe, Patrick, MD, MS	Assistant Professor	Cancer Population Sciences (CPS)	Dr. Tighe's research examines how machine learning algorithms, stochastic process modeling, social network analyses and computer vision can improve processes related to acute postoperative pain and perioperative patient safety.
Tomar, Scott, DMD, DrPH	Acting Chair & Professor	Cancer Population Sciences (CPS)	My research interests involve the understanding and control of modifiable risk factors for disease in populations. One primary area of interest is tobacco use and its effects on oral health. My research in this area has included tobacco-associated oral diseases, the epidemiology of tobacco use, and improving the outcomes for people with oral cancer — a disease largely associated with tobacco use.
Toth, Zsolt, PhD	Assistant Professor	Mechanisms of Oncogenesis (MOO)	Molecular genetic analysis of the KSHV genome to determine what viral cis- and trans-factors regulate the chromatin structure of the KSHV genome in the different phases of KSHV life cycle such as during de novo infection, latency, and lytic reactivation. Identifying and characterizing the function of cellular histone-modifying enzyme complexes that control the establishment of KSHV latency and lytic reactivation. Using system biology approaches in collaboration with Dr. Bernadett Papp (Department of Oral Biology), we want to determine what changes in the host epigenome and transcriptome that are induced by KSHV factors are crucial for KSHV replication and cell reprogramming involved in KSHV pathogenesis. Understanding what makes oral epithelial cells susceptible to support lytic replication of KSHV following de novo infection compared to other cell types.

Tran, David, MD, PhD	Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	<p>My research program has 3 major focus areas:</p> <p>(A) understanding the mechanism of cancer metastasis and dormancy. Our lab is interested in understanding how cancer EMT contributes to cancer metastasis, and if so whether it also regulates cancer dormancy, a phenomenon in which micrometastatic disease is present but clinically undetectable. To answer these questions, we employ both cell-based systems as well as a novel genetic mouse model of cancer EMT. The goal is to dissect the relative contributions of cancer EMT to different stages of metastasis from initial local invasion to dormant micrometastases and subsequent development of macrometastases.</p> <p>(B) To determine the role of mesenchymal factors in primary malignant brain tumors. Glioblastoma (GBM) expresses high levels of mesenchymal factors. We are interested in determining 1) whether mesenchymal factors influence gliomagenesis, 2) the functional contribution of mesenchymal factors to invasive properties of GBM cells, and 3) the role of mesenchymal factors in GBM's resistance to cytotoxic and antiangiogenic agents.</p> <p>(C) Translational/clinical research in Neuro-Oncology. We use various powerful methods, including 1) NGS and RNAseq in brain tumors to identify genetic response signatures to standard and targeted therapeutics to develop genomics-based personalized therapies; 2) hyperthermia to induce local disruption of the BBB to enhance chemotherapy delivery and to induce glioma-specific immune activation; 3) using TTFields therapy to eliminate glioma stem cells; 4) Reprogramming of glioma stem cell fate to increase treatment sensitivity; and 5) determining radiographic and genetic biomarkers of true vs. pseudo-progression in brain tumors.</p>
Trevino, Jose, MD	Assistant Professor	Cancer Population Sciences (CPS)	<p>I have a background in pancreatic tumor signaling, xenograft pancreatic tumor models, and immediate access to resected pancreatic tumor tissues and clinical data. I study signaling mechanisms in pancreatic cancer cells and established a role for Src, a non-receptor protein tyrosine kinase, in angiogenesis and tumor progression in pancreatic adenocarcinoma. Additionally, I study tumor biology investigating pancreatic tumor progression, metastases, and chemoresistance through a Src-dependent Id-1 signaling axis with additional work involving investigations into Rb-Raf-1 kinase interactions and their role in pancreatic tumor progression. Presently, I have a fully supported laboratory for continued work in translational biology with access to resected pancreatic tumor tissues and clinical data.</p>



Tucker, Carolyn, PhD	Professor	Cancer Population Sciences (CPS)	Dr. Tucker uses an academic-community partnership research approach and the community-based participatory research model. Her research focuses on (a) culturally sensitive physical and mental health promotion and health care to prevent and reduce childhood and adult obesity, hypertension, type 2 diabetes, and obesity-related colorectal cancer, (b) the integration of physical and mental health promotion into medicine, and (c) community health empowerment to reduce physical and mental health disparities that affect racial/ethnic minority and economically disadvantaged communities. Some of her current research studies involve (a) developing and testing interventions to prevent and reduce childhood and adult obesity and related diseases and mental health problems in at-risk communities and (b) empirically examining the links between patient-centered, culturally sensitive health care and physical and mental health outcomes among racial/ethnic minorities and the medically underserved. Her widely used, published Health Self-Empowerment Theory and Patient-Centered, Culturally Sensitive Health Care Model inform her research.
Vulpe, Christopher, MD, PhD	Professor	Cancer Therapeutics & Host Response (CTHR)	Copper and Iron Metabolism, Toxicogenomics and Green Chemistry, Ecotoxicogenomics
Wallace, Margaret (Peggy), PhD	Professor	Cancer Population Sciences (CPS)	A long-term project in the Wallace laboratory is the molecular study of neurofibromatosis 1 (NF1). We are using genetic and cell biology approaches to study this condition, using a large set of patient samples and data. Other work involves understanding the protein-level result of various mutations, phenotype-genotype correlations, use of human tumor Schwann cell cultures for xenograft testing of drug therapies, searching for epigenetic effects at the NF1 and other loci in tumors, and investigating the role of steroid hormones in NF1. We have also identified a novel gene, PPP1R10, that cooperates with loss of NF1 in myeloid leukemia, via creation of a knockout mouse. In addition, we have been analyzing genes for mutations related to heritable hereditary heart defects and restrictive/dilated cardiomyopathy and we have identified novel mutations in SCN9A related to autosomal recessive congenital insensitivity to pain. The laboratory is also studying multifactorial disorders, conditions that do not always show Mendelian inheritance but have a genetic component.

Wang, Gary, MD, PhD	Associate Professor	Mechanisms of Oncogenesis (MOO)	<p>Research in the Wang Lab focuses on understanding the pathogenesis and molecular biology of viruses that cause chronic human infections, in particular, human immunodeficiency virus and Hepatitis C virus (HCV). We are interested in understanding the mechanisms by which viruses evade host immune responses and antiviral drug selective pressures, using a combination of methods including high throughput next-generation sequencing, bioinformatics, as well as traditional methods of molecular biology and virology. As a deeper understanding of viral population dynamics and evolution is critical to many aspects of HIV and HCV treatment and prevention, the lab studies the genomic consequences of HIV and HCV infection in patients in the face of antiviral pressure, with the dual goal of understanding mechanisms and developing strategies for antiviral therapy.</p> <p>More recently, our laboratory has embarked on a new area of investigation to understand the role of indigenous microbial communities in human infections. Thus, our current research falls within the general themes of host-pathogen interactions, and is divided into two major areas: (1) Molecular studies of HCV pathogenesis and drug resistance; and (2) Ecology of indigenous microbial communities associated with human infections. We currently focus on microbial ecology of Clostridium difficile infection, chronic periodontitis in HIV infection, and microbial ecology in febrile neutropenia.</p>
Weaver, Michael, PhD, RN, FAAN	Professor	Cancer Population Sciences (CPS)	Behavioral Determinants of Cancer; Biostatistics; Cancer Genetics; Quality of Life Issues
Wellehan, James, DVM, PhD	Assistant Professor	Not Programmatically Aligned (NPA)	I have a strong interests in wildlife medicine, pathogen discovery, viral oncology, and molecular diagnostics. In addition to my roles as a clinician with the zoological medicine service and service chief of the veterinary clinical microbiology laboratory, my research laboratory focuses on infectious diseases in wildlife, with current projects on a herpesvirus strongly associated with urogenital carcinoma in sea lions, herpesviruses associated with oral tumors in lizards, a polyomavirus associated with cutaneous lymphoid tumors in birds, and comparative papillomavirus evolution.
Whitehead (Ennis), Nicole, PhD	Assistant Professor	Cancer Population Sciences (CPS)	The long-range objective of Dr. Whitehead's research program is to improve health outcomes and well-being among low income and minority populations, who face the greatest inequities in health care, through effective interventions that bridge the gaps in traditional care. Her work focuses on those coping with HIV/AIDS and Breast Cancer. Dr. Whitehead's current research program has two aims. First, using community based participatory methods, her work aims to understand the unique factors that influence inequities in health outcomes among low income and minority populations. Second, to apply this knowledge in the development and dissemination of effective interventions that bridge the gaps in care.
Wilkerson, Jenny, PhD	Research Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	Anesthesiology/Pain Management; Chemotherapy

Wilkie, Diana, PhD, RN, FAAN	Professor	Cancer Population Sciences (CPS)	Use of informatics to promote patient-centered care and big data science; pain assessment; biobehavioral therapies for cancer pain; behavioral correlates of cancer pain; palliative and end-of-life care; sickle cell disease pain mechanisms, assessment and management; reproductive choices for people with sickle cell disease or sickle cell trait; intervention research
Williamson, Elizabeth, BSc, PhD	Research Associate Professor	Cancer Therapeutics & Host Response (CTHR)	
Wingard, John, MD	Deputy Director of Research, Program Director	Cancer Therapeutics & Host Response (CTHR)	My interests are primarily in 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. We have established serum and cell banks of bone marrow, peripheral stem cells, cord blood for various correlative studies. We have performed studies of psychosocial adjustment undergoing transplant therapy and longterm studies including quality of life and survivorship studies.
Wu, Lizi, PhD	Associate Professor	Mechanisms of Oncogenesis (MOO)	Our laboratory is interested in understanding transcriptional events of signal transduction pathways critical for normal development and human diseases. One of our current major focuses is a highly conserved cell fate determination pathway mediated by Notch receptors. Aberrant Notch signaling is associated with T cell leukemia as well as a growing number of solid tumors. However, it remains elusive how Notch signaling regulates the growth, survival, and interactions of the tumor cells and its microenvironment during cancer development. Therefore, we aim to elucidate molecular regulation underlying normal and pathological Notch signaling. We hope that the knowledge from our research may point to the mechanisms that transform normal cells to cancerous cells, and thus aid in developing novel cancer therapies.
Wynn, Tung, MD	Clinical Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	Dr. Wynn is the director of the UF Pediatric Hemostasis Program and the UF Pediatric Cancer Survivorship Program.
Xiao, Hong, PhD	Professor	Cancer Population Sciences (CPS)	Dr. Xiao's research focuses on geographic and racial disparities in cancer diagnosis, treatment and survival using the Florida cancer registry data and other statewide databases.
Xiao, Rui, PhD	Assistant Professor	Mechanisms of Oncogenesis (MOO)	We are interested in understanding the fundamental biology of the interactions between genetic factors and environmental factors in the process of animal aging.
Xie, Huikai, PhD	Professor	Cancer Therapeutics & Host Response (CTHR)	Microsensors, nanofabrication technology, optical MEMS, biomedical imaging, biophotonics, noninvasive optical imaging, and imaging-guided surgery.

Xie, Mingyi, PhD	Assistant Professor	Mechanisms of Oncogenesis (MOO)	<p>MiRNAs are ~22 nucleotide (nt) ubiquitous gene regulators that modulate diverse cellular pathways including differentiation, proliferation and apoptosis, all critical to human development and diseases. Canonical miRNAs are produced from long primary (pri-) miRNA transcripts that are cleaved by the nuclear Microprocessor complex, with the resulting precursor (pre-) miRNA hairpins exported by Exportin-5 and processed by cytoplasmic Dicer to yield mature miRNAs (Fig. 1, middle panel). At Yale, Dr. Xie documented two surprising miRNA biogenesis pathways:</p> <p>Herpesvirus saimiri (HVS)-miRNAs are processed by the host Integrator complex, a 14-subunit complex best known for executing the 3'-end cleavage of cellular small nuclear RNAs (snRNAs), therefore bypassing the canonical Microprocessor cleavage. (Fig. 1, top panel)</p> <p>Mammalian m7G-capped precursor miRNAs are generated from RNA polymerase (Pol) II transcription initiation sites. Whereas the nuclear-cytoplasmic export of capped pre-miRNAs is mediated by Exportin-1.</p> <p>These pathways surprisingly incorporate fundamental cellular machineries involved in processing other classes of RNAs, expanding our appreciation of their impact on small RNA populations and oncogenesis. Our group's immediate research goal is to further delineate the unique modes of miRNA production, including Integrator-mediated RNA metabolism, and understand the functions of these special miRNAs in herpesviruses and their hosts. Such research will allow the design of therapies for related oncogenic herpesviruses and cancers.</p>
Xing, Chengguo (Chris), PhD	Professor	Cancer Therapeutics & Host Response (CTHR)	<p>Our research broadly covers the 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. We integrate different disciplines at the interface of chemistry and biology, including pharmacognosy, medicinal chemistry, chemical biology, bioanalytical chemistry and disease/risk biomarkers, molecular, cellular and animal biology.</p> <p>Particular research areas are:</p> <ol style="list-style-type: none"> <li>1. Drug discovery and development with the preference towards targeting multi-drug resistant malignancies.</li> <li>2. Natural dietary supplement-based cancer prevention and tobacco cessation.</li> <li>3. Natural dietary supplement to improve quality of life and to prevent cancer recurrence among cancer survivors.</li> <li>4. Drug candidate development against brain tumor and lung tumor.</li> </ol>
Yaghjian, Lusine, MD, MPH, PhD	Assistant Professor	Cancer Population Sciences (CPS)	<p>cancer epidemiology  breast cancer prevention and control  mammographic breast density and molecular pathways to high density  molecular and genetic epidemiology  environmental epidemiology  gene-environment interactions</p>

Yang, Thomas, PhD	Professor	Mechanisms of Oncogenesis (MOO)	My laboratory studies the epigenetic regulation of gene expression, and the epigenetic consequences of developmental exposure to alcohol.
Yao, Yingwei, PhD	Research Associate Professor	Cancer Population Sciences (CPS)	Biostatistics
Yeung, Anamaria, MD	Clinical Associate Professor	Cancer Population Sciences (CPS)	Dr.Yeung's research interests include improving the treatment of gynecologic cancers, and improving the quality and safety of radiation therapy delivery.
Yoon, Saunjoo, PhD, RN	Associate Professor	Cancer Population Sciences (CPS)	<p>The long-term goal of her research is to improve treatment outcomes and quality of life, and extend overall survival of patients with GI cancers using complementary and alternative medicine (CAM) modalities.</p> <ol style="list-style-type: none"> <li>1. Management and prevention of cachexia due to unintentional weight loss in GI cancer is one of a few research interests. The ongoing research is built upon a recently completed feasibility study that used acupuncture to improve appetite and weight gain in GI cancer patients with cachexia—a severe, debilitating condition, that remains, to date, largely idiopathic, incurable, and in need of urgent, translational research.</li> <li>2. Cachexia, palliative care, and cancer survivorship are very closely related to quality of life in cancer patients, particularly, patients with pancreatic cancer and gastric cancer as well.</li> <li>3. Understanding of biomarkers and mechanisms that may indicate success of CAM interventions (e.g., acupuncture, mind-body therapies) for cancer patients is imperative. The collaborators are from the multiple disciplines as a research team (from Medicine-GI Oncologist, Neurosurgery, Endocrinology, Clinical Psychologist, Acupuncturist, Pharmacy, Statistician), with members who can contribute their singular expertise. This robust team includes NIH-funded experts with vital experience in the following areas. All members complement each other and will work diligently to fulfill the goals of the proposed study.</li> </ol>
Yost, Richard, PhD	Professor	Not Programmatically Aligned (NPA)	Research in the Yost group centers around three aspects of analytical mass spectrometry: instrumentation, fundamentals, and applications. Instrumentation development includes a wide range of projects in tandem mass spectrometry (MSn) and chromatography. We are utilizing a laser microprobe MSn system to image trace levels of drugs and biomolecules in varying tissue samples. Additionally, we are utilizing high-field asymmetric waveform ion mobility spectrometry (FAIMS) coupled to a mass spectrometer for the analysis of various compound classes. In addition Dr. Yost heads Core 3 of the South East Center for Metabolomics (SECIM). Core 3, the Advanced Mass Spectrometry core, is involved biomarker identification using high resolution MS and ion mobility MS.

Young, Mary, PhD	Clinical Professor	Cancer Population Sciences (CPS)	Dr. Young's research interests can be broadly defined as the study of the psychosocial aspects of catastrophic illness or injury and the development of constructivist grounded theory relating to adaptation to disability. She is Co-Principal Investigator on the project "Development of a Model of Prostate Cancer Care and Survivorship (CaPCaS) for Black Men: A Grounded Theory Study of Ethnically Diverse Black Men" funded by the Department of Defense PCRP Health Disparity Award. Dr. Young approaches her research from a combined paradigm of quantitative and qualitative research methods, using interviews, focus groups, observations, and surveys as data sources. She is particularly interested in employing qualitative research methods to study the lived experience of disability from the perspective of persons with disabilities and their family members, with emphasis on caregiving challenges. She has expertise on using the computer-assisted data analysis system, NVivo, to analyze large amounts of open-ended text data. She teaches a doctoral level course on qualitative data analysis, facilitates an on-going interdisciplinary qualitative data analysis group at UF Health, and serves as a qualitative methodological consultant for the UF Health Clinical and Translational Science Institute.
Yuan, Yaxia, PhD	Research Assistant Professor	Cancer Therapeutics & Host Response (CTHR)	Bioinformatics; Drug Design
Zajac-Kaye, Maria, PhD	Professor	Mechanisms of Oncogenesis (MOO)	My long term research interests have been to understand mechanisms of oncogenic transformation. We have recently focused on the role of thymidylate synthase (TS) in tumorigenesis since TS plays a central role in DNA synthesis/repair and is a bona fide cancer therapeutic target. In addition, high levels of TS have been correlated with a poor prognostic outcome in patients with lung, colon, ovarian and rectal carcinomas. We have now demonstrated that ectopic expression of catalytically active human TS (hTS) was sufficient to induce a transformed phenotype in mammalian cells both in culture and in transgenic models. Our current work is focused on defining patterns of cooperation between TS and other oncogenes using a series of crosses between defined mouse models. Our goal is to use these TS transgenic animals to study the in vivo consequences of elevated TS on DNA stability, to test how this relates to tumorigenesis, and to improve the use of TS as a biomarker and therapeutic target.
Zarrinpar, Ali, MD, PhD	Associate Professor	Cancer Therapeutics & Host Response (CTHR)	Cell Signaling Pathways; Chemotherapy; Liver; Metastasis; Nanotechnology; Pediatric Oncology; Surgical Oncology; Targeted Cancer Therapy
Zhao, Jinying, MD, PhD	Professor	Not Programmatically Aligned (NPA)	Telomere attrition and diabetes risk in American Indians Epigenetic determinants for major depression: a monozygotic discordant twin study Novel metabolic predictors of diabetes in American Indians Genome-wide profiling of brain DNA hydroxymethylome in Alzheimer's disease

Zhou, Lei, BMed, PhD	Associate Professor	Mechanisms of Oncogenesis (MOO)	We are interested in molecular mechanisms controlling cellular sensitivity to irradiation or chemotherapy. In particular, we are interested in the transcriptional activation of upstream apoptosis regulators in response to Radiation or chemotherapy. Model systems including <i>Drosophila</i> as an in vivo genetic model as well as cultures of human cancer cell lines. Recent publication: Zhang et al. Epigenetic Blocking of An Enhancer Region Controls Irradiation-Induced Pro-apoptotic Gene Expression in <i>Drosophila</i> Embryos. <i>Developmental Cell</i> 14:481.
Zhou, Liang, MD, PhD	Associate Professor	Cancer Therapeutics & Host Response (CTHR)	The goal of my laboratory is to determine the transcriptional regulation of intestinal immune responses. We have characterized the interactions between various transcription factors (e.g., ROR $\gamma$ t and Foxp3) involved in specifying development of Th17 cells and the related iTreg lineage and how they eventually determine whether the T cell adopts the Th17 or Treg cell fate. Recently, we have been focusing on the molecular regulation of ROR $\gamma$ t+ innate lymphoid cells by the aryl hydrocarbon receptor (Ahr), a ligand-dependent transcription factor under steady-state physiological conditions, during inflammation or autoimmunity. This work has implications for understanding how to modulate intestinal immune responses in different disease settings, may ultimately lead to identification of new therapeutic targets for human IBD or colon cancer.
Zhou, Daohong, MD	Professor	Mechanisms of Oncogenesis (MOO)	Dr. Zhou's research has been focused on investigation of the long-term effects of genotoxic stress/DNA damage induced by ionizing radiation (IR) and chemotherapy on hematopoietic stem cell (HSC) self-renewal and genomic stability; and the role of HSC injury in IR- and chemotherapy-induced long-term bone marrow suppression and leukemogenesis. His studies has led to a better understanding of the cellular and molecular mechanisms by which IR and chemotherapy cause normal tissue damage and the discovery of the first potent and broad-spectrum senolytic drug, ABT263-a specific Bcl-2/xl inhibitor, that can selectively kill senescent cells to rejuvenate both prematurely senescent tissue stem cells induced by IR and tissue stem cells in normally aged mice. This discovery may lead to new therapeutics for various age-related diseases and the side effects induced by chemotherapy and IR. More recently, he developed several proteolysis targeting chimeras (PROTACs) that can target Bcl-xl and other proteins of interest for degradation via the ubiquitination and proteasome system. He found that Bcl-xl PROTACs can selectively induce Bcl-xl degradation in senescent cells and various cancer cells but not in platelets, suggesting that Bcl-xl PROTACs have the potential to be developed as a better senolytic and anticancer agent than ABT263 by not causing thrombocytopenia. Using the PROTAC drug development platform, he is developing additional specific antitumor agents.

Zolotukhin, Sergei, PhD	Associate Professor	Mechanisms of Oncogenesis (MOO)	<p>Our laboratory has initiated research to explore the novel concept of whether gene therapy could be successfully applied to treat a multitrait disorder such as diet-induced obesity (DIO). To validate this concept, we utilized an unconventional adult transgenic rat model where the gene under investigation is induced or repressed in a sustained fashion using viral vectors targeting metabolically active tissues. We have tested seven independent gene targets in longitudinal in vivo experiments concluding that: 1) it is possible to reduce whole body adiposity and improve glucose homeostasis by targeting single genes in key metabolic pathways; and 2) one-time therapeutic intervention could prevent the development of DIO in young subjects and partially correct pre-existent obesity in older subjects. Current research focuses on one particular gene encoding adipocyte-specific hormone adiponectin, which proved to be the most promising among the targets tested. We hypothesize that adiponectin gene therapy targeting the liver reduces systemic adiposity and improves glucose homeostasis acting both locally at the hepatocellular level and systemically at the level of brain/periphery nutrient sensing. Our studies are focusing on: 1) Elucidating the underlying mechanisms responsible for the reduction in systemic adiposity in DIO rats treated with adiponectin gene therapy; 2) Determining whether enhanced adiponectin signaling in skeletal muscle or liver of DIO rats retards age-related changes and extends the maximum life span in treated subjects; and 3) Studying transgenerational effect of adiponectin gene therapy by testing the relative contribution of environmental and genetic factors in the phenotype of DIO dam's F1/F2 offspring.</p> <p>In addition, our laboratory develops the novel system of rAAV production in insect cells. The system takes advantage of DNA regulatory elements from both wt <i>Autographa californica</i> multiple nuclear polyhedrosis virus (AcMNPV) and wt AAV2. The endpoint design consists of only two components: 1) stable Sf9-based cell line incorporating integrated copies of rep and cap genes, and 2) Bac-GOI. Rep and cap genes are designed to remain silent until the cell is infected with Bac-GOI helper providing both rAAV transgene cassette and immediate-early (IE-1) transcriptional transregulator required to initiate the expression of AAV helper genes. The described arrangement provides identical levels of Rep and Cap proteins in all cells while allowing for a higher MOI with Bac-GOI thus ensuring significantly higher yields of rAAV.</p>
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