

**Sylvester Comprehensive Cancer Center  
Cancer Center Membership**

Report generated on September 20, 2018

Name	UM Title	Primary Department	Research Program	Keywords	Major Interests
Abramowitz, Matthew C., M.D.	Associate Professor of Clinical	Radiation Oncology	Tumor Biology	Prostate cancer, Head and neck cancer	Latest technology in management of prostate and other genitourinary and head and neck malignancies
Abreu, Maria T., M.D.	Professor of Clinical	Medicine	Tumor Biology	Gastroenterology, Crohn's disease, Gnotobiotic Core Facility, Inflammatory Bowel Disease, IBD, IBD clinical trials, investigator-initiated studies in IBD, genetic research in IBD, IBD Center Clinical Phenotype Database and Tissue Repository, Hispanic samples, genetic and environmental factors, host-bacterial interactions, role of toll-like receptor signaling in intestinal inflammation and neoplasia, toll-like receptor 4 (TLR4), colitis-associated neoplasia, TLR4 signaling in cancer stem cell activation	On the clinical-translational side, Dr. Abreu is an expert in intestinal inflammation, Crohn's disease and inflammatory bowel disease (IBD). On the basic science side, the focus of my laboratory has been host-bacterial interactions and, in particular, the role of toll-like receptor signaling in intestinal inflammation and neoplasia. They have focused on toll-like receptor 4 (TLR4) as a model for how recognition of bacteria by TLRs in the intestine functions broadly with an eye to translating this to patients before they develop dysplasia.
Adkins, Rebecca D., Ph.D.	Professor	Microbiology and Immunology	Non-Aligned	Ontogeny of the immune system, Neonatal immune responses, Developmental epigenetics, Pediatric cancer, T cell function, Protective Immunity	T cell function, Protective Immunity, Development of immune system function in neonatal life, Normal physiological epigenetic programs during development and how they may be "derailed" in pediatric cancer
Agarwal, Ashutosh, Ph.D.	Assistant Professor	Biomedical Engineering	Non-Aligned	Organs on Chips, Biomaterials, Tissue Engineering, Metastatic Niche	Dr. Agarwal's research focus is to develop organ on chip platforms which mimic human organ level complexity within a fluidic microsystem capable of measuring functional readouts. These platforms can be applied towards testing drugs, discovering therapies, modeling disease states, and evaluating stem cells. Current research projects include building a Heart on a Chip, Pancreatic Islet on a Chip, Glomerulus on a Chip, and Patient specific disease model of Neuromuscular Junctions.
Ahn, Yeon S., M.D.	Professor	Medicine	Non-Aligned	Platelet disorders, Thrombotic disorders, Bleeding disorders, Hematologic malignancies	RESEARCH INTERESTS: ITP, TTP, platelet dysfunction, antiphospholipid syndrome and other hypercoagulable states, bleeding disorders CLINICAL INTERESTS: General hematology, hematologic malignancies, platelet disorders, bleeding and thrombotic disorders
Al-Ali, Hassan, Ph.D.	Research Assistant Professor	Neurological Surgery	Tumor Biology	Drug target Discovery, Drug Discovery, Phenotypic Screening, Target Profiling, Cell-based Assays	Dr. Al-Ali is primarily interested in drug discovery. He is developing a new platform technology that enables rapid and efficient identification of drug targets that are likely to produce high efficacy in patients. The technology also identifies off-targets that must be avoided due to possible adverse effects (for example, these off-targets would counteract the activity of the drug on the cancer, or would even cause the cancer to proliferate rather than arrest/apoptose). By identifying both effective targets that must be engaged by a drug AND off-targets that must remain un-engaged, highly efficacious drugs can be discovered and developed.
Alderuccio, Juan P., M.D.	Assistant Professor	Medicine	Tumor Biology	Lymphoma, multiple myeloma and experimental therapeutics	Clinical characteristics and molecular markers involved in histologic transformation of low-grade B cell lymphomas to aggressive lymphomas. Treatment optimization in patients with post-transplant lymphoproliferative disorders (PTLD) Drug development in lymphoma and multiple myeloma
Alencar, Alvaro J., M.D.	Assistant Professor of Clinical	Medicine	Tumor Biology	high-grade lymphoma, diffuse large b-cell lymphoma, high-risk follicular lymphoma, Philadelphia-like ALL, primary CNS lymphoma, double-hit high-grade B-cell lymphoma, double-expressor diffuse large b-cell lymphoma	Dr. Alencar's research focus is on the treatment of high grade lymphoma and high risk follicular lymphoma. He has a special interest in health disparities, focusing on biologic characteristics acute lymphoblastic leukemia in Hispanics.
Alvarez, Ofelia A., M.D.	Professor of Clinical	Pediatrics	Non-Aligned	Pediatric oncology, Supportive care, Sickle cell disease, Blood transfusions, Human subjects research	Pediatric oncology; Supportive care; Brain tumors; Research ethics
Alves, Ney R., M.D.	Assistant Professor of Clinical	Medicine	Non-Aligned	Not Provided	Clinical trials: new therapies and strategies to treat lymphomas and myelomas.
Andreansky, Samita S., Ph.D.	Research Assistant Professor	Pediatrics	Tumor Biology	Her-2/neu, small molecule inhibitors, oncolytic viruses, tumor specific immunity	Dr. Andreansky studies how tumor microenvironment drives negative immune regulators that impacts tumor specific immunity. The working model is that "oncogene addiction" can drive immunosuppression via up regulation of inflammatory mediators. Her laboratory is developing novel therapies with small molecule drugs and oncolytic viruses. Targeted therapy with small molecule drugs isolated from natural compounds was shown to downregulate the activity of Her-2/neu receptor in Her-2/neu positive cancer cells and tumor reduction in Her-2/neu preclinical models.
Antoni, Michael, Ph.D.	Professor	Psychology	Cancer Control	cognitive behavioral stress management, leukocyte gene expression, psychosocial factors, breast cancer, prostate cancer, HIV, psychoneuroimmunology, neuroendocrine, vaccine, inflammation, remote technology applications	Dr. Antoni's lab examines stress, coping, and health outcomes and showed stress management intervention effects on psychological adaptation, biobehavioral processes (neuroendocrine, inflammation), and health outcomes in multiple NIH randomized trials in breast cancer, prostate cancer, HIV/AIDS and chronic fatigue. The lab disseminated treatment manuals for breast and prostate cancer in use at major facilities nationally. Antoni directed the NCI-funded P50 Center for Psycho-Oncology Research, multiple R01s, and federal training grants focused on HIV and breast cancer.
Ardalan, Bach, M.D.	Professor	Medicine	Non-Aligned	Colon cancer, Pancreatic cancer, Drug modulation, Drug discovery	Drug modulation and development of new antineoplastic agents for patients with advanced colon and pancreatic tumors
Armstrong, Daniel F., Ph.D.	Professor	Pediatrics	Cancer Control	pediatric cancer, neurocognitive impairment, late effects, methotrexate toxicity, autism spectrum disorder	Dr. Armstrong's primary focus is on mechanisms of neurocognitive impairment in children treated for ALL and CNS tumors using chemotherapy and/or radiation therapy and on approaches to prevent or lessen the severity of impairment following successful treatment. He also conducts interdisciplinary investigations of relationships between neuroimaging findings of CNS structural changes, biochemical pathways, and functional outcomes. Additionally, a recent focus concerns the potential linkage between high dose methotrexate in treatment of ALL and late onset of autism spectrum symptoms.
Arnold, David J., M.D.	Associate Professor of Clinical	Otolaryngology	Non-Aligned	Head and neck cancer	Outcomes in research in cancer treatment; head and neck oncology and reconstructive surgery, microvascular reconstructive surgery; refinement of microvascular surgical techniques, tumor markers in head and neck cancer, advances in the treatment of thyroid cancer
Avisar, Eli, M.D.	Professor of Clinical	Surgery	Non-Aligned	Not Provided	Esophagus, stomach, liver, pancreas, colorectal cancer, melanoma, sarcoma and breast; sentinel node technology, intra-operative PET applications, breast cancer prevention and early detection, ablative therapies (photodynamic therapy, laser, cryotherapy and radiofrequency ablation), neo-adjuvant therapies for esophageal, liver, pancreas and breast
Ayad, Nagi G., Ph.D.	Associate Professor	Psychiatry & Behavioral Sciences	Cancer Epigenetics	epigenetics, kinases, glioblastoma, medulloblastoma, LINCS	Dr. Ayad's laboratory is focused on identifying therapeutic combinations for brain cancers. He uses big data resources to identify targets in glioblastoma and medulloblastoma. He also works closely with neurosurgeons and neuro-oncologists to identify clinically relevant compounds for treating brain tumors.
Balise, Raymond R., Ph.D.	Research Assistant Professor	Urology	Cancer Control	Urology, Treatment, Quality of life	Dr. Balise is supporting the biostatistics and informatics needs for all the oncology projects based in the Department of Urology. So, he is interested in all aspects (from bench research to patient outcomes) of bladder, prostate and kidney cancer research.
Balkan, Wayne E., Ph.D.	Research Associate Professor	Medicine	Non-Aligned	Osteoblast, Osteoclast, Prostate cancer	The role of steroid hormones in bone cell (osteoblast) differentiation and maturation.
Banerjee, Santanu, Ph.D.	Assistant Professor	Surgery	Tumor Biology	Drug abuse, Morphine, Microbiome, Mucosal immunology, Lung diseases	Dr. Banerjee's principal research projects deal with innate immunity and inflammation (both sterile and pathogenic), where one hand they look at the inflammation in gut, lungs and system due to dual insult of drug abuse/clinical drug administration and pathogens; on the other hand, they look at sterile inflammation due to metabolic disorders like diabetes and physiological conditions like obesity, where most often than not, the situations are go hand in hand. Chronic morphine, and resultant immunosuppression, leading to persistent yet low-level inflammation, has been one of the flagship projects. With this proposal, Dr. Banerjee intends to probe the longitudinal cascade of events leading to gut pathology due to HIV infection, in the context of drug abuse. Emphasis will be laid on microbial dysbiosis and metabolic changes in the context of aforementioned dual insults. They propose to do this using the powerful NSG-BLT humanized mice model, with engrafted human microbiome, which they have been preparing in-house and using for the past 2 years. This is one of the closest translational models to do this work. For this proposal, Dr. Banerjee will receive valuable inputs from his past mentor Prof. Sabita Roy, who has several decades of experience in opioid pharmacology and immunology.

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Banerjee, Sulagna, Ph.D.	Assistant Professor	Surgery	Tumor Biology	CD133, Tumor microenvironment, Chemoresistance, Pancreatic cancer, Tumor initiating cells	Understanding the molecular signatures that are responsible for TIC plasticity which is the dynamic interconversion of non-TIC to TIC. Crosstalk between the different elements of tumor microenvironment in determining chemoresistant phenotype to the tumor cells. Role of environmental factors like hypoxia, ER stress, altered metabolism and inflammatory molecules that may be involved in tumor initiation.
Barber, Glen N., Ph.D.	Professor	Cell Biology	Tumor Biology	innate immunity, interferon, STING, cancer, virus.	Viral Oncology. Developing viral oncolytic agents for the treatment of cancer. Understanding the role of innate immunity and the control of cancer. Understanding mechanisms of inflammation associated cancer. Developing immunotherapeutics for the treatment of cancer.
Barredo, Julio C., M.D.	Professor	Pediatrics	Tumor Biology	Childhood acute lymphocytic leukemia, AMPK, Energy and ER stress/UPR, FPGS expression, Chemotherapeutic modulators	Understanding the survival responses of leukemia cells to energy and metabolic stress regulated by AMPK. Investigating the role of AMPK in gene regulation via epigenetic mechanisms in leukemia cells under energy/metabolic stress. Exploiting the vulnerabilities of acute leukemia cells, particularly ALL, to translate our laboratory findings into novel clinical trials for ALL by targeting survival pathways elicited by energy or metabolic stress in acute leukemia.
Barrera, Ingrid G., Psy. D.	Assistant Professor	Psychiatry & Behavioral Sciences	Cancer Control	Mood, Stem Cell Transplant, Cognition, Hispanic vs Non-Hispanic, Neuropsychological testing	Body image: how best to cope with body image and changes in appearance as a result of cancer treatment. Fertility and sexuality in cancer patients: how to cope with sexual and fertility changes as a result of cancer treatment. AYA population: how to help adolescent and young adult cope with a cancer diagnosis, as well as help them cope with body image and fertility changes. Also, working with the families of AYA's to help facilitate support. Stem cell transplant patients, cognition & mood disorders: what affects/determines a successful transplant
Bedogni, Barbara, Ph.D.	Associate Professor	Dermatology & Cutaneous Surgery	Tumor Biology	Melanoma; Notch signaling; MT1-MMP; tumor microenvironment; novel targeted therapies, Melanoma, tumor microenvironment (TME), Notch, ERBB, Metalloproteinases, Extracellular Matrix (ECM), immune responses	The laboratory of Dr. Bedogni studies mechanisms involved in the development and metastatic dissemination of melanoma. Specifically the goals are: 1) to understand the signaling pathways that allow melanoma growth, survival and propagation. 2) to determine how these pathways modulate the tumor microenvironment (TME) with a focus on immune responses and the extracellular matrix/tumor interface. 3) To develop novel therapies to treat a broad range of melanomas independent of their oncogenic drivers (e.g. both BRAF mutated and wild type tumors).
Beitinjaneh, Amer, M.D.	Associate Professor of Clinical	Medicine	Tumor Biology	Lymphoma, stem cell transplant, cell therapy, immune therapy, GVHD.	Dr. Beitinjaneh's clinical research interests are the long-term effect of stem cell transplantation, alternative donor transplantation, targeted therapy, immune and cellular therapy (including transplantation) for aggressive lymphomas.
Benedetto, Pasquale, M.D.	Professor	Medicine	Tumor Biology	Not Provided	Dr. Benedetto's research interests include genitourinary cancer (testis, bladder, kidney, prostate, orthopedic oncology), bone and soft tissue sarcomas, pancreas cancer, and lymphoma. His clinical interests focus on orthopedic oncology (softtissue s/o bone tumors), genitourinary oncology (testis kidney bladder), gastrointestinal oncology (pancreas, colon), and neuroendocrine tumors lymphoma.
Benveniste, Ronald J., M.D., Ph.D.	Associate Professor	Medicine	Non-Aligned	Glioma, Brain metastasis, Pituitary tumor, Brain imaging, Serum marker	Serum biomarkers of glioma progression; Procollagen expression in high grade gliomas; Imaging in CNS tumors
Beurel, Eleonore, Ph.D.	Associate Professor	Psychiatry & Behavioral Sciences	Tumor Biology	Inflammation, Breast Cancer, Depression, Interleukin-6, Learned Helplessness	The role of depression in the potential worsening of metastasis in a breast cancer model.
Bhatia, Rita, M.D.	Associate Professor	Radiology	Non-Aligned	Not Provided	Head and neck radiology
Bhatia, Shivank, M.D.	Associate Professor	Radiology	Tumor Biology	Not Provided	Prostate Cancer and Liver Cancer
Bhattacharya, Sanjoy K., Ph.D.	Professor	Ophthalmology	Non-Aligned	Mass spectrometry, Proteomics, Cellular assays, Deimination, Lipidomics.	How lipid interacts with proteins and contribute to cell behavior and function. Development of methods to capture sugar containing proteins on cell surface and isolate lipids that binds to membrane fractionated this way. Altered state of cells (such as cells undergoing active detachment) will present lipid differences and enzymatic activities that contribute to such changes. Mass spectrometric methods that enables identification and quantification of such lipids. Such investigations are relevant for cancer. Another interest is posttranslational modification of protein-bound arginine deimination. Aberrant modification of arginine results in altered state of cells relevant for cancer.
Bixby, John L., Ph.D.	Professor	Molecular and Cellular Pharmacology	Tumor Biology	kinases, phosphatases, nervous system, phenotypic screen, gene expression	1. Regulation of phosphorylation; kinases and phosphatases 2. Cellular growth pathways--gene expression, transcription factors 3. Experimental rigor and reproducibility, controlled vocabularies and experimental metadata
Biomberg, Bonnie, Ph.D.	Professor	Microbiology and Immunology	Tumor Biology	Immune, aging, inflammation, obesity, metabolic disorders, B and T lymphocytes, monocyte/macrophage, breast, prostate, pancreas cancers, lymphoma, leukemia.	Dr. Blomberg's team study the molecular and cellular immune deficiencies caused by aging, increased inflammation, cancer, and obesity in mice and humans. In breast cancer patients, with Dr. M. Antoni here, they found decreased inflammation, improved immune measures, and increased survival in those doing CBSM (cognitive behavioral stress management). They are also collaborating with Dr. F. Penedo here on prostate cancer for similar measures.
Blonska, Marzena, Ph.D.	Assistant Professor	Medicine	Tumor Biology	DLBCL, Microenvironment, NF-kB transcription factor, Oncogenic signaling pathways, B-cell receptor signaling	Dr. Blonska's projects focus on oncogenic signaling pathways in B-cell lymphomas. Currently, she has three major research areas: To investigate the role of NF-kB and Jun signaling in lymphomagenesis; To reveal the molecular mechanisms that contribute to lymphoma progression and interaction with the microenvironment; To develop new biomarkers for lymphoma.
Briegel, Karoline, Ph.D.	Associate Professor	Surgery	Tumor Biology	Breast cancer, Transcription factors, Cancer stem cells, EMT, Metastasis, Mouse models	Breast cancer progression and metastasis; etiology of triple-negative breast cancer; WNT signaling and embryonic transcription factors in cancer stem cell regulation, mammary lineage specification, and EMT; mouse models for breast cancer; anti-cancer stem cell based therapies
Brothers, Shaun, Ph.D.	Associate Professor	Psychiatry & Behavioral Sciences	Tumor Biology	drug discovery, pharmacology, small molecules, screening, cancer drugs, personalized medicine, preclinical, epigenetics, GPCR, pharmacokinetics, pharmacodynamics, repurposing, neuroscience	Dr. Brother's works on small molecule drug discovery and development for a variety of diseases. This is inclusive of target identification, small molecule drug screening, lead compound development, preclinical disease models, drug development and even some clinical development. His research also encompasses projects on repurposing known FDA approved drugs and programs to identify personalized medicine solutions for cancer patients who have exhausted all other treatment options.
Buki, Lydia P., Ph.D.	Associate Professor	School of Education & Human Development	Cancer Control	Cancer screening, cancer survivorship, Latino populations, health disparities, psychosocial factors	Psychosocial aspects of cancer disparities in Latino populations. She is especially interested in preventable cancers, such as cervical cancers, or cancers for which screening is available, such as breast and colorectal cancers. Dr. Buki has done work on early detection of all the cancers mentioned, both in the U.S. and abroad. She has also studied breast cancer survivorship in Latina women in the U.S.
Burnstein, Kerry L., Ph.D.	Professor	Molecular and Cellular Pharmacology	Tumor Biology	prostate cancer, experimental therapeutics, androgen receptors, coactivators, arginine vasopressin receptors	Dr. Burnstein's lab studies androgen receptor (AR) signaling pathways that may be exploited therapeutically for the incurable stage of prostate cancer, castration-resistance (CRPC). They seek to understand the mechanisms by which AR and its constitutively active variants regulate genes and gene networks that contribute to cancer progression. The Burnstein lab identifies downstream targets that may be inhibited pharmacologically and test compounds in robust preclinical models that faithfully recapitulate features of human PC from androgen dependence to metastatic castration resistance.
Byrnes, John J., M.D.	Professor	Medicine	Non-Aligned	Hematologic malignancies, Retrovirus-associated malignancies, Lymphoma, Leukemia, Multiple myeloma, Coronary artery disease, Thrombotic microangiopathy	Dr. Byrnes' interests focus on hematologic malignancies, and retrovirus-associated malignancies. Other interests are mechanism and treatment of thrombotic microangiopathy syndromes, including thrombocytopenic thrombocytopenia purpura (TTP) and hemolytic-uremic syndrome (HUS).
Caban-Martinez, Alberto J., Ph.D., D.O., M.P.H	Assistant Professor	Public Health Sciences	Cancer Control	Occupational health and safety, Occupational Medicine, Occupational Epidemiology, Workplace Health Promotion, Tobacco Control	The work environment plays an important role in worker health whether through possible exposures to job hazards or stress on the job, or through supportive social networks and opportunities to build self-esteem. There is mounting evidence that worksite cancer prevention interventions that integrate worksite health promotion and occupational health and safety are effective in promoting changes in cancer risk-related behaviors, particularly for blue-collar workers like construction workers. These workers face dual health risks through their exposures to occupational hazards and their high rates of risk-related behaviors, such as tobacco use, physical inactivity, or unhealthy diets. Dr. Caban-Martinez has demonstrated that the use of innovative worksite-based health assessments such as the lunch truck provides unique opportunities to provide workers with health promotion activities as well as collect self-report and biological data. Importantly, Dr. Caban-Martinez and his group has also observed increased levels of worker participation with this intervention model, compared to health promotion alone. Based on a synthesis of the evidence across studies, the Institute of Medicine and the National Institute for Occupational Safety and Health (NIOSH) have recommended this comprehensive approach to improving the health of workers. Dr. Caban-Martinez's research has also included collaborations with labor unions, with whom they share a common mission to promote worker health and safety.
Cai, Xiaodong, Ph.D.	Professor	Electrical and Computer Engineering	Cancer Control	Bioinformatics, Computational biology, Cancer genomics, Machine learning, Statistics	Develop machine learning algorithms and computer programs to analyze (big) data in cancer genomics, particularly those related to DNA sequences, gene expression, alternative splicing, and DNA methylation; Design and analyze mathematical models for gene regulatory networks for identifying cancer driver; Develop computational method for chemical genomics to discover drug targets for cancer therapy
Calfa, Carmen J., M.D.	Assistant Professor	Medicine	Non-Aligned	Immunity, Breast Cancer, Breast cancer prevention, Her 2 positive breast cancer	Dr. Calfa is a triple board-certified breast medical oncologist and has been recognized for her clinical care and research. She is an assistant professor of clinical medicine at the University of Miami Miller School of Medicine. At Sylvester, Dr. Calfa works as part of a multidisciplinary team of breast cancer experts and researchers. She earned her medical degree from the University of Medicine and Pharmacy of Tirgu-Mures in Romania.
Capobianco, Anthony, Ph.D.	Professor	Surgery	Tumor Biology	Notch signaling, DSL proteins, Jagged1, Signal transduction	Dr. Capobianco's lab is focused on the discovery and development of novel cancer therapeutics targeting critical nodes in the Notch and Wnt Pathways.

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Carcioppolo, Nicholas, Ph.D.	Assistant Professor	Communications	Cancer Control	indoor tanning, UV exposure, HPV prevention, entertainment education, persuasion	Dr. Carcioppolo's research involves the development and assessment of persuasive messaging interventions to increase cancer prevention and screening behaviors. Much of his work in cancer prevention is on UV exposure, including both indoor and outdoor tanning behavior. As a behavioral scientist, he is particularly interested in nontraditional media including entertainment education and game-based interventions.
Carrasquillo, Olveen, M.D., M.P.H	Professor	Medicine	Cancer Control	Health disparities, Hispanics, Community healthcare workers, Cervical cancer, Community based participatory research	Dr. Carrasquillo is national expert in minority health, health disparities, community based participatory research, access to care and community health worker interventions. He has over twenty years of experience leading large NIH Center grants and randomized trials, totaling over \$40 million in funding. His work includes research in cancer, diabetes, cardio-vascular disease, HIV, and most recently in precision medicine.
Carrico, Adam W., Ph.D.	Associate Professor	Public Health Sciences	Cancer Control	Behavioral Interventions, Immune Activation, Inflammation, Microbiome, Substance Use	Dr. Carrico's ICARUS laboratory aims to develop and test interventions that address the biopsychosocial vulnerabilities to optimizing HIV/AIDS prevention, addressing substance use and misuse, and supporting cancer prevention in marginalized populations. A major focus of his research program has been documenting the biological pathways whereby psychological factors and substance use could increase risk for negative health outcomes. Most recently, this work includes studies examining leukocyte gene expression and microbiome-gut-brain axis.
Carver, Charles, Ph.D.	Professor	Psychology	Cancer Control	Positive affect, Affect regulation, Quality of life, Cognitive-behavioral stress management (CBSM) intervention, Psychosocial adaptation indicators	Role of psychosocial variables in cancer morbidity and quality of life in cancer patients, in terms of emotional disturbance, psychosexual disturbance, and disruption of normal life activities.
Castillo, Rosa, M.D.	Assistant Professor of Clinical	Radiology	Non-Aligned	Colorectal cancer, prostate cancer, Gynecology cancer	Lead the radiology research clinic, providing radiologic assessment of tumor in patients included in clinical trials.
Celik, Emrah, Ph.D.	Assistant Professor	Mechanical & Aerospace Engineering	Non-Aligned	Circulating tumor cell (CTC), Biophysics, Cytoskeletal rearrangement, Cell adhesion, Atomic force microscopy	Involve in research related to GYO and GI as well as Prostate cancer
Chapman, Jennifer R., M.D.	Associate Professor of Clinical	Pathology	Tumor Biology	reproducible lymphoma classification, disease risk stratification, target therapy assessment	Identification of the role of viruses and immunodeficiency in lymphomagenesis; Identification of biomarkers that are useful in: A) reproducible lymphoma classification B) disease risk stratification and C) target therapy assessment.
Chen, Xi, Ph.D.	Associate Professor	Public Health Sciences	Cancer Control	Genomics, Biostatistics, Bioinformatics	Dr. Chen's research is focused on statistical genomics and bioinformatics for cancer research, especially developing and applying innovative statistical and bioinformatics methodology to facilitate translational genomic research from bench to clinic. The long-term goal of Dr. Chen's research is to help understand the complex diseases at system level by integrating multidimensional omics data including genomics, genomics, epigenomics, proteomics and phenotype data.
Chen, Zhibin, M.D., Ph.D.	Associate Professor	Microbiology and Immunology	Tumor Biology	Autoimmunity, Inflammation, Cytokines, Tumorigenesis, Aging, Transdifferentiation, Premalignancy, Transcriptome, Alternative Splicing, Epigenetic, Transgenic Model.	Dr. Chen's laboratory studies immunological mechanisms and interventions of cancer. Their focus is on the double-edged role of autoimmunity and inflammation in cancer development and tumor killing, with a particular interest in age-associated tumorigenesis. They build animal models to mimic the genetic and genomic risks of human cancers, examine the cause and effect in tumorigenesis at molecular, cellular and systems levels, identify potential biomarkers of cancer development, and test potential interventions for cancer prevention and treatment.
Cho, Jeong H., M.D., Ph.D.	Associate Professor	Pathology	Non-Aligned	Melanoma, Borderline Melanocytic lesions, Molecular Pathology, Cutaneous Lymphoma	Melanoma and Melanocytic lesions, Molecular Pathology, Cutaneous Lymphoma
Civantos, Francisco J., M.D.	Professor	Medicine	Non-Aligned	Head & neck/skull base surgery; Evaluation of radionuclide guided sentinel node biopsy as a technique for determining risk of cancer metastases in cervical lymph nodes	Head & neck/skull base surgery; Evaluation of radionuclide guided sentinel node biopsy as a technique for determining risk of cancer metastases in cervical lymph nodes
Collins, Kevin M., Ph.D.	Assistant Professor	Biology	Non-Aligned	Neuroendocrine, calcium, signaling, neurobiology, development	Dr. Collin's group is interested in the molecular and cellular mechanisms that regulate neural circuit development and modulation of activity. They use the nematode <i>Caenorhabditis elegans</i> as a model system. They are interested in using the unique genetic tools available in <i>C. elegans</i> to define how TGFbeta, EGF, Gq, Go, and lipid signaling regulate reproductive behaviors.
Cote, Richard J., M.D.	Professor	Pathology	Tumor Biology	cancer circulating tumor cells, CTCs, nanotechnology, biomedical nanotechnology, pathology, micrometastases, breast tumors, genitourinary tumors, nanofabrication, bionanosensors, lung cancer, breast cancer, bladder cancer	Dr. Cote's research is focused on the elucidation of cellular and molecular pathways of tumor progression and response to therapy. He has special interests in micrometastases detection and characterization and in the pathology of breast and genitourinary tumors. His laboratory is also focused on the development of immunohistochemical and molecular methods, nanoscale technologies for cancer diagnostic applications, and technologies for the capture and characterization of circulating tumor cells.
D'Urso, Gennaro, Ph.D.	Associate Professor	Molecular and Cellular Pharmacology	Tumor Biology	Cell Cycle, DNA polymerase, Checkpoint, Replication, Yeast	Cell Cycle Control of DNA Replication. Understanding how DNA synthesis is regulated during the eukaryotic cell cycle
Daunert, Sylvia, Ph.D.	Professor	Biochemistry & Molecular Biology	Tumor Biology	Not Provided	Dr. Daunert's Lab is developing new molecular diagnostics tools employing nanotechnology approaches as well as nanocarrier-based targeted drug delivery platform with potential applications in cancer therapy.
Davis, Joanna, M.D.	Associate Professor	Pediatrics	Non-Aligned	Hemophilia treatment center, Women's bleeding disorders	Hemostasis and thrombosis
Dawra, Rajinder K., Ph.D.	Research Associate Professor	Surgery	Tumor Biology	Acute Pancreatitis, Chronic Pancreatitis, Inflammation and pancreatic Cancer	Dr. Darwa's research focuses on acute and chronic pancreatitis. This involves understanding the mechanism of the disease and evaluation of the potential therapeutics using experimental models of the disease. Another area of interest is to understand the role of chronic pancreatic inflammation in promoting pancreatic cancer.
De la Fuente, Macarena, M.D.	Assistant Professor	Neurology	Cancer Epigenetics	Primary brain tumors: Glioblastoma, Glioma, Ependymoma, Neurocytoma, Meningioma, Ganglioglioma	Dr. De la Fuente's research focuses on translational research as well as the development of clinical trials for primary brain tumors, particularly, low-grade glioma and glioblastoma. She is currently leading collaborative, multicenter, national and international trials for primary brain tumors. In addition to the development of clinical trials, her research interest focuses on IDH-mutant glioma, specifically investigating radiographic biomarkers for these tumors.
Deleo Hurley, Judith, M.D.	Professor	Medicine	Cancer Control	Breast cancer, HIV malignancies, Disparities in breast cancer outcomes, Stage of presentation, Neoadjuvant therapy	Breast cancer; HIV malignancies; Cancer in pregnancy
De Lima Lopes, Gilberto, M.D.	Associate Professor of Clinical	Medicine	Cancer Control	Clinical trials, Translational research, Health economics, Outcomes research, Global oncology	Dr. De Lima Lopes' work on developing new drugs to treat cancer, designing, leading and participating in phase I through IV clinical trials. He has helped bring a number of novel cancer therapies into the clinic. He also lead the area known as Global Oncology, in which we perform health economics and outcomes research, policy studies and others that aim to improve cancer prevention, diagnosis and treatment around the world. He is the Editor-in-Chief for the specialized Journal of Global Oncology, which is the main source for Global Oncology studies.
Deo, Sapna, Ph.D.	Professor	Biochemistry & Molecular Biology	Tumor Biology	DNA and RNA Diagnostic, Biosensors, Paper microfluidic, Bionanotechnology, Targeted drug and DNA delivery, Imaging	Emerging technologies for cancer diagnosis; Development of point of care HPV test for cervical cancer screening; MicroRNA analysis and detection
Desrosiers, Ronald C., M.D., Ph.D.	Professor	Pathology	Non-Aligned	Viruses, AIDS, Cancer, Vaccines, Persistence	Oncogenic herpesviruses; The Kaposi sarcoma herpesvirus (KSHV); Mechanisms of viral persistence, immune evasion, and pathogenesis; Use of recombinant herpesviruses toward development of a protective vaccine against HIV/AIDS.
Dhabhar, Firdaus S., Ph.D.	Professor	Psychiatry & Behavioral Sciences	Cancer Control	Psychological/physical/physiological stress, Psycho-neuro-endocrine-immunology, Anxiety & depression, Skin cancer, Eustress/distress, Breast cancer, Squamous cell carcinoma	Dr. Dhabhar is interested in basic and clinical research on: 1) How stress-related immune, endocrine, physiological and psychological mechanisms can affect cancer progression, treatment effectiveness, and survivorship. 2) Mechanisms mediating the effects of stress on cancer prevention efforts. 3) Cancer and cancer treatment related psychological & physiological stress effects.
Dhar, Shanta, Ph.D.	Associate Professor	Biochemistry & Molecular Biology	Tumor Biology	Nanotherapeutics, Chemotherapy, Mitochondrial Medicine, Cisplatin, Combination Therapy	Dr. Dhar's research interests lie at the interface of chemistry and biology with particular emphasis on nanocarrier mediated intracellular delivery of payloads for potential applications in various diseases. Their research is directed to develop organelle targeted nanoparticles and to study nanoparticle assisted targeted delivery for possible applications in cancer, cardiovascular and neurodegenerative diseases. Dr. Dhar's lab develops technologies that use a combination of conventional methods of cancer treatment and immunotherapy in a single nanoparticle platform.
Dogan, Nesrin, Ph.D.	Professor	Radiation Oncology	Non-Aligned	IGRT, IGART, Deformable Image Registration, Image Guidance, Cone Beam CT	Image Guided Adaptive Radiation Therapy
Donna, Elio, M.D.	Associate Professor of Clinical	Medicine	Non-Aligned	Member, Thoracic Oncology Tumor Board, EBUS-TBNA, Granulomatous inflammation	Role of different modalities of bronchoscopy in lung cancer
Dudeja, Vikas, M.D.	Assistant Professor	Surgery	Tumor Biology	Acute and Chronic Pancreatitis, Pancreatic cancer, Metastases, tumor microenvironment, circulating tumor cells,	Dr. Dudeja is evaluating the role of tumor microenvironment in pancreatic cancer metastases and progression. The Dudeja group/Es preliminary studies suggest that lack of NFKappa B in tumor stroma markedly reduces tumor growth of pancreatic cancer, and their preliminary data also suggest that NFKappaB in tumor stroma protects cancer cells from immune mediated cell death. They are also evaluating the cross talk between the tumor cells and stroma which mediates these effects. Additionally, to better understand tumor stroma, they are studying chronic pancreatitis, as the stroma observed in pancreatic cancer is very similar to that observed in chronic pancreatitis. Understanding the similarities and differences will help them devise strategy to modulate stroma for therapeutic gain.
Elgart, George, M.D.	Professor	Dermatology & Cutaneous Surgery	Non-Aligned	Not Provided	Auto immune blistering diseases, melanoma, immunodermatology & dermatopathology

Name	UM Title	Primary Department	Research Program	Keywords	Major Interests
El-Rifai, Wael, M.D., Ph.D.	Professor	Surgery	Tumor Biology	gastric, esophageal, redox, oxidative stress, drug resistance, targeted therapy	Dr. El-Rifai's laboratory provides unique training experiences in diverse areas of cancer research that include molecular mechanisms of tumorigenesis, drug resistance, and targeted therapy. His research utilizes functional and translational oncogenic approaches in upper gastrointestinal carcinomas. Dr. El-Rifai's research investigates the roles of infection, inflammation and oxidative stress in tumorigenesis for the development of therapeutic approaches target redox vulnerabilities in cancer cells.
Ezuddin, Shabbir, M.D.	Associate Professor	Radiology	Non-Aligned	Not Provided	All aspects of nuclear medicine including diagnostic imaging and radiotherapy
Farooq, Amjad, Ph.D.	Associate Professor	Biochemistry & Molecular Biology	Non-Aligned	Biophysical and in silico approaches, Protein structure, Protein modeling, Drug design, Drug repurposing, Virtual screening, Human Genomics.	Dr. Farooq's laboratory applies a wide variety of biophysical methods to study the basic mechanisms driving protein-ligand interactions in the context of cellular processes pertinent to human health and disease. Importantly, in the wake of ever rising costs coupled with lengthy clinical trials associated with de novo drug design, his research efforts are also directed toward repurposing old or existing drugs for new indications for which no other therapeutic alternatives are available on the basis of structure-based rational approach.
Feaster, Daniel, Ph.D.	Professor	Public Health Sciences	Cancer Control	HIV, substance use, mental health, HCV, PrEP, heterogeneity of treatment effects	Dr. Feaster's work on interventions to counteract the impact of substance abuse and mental health issues on the HIV treatment and prevention care cascades and improve health outcomes and service use in these individuals. He also focuses on implementation research on how to best disseminate evidence-based interventions in these areas. Dr. Feaster also works to develop methods and approaches to predict treatment response and explain treatment heterogeneity.
Fernandez, Gustavo, M.D.	Associate Professor of Clinical	Medicine	Non-Aligned	Sarcoma, Bladder, Prostate neoadjuvant chemotherapy, Targeted therapy	GU and Sarcomas
Feun, Lynn G., M.D.	Professor	Medicine	Non-Aligned	melanoma, skin cancers hepatocellular carcinoma liver cancer	Clinical research in melanoma , skin cancers and hepatocellular carcinoma
Figueroa, Maria E., M.D.	Associate Professor	Human Genetics	Cancer Epigenetics	Epigenetics, DNA methylation, chromatin, hydroxymethylation, hematopoiesis, acute leukemias, myelodysplastic syndromes, aging	The Figueroa lab studies the role of epigenetic modifications in transcriptional regulation during normal and malignant hemopoiesis. Our focus is mainly on how changes in normal DNA methylation and hydroxymethylation patterns occur during malignant transformation and how these changes may contribute to the leukemogenic process. We use a combination of computational approaches based on genome-wide next generation sequencing data as well as in vitro and in vivo modeling to determine the consequences of the epigenetic lesions that we have identified.
Fischl, Margaret, M.D.	Professor	Medicine	Cancer Control	Not Provided	Research, prevention, and treatment of HIV and AIDS in men, women, and children. Kaposi's sarcoma.
Fishman, Joel E., M.D., Ph.D.	Professor	Radiology	Non-Aligned	Lung cancer, CT, Screening, Cardiomyopathy, Stem cell therapy	Lung cancer screening with CT and infections in immunocompromised patients (incl BMT)
Ford, John C., Ph.D., MBA	Assistant Professor of Clinical	Radiation Oncology	Tumor Biology	MRI, image guided radiation therapy, radiomics, texture analysis, preclinical	1) Development of a MRI image guidance for a small animal irradiator. 2)Applications of MRI to characterize tumor heterogeneity and correlate various radiomic MR image features with cancer treatment response.
Fornoni, Alessia, M.D., Ph.D.	Professor	Medicine	Tumor Biology	proteinuria podocytes insulin signaling lipid biology kidney diseases	Mechanisms of drug induced kidney injury Multiple myeloma and amyloidosis
Franceschi, Dido, M.D.	Professor of Clinical	Surgery	Non-Aligned	Not Provided	Dr. Franceschi's research interests include foregut surgery, primary and metastatic liver disease, pancreas cancer, and breast cancer.
Franzmann, Elizabeth J., M.D.	Associate Professor	Otolaryngology	Cancer Control	squamous cell carcinoma, oral cancer, oropharyngeal cancer, early detection, HPV, point of care test, optical imaging, commercialization, companion diagnostic, CD44, protein, p16 cancer stem cell	Dr. Franzmann's group has invented an inexpensive and noninvasive oral rinse screening test that helps distinguish individuals harboring molecular features associated with oral cancer from the billions at risk of disease due to tobacco, alcohol, and the HPV virus. Her research interests include human oral cancer risk, prevention, and treatment. Her researchers focus on characterizing salivary molecular markers for application as inexpensive and noninvasive early detection tests and investigating CD44 as a potential target for oral cancer therapy.
Galoian, Karina, Ph.D.	Research Associate Professor	Orthopedics & Rehabilitation	Non-Aligned	Signal transduction, Cell cycle, Neuropeptides, Sarcoma, miRNA	Molecular signal transduction mechanism of metastasis and cancer, neuropeptides and cancer inhibition m cancer stem cells, Epigenetics, cell adhesion , miRNA and stem cell markers
Garcia-Buitrago, Monica T., M.D.	Professor of Clinical	Pathology	Non-Aligned	Immunohistochemistry, Tumor biology, Pancreatic neoplasms, Gastrointestinal neoplasms, Hepatobiliary neoplasms	Immunohistochemistry and molecular biomarkers in gastrointestinal, pancreatic and hepatobiliary neoplasms.
Garrido, Jose, M.D.	Associate Professor	Medicine	Non-Aligned	Not Provided	Not Provided
George, Sophia, Ph.D.	Research Assistant Professor	Obstetrics & Gynecology	Cancer Control	Fallopian Tubes, Ovarian Cancer, Hereditary Breast and Ovarian Cancer, Caribbean women, BRCA1/2, PALB2, RAD51, Homologous Recombination Deficiency	Dr. George's precision prevention research examines the incidence and prevalence of hereditary breast and ovarian cancer syndrome in women from the Caribbean. Ovarian cancer, starts in the Fallopian tube epithelia (FTE), so she and her researchers use these FTE cells to study the biology of early genomic changes that lead to cancer including a detailed characterization of pro-tumorigenic metabolic and oxidizing insults.
Gilboa, Eli, Ph.D.	Professor	Microbiology and Immunology	Tumor Biology	RNA therapeutics, neoantigens, murine tumor models, T cell immunity	Develop a combinatorial approach to cancer immunotherapy of novel high-impact treatments evaluated in advanced murine tumor models. A main focus is to induce neoantigens in concurrent, and future tumors do treat patients in remission and individuals at high risk of developing cancer. A second and complementary approach Dr. Gilboa's team is developing to enhance the uptake of the neoantigen-engineered tumor cells by the dendritic cell system by coating the tumor cells in situ with endogenous naturally occurring polyclonal antibodies.
Goldschmidt-Clermont, Pascal J., M.D.	Professor	Medicine	Tumor Biology	Coronary Artery Disease, Endothelial Cell, Endothelium Vascular, Stem Cells, Artherosclerosis	Dr. Goldschmidt-Clermont research involves the role of endothelial progenitor cells (EPCs) and their potential role in aging and arterial repair, specifically collaborating with Dr. Enrique A. Mesri, Ph.D. to study KSHV/ reactive oxygen species (ROS), to provide a description of ALDH as a novel EPC marker and promising studies showing the role of EPC in pathologic angiogenesis and cancer or autoimmune disease.
Goldstein, Bradley J., M.D., Ph.D.	Associate Professor	Otolaryngology	Non-Aligned	Olfaction, stem cells, neurogenesis, epigenetics, sinus	As an Otolaryngologist-head and neck surgeon, Dr. Goldstein treats a variety of disorders of the head and neck, including malignancies. His focus is on Rhinology, and my research interest involves renewal in the olfactory epithelium. Dr. Goldstein studies the stem cells in this neuroepithelium, which overlaps with ongoing work in cancer stem cells. Specifically, his is interested in epigenetic regulation of these cells and collaborate with cancer labs on this area.
Gomez-Fernandez, Carmen, M.D.	Professor	Pathology	Non-Aligned	Not Provided	Tumor Immunohistochemistry
Gong, Feng, Ph.D.	Associate Professor	Biochemistry & Molecular Biology	Cancer Epigenetics	DNA repair, Chromatin remodeling, Deubiquitination, SWI/SNF, BRCA1	Dr. Gong's laboratory investigates how DNA repair pathways operate in eukaryotic cells to remove DNA lesions from chromatinized DNA. They use budding yeast and cultured human cancer cells to examine the roles of histone modifications and chromatin remodeling in DNA repair. In addition, they are interested in the roles of deubiquitinating enzymes in the control of p53 stability.
Gonzalzo, Mark L., M.D., Ph.D.	Professor	Urology	Tumor Biology	Prostate, Kidney, Bladder cancer, Outcomes	Dr. Gonzalzo is also interested in understanding how ethnic disparities contribute to the burden of urologic malignancies. His team has published extensively on the molecular biology and early detection of prostate, bladder, and kidney cancer as well as on the impact of various clinical parameters on patient outcomes related to these diseases.
Goodman, Kenneth W., Ph.D.	Professor	Medicine	Non-Aligned	Ethics, Bioethics, Informatics, Epidemiology, End-of-life care	Ethical issues in health informatics; Epidemiology and public health; End-of-life care.
Goodman, Mark S., M.D.	Associate Professor of Clinical	Medicine	Non-Aligned	Hematologic malignancies, Leukemia, Lymphoma, Bone marrow transplant, Pharmacokinetics, Hematopoietic stem cell transplantation	The research and clinical interests of Dr. Goodman focus on hematologic malignancies, solid tumors, and bone marrow transplantation.
Goodwin, W. Jarrard, M.D.	Professor	Otolaryngology	Cancer Control	head and neck cancer, disparities, chemoprevention, surgical salvage, survivorship	Dr. Goodwin's research interests over the course of his career have included: Disparities in Head and Neck Cancer outcomes; Chemoprevention of Head and Neck Cancer; and Surgical salvage for patients with recurrent Head and Neck Cancer. Dr. Goodwin is also interested in Head and Neck Cancer survivorship.
Graham, Regina M., Ph.D.	Research Assistant Professor	Neurological Surgery	Non-Aligned	glioblastoma, neuroblastoma, cancer stem cell, nano particles, blood brain barrier, antipsychotics, medulloblastoma, imaging, radiotherapy, chemotherapy, natural products, pediatric cancer, brain tumor, receptor endocytosis	Dr. Graham's research focuses on brain tumors and neuroblastoma. She seeks to understand the role of cancer stem-like cells in treatment resistance and finding novel ways to target these cells, including natural products like curcumin and withaferin A. Also she is exploring the repositioning of FDA approved drugs such as antipsychotics for cancer treatment and is interested in integrating nano particles such as carbon dots, in cancer diagnosis and treatment.
Greidinger, Eric L., M.D.	Associate Professor	Medicine	Non-Aligned	Innate Immunity, Autoimmunity, Ribonucleoproteins, Viral latency, Toll-Like Receptors	Dr. Greidinger is interested in the roles of the innate and adaptive immune systems in the induction and tissue targeting of anti-self immune responses (including autoimmunity and anti-tumor immunity). He has a longstanding collaboration with Dr. Glen Barber related to this work.
Guan, Yongtao, Ph.D.	Professor	School of Business Administration	Cancer Control	spatial epidemiology, exposure traffic, cancer risk factors, biostatistics, longitudinal data analysis	Point processes, spatial-temporal processes, spatial epidemiology, longitudinal data analysis; Substantive: health care analytics, marketing analytics, spatial epidemiology.
Gultekin, Sakir, M.D.	Professor	Pathology	Non-Aligned	tumor marker, pathology, paraneoplastic, glioma, pituitary	Diagnostic and Prognostic Marker Development for Brain Tumors

Name	UM Title	Primary Department	Research Program	Keywords	Major Interests
Guy, John, M.D.	Professor	Ophthalmology	Non-Aligned	Mitochondria, AAV, LHON, Gene therapy	Somatic and germline mtDNA mutations have been reported for a wide variety of cancers. These include renal adenocarcinoma, colon cancer cells, head and neck tumours, astrocytic tumours, thyroid tumours, breast tumours, ovarian tumours, prostate and bladder cancer, neuroblastomas and oncocytomas. The identification of clearly deleterious mtDNA mutations in cancer tissues, such as an intragenic deletion or the common rRNA(LUUR) A3243G MELAS mutation validate the relevance of pathogenic mutations in neoplastic transformation. The importance of the mtDNA in cancer has been confirmed by the exchange of cancer cell mtDNA with pathogenic or normal mtDNA, resulting in alterations of cancer cell phenotypes. However, the strategy to correct the mtDNA mutation is inadequate, because of no procedure is thus far available for introduction of exogenous DNAs into mitochondria in living cells or even into isolated mitochondria. Dr. Guy and his group have developed a novel technology to redirect the adeno associated virus (AAV) virion to mitochondria rather than to its typical target, the nucleus, by addition of a mitochondrial targeting sequence (MTS) to the capsid, the protein shell of the virus and used it deliver mtDNA directly to mitochondria in adult mouse by using intraocular injection or mouse fertilized eggs by using microinjection. This innovative technology has implications for treating the cancer with gene therapy by bringing the mitochondrial bioenergetics and metabolism back to the normal level and preventing cells from initiating and/or sustaining the transformed state.
Harbour, J. William, M.D.	Professor	Ophthalmology	Cancer Epigenetics	ocular oncology, uveal melanoma, retinoblastoma, BAP1, SF3B1, EIF1AX, GNAQ, GNA11, CYSLTR2, PLCB4, PRAME, epigenetics, chromatin structure, histone modifications, enhancers	Dr. Harbour's laboratory works closely with the leading international ocular oncology referral center to elucidate the fundamental causes of the most common eye cancers in adults (uveal melanoma) and children (retinoblastoma). They use an integrative approach that includes genetic, epigenetic, genomic, transcriptomic and proteomic techniques. Discoveries from his laboratory are now driving clinical trials of prognostic biomarkers and targeted therapies around the world.
Hare, Joshua, M.D.	Professor	Medicine	Non-Aligned	Not Provided	Stem cells, cardiology regenerative medicine
Heller, Aaron, Ph.D.	Assistant Professor	Psychology	Cancer Control	Mobile Health (mHealth), Resilience, Social Engagement, Inflammation, Neuroimaging/Neuroscience	Dr. Heller's research combines neuroimaging, biomarkers (i.e., inflammation) and mobile technology (mHealth). Using these methods, his work to characterize associations between the brain circuits underlying emotion regulation and how individual differences in these brain circuits relate to real-world functioning. As a result, his central interests are to better characterize psychological health and resilience to improve interventions designed to attenuate depression and enhance resilience. Recently, he has begun to work with Mike Antoni in the Psychology department (CANCER CONTROL PROGRAM) to study how resilience emerges in patients diagnosed with breast cancer. They plan to collaborate with Dr. Bonnie Blomberg to conduct this work. In particular, this nascent work will utilize mobile technology to objectively and unobtrusively index breast cancer patient's behavioral, social, and emotional responses (mHealth) to cancer diagnosis and treatment as they play out in the real world using a combination of GPS, self-report and text messaging data. These mHealth measures will directly examine whether in-vivo behavior during cancer treatment is one pathway by which pre-existing traits predict better outcomes psychological and biological outcomes. Using mHealth to identify the profile of resilience can then inform intervention and follow-up decisions to facilitate the patient's psychosocial well-being and physical health during and after cancer treatment.
Heros, Deborah, M.D.	Professor	Neurology	Non-Aligned	GBM, Metastatic brain tumors, Malignant meningioma, Leptomeningeal cancer	To provide access of clinical trials to patients with primary and metastatic tumors to CNS, patients with Neurologic sequela of cancer, and to study quality of life measurements in this patient population.
Hoffman, James E., M.D.	Assistant Professor of Clinical	Medicine	Non-Aligned	Amyloidosis, Multiple myeloma, Plasma cell diseases, Monoclonal gammopathy, Paraproteinemia	Clinical research in the field of plasma cell disorders, such as amyloidosis and multiple myeloma
Holt, Gregory E., M.D., Ph.D.	Assistant Professor	Medicine	Non-Aligned	Lung cancer, Immunotherapy, DNA vaccines, Immunosuppression, Adenosine	Lung cancer immunotherapy
Hosein, Peter J., M.D.	Associate Professor of Clinical	Medicine	Tumor Biology	Pancreatic cancer, gastrointestinal cancer	Dr. Hosein is a clinical researcher focused on Gastrointestinal Cancers. He has been the principal investigator for multiple phase I and II clinical trials for patients with liver and pancreatic cancers conducted at the Sylvester Comprehensive Cancer Center. He has also participated as a co-investigator in national phase III clinical trials in pancreatic and colorectal cancers. His primary research interest is in neoadjuvant therapy for patients with localized pancreatic cancer, and novel therapies for metastatic pancreatic cancer.
Hu, Jennifer J., Ph.D.	Professor	Public Health Sciences	Cancer Control	DNA Repair, Polygenic Model, Genetic Polymorphisms, Genetic Epidemiology, Breast Cancer Disparities, Molecular Genetics of Triple Negative Breast Cancer in Tri-Racial/Ethnic Populations, Comprehensive and Alternative Medicine, Radiotherapy, Quality of Life	Dr. Hu research program mainly focuses on DNA repair pathways and immune/inflammatory responses in breast cancer risk, treatment responses, adverse responses, and survival disparities. Her current research has been devoted to translating cancer genomics to targeted intervention using multiple OMICs approaches to characterize metabolomics reprogramming and dysregulated cancer genomic pathways in breast cancer.
Hu, Shasha, M.D.	Associate Professor	Dermatology & Cutaneous Surgery	Cancer Control	Melanoma epidemiology, Delayed melanoma diagnosis, Racial disparities, Role of Vitamin D in melanoma, Non-Hodgkin's lymphoma	Skin cancer; Melanoma; Non-Hodgkin's lymphoma
Huang, Marilyn, M.D.	Associate Professor of Clinical	Obstetrics & Gynecology	Non-Aligned	Robotic surgery, Clinical trials, Experimental therapeutics, Gynecologic cancers	Clinical trials developmental/novel therapeutics and rare tumor
Hudson, Barry I., Ph.D.	Assistant Professor	Cell Biology	Tumor Biology	breast cancer, metastasis, receptors, signaling, S100s, DAMPs, RAGE, obesity, diabetes, inflammation	Dr. Hudson lab's research is focused on understanding the inflammatory mechanisms underlying breast cancer and the ultimate translation of these basic observations to human clinical studies. His research efforts have focused on the inflammatory role of the Receptor for Advanced Glycation End-products (RAGE) and its ligands (AGEs, s100s and HMGB1) in diabetes, obesity, and breast cancer.
Ikpat, Offiong F., M.D., Ph.D.	Associate Professor	Pathology	Non-Aligned	Tumor microenvironment, NK cells, Macrophages, T regs, Lymphoma, Breast cancer	Tumor microenvironment; Lymphoma; Breast cancer
Ikpeazu, Chukwuemeka V., M.D., Ph.D., MBA	Associate Professor	Medicine	Non-Aligned	Not Provided	Dr. Ikpeazu's research interest is in lung cancer, head & neck cancer, thyroid cancer, and melanoma. Currently, He is the PI for several clinical trials in Lung and Head & Neck Cancers.
Ince, Tan A., M.D., Ph.D.	Research Professor	Pathology	Tumor Biology	Epigenetics, breast cancer, ovarian cancer, cancer stem cells, estrogen hormone, androgen receptor, Vitamin-D receptor, HSF-1, cell culture	1. Development of cell culture technology: Dr. Ince's laboratory develops new nutrient media to establish primary human cell lines from patients for precision oncology applications and drug discovery. 2. Epigenetic regulation of stem cells: They discovered that human breast and ovarian cancer stem cells are regulated epigenetically by HDAC7. 3. Multiplexing prognostic and therapeutic proteins: They found that the combined expression of AR/VDR/ER predicts 6.9 fold better survival for breast cancer.
Ishwaran, Hemant, Ph.D.	Professor	Public Health Sciences	Cancer Control	Random Forests, Staging, Cancer genomics, Big data, Software	Cancer Staging; Cancer Genomics; Clinical Models
Isom, Daniel G., Ph.D.	Assistant Professor	Molecular and Cellular Pharmacology	Tumor Biology	acidosis, cell signaling, G protein-coupled receptors	The Isom Lab studies proteins and cell-surface receptors that detect and transduce cellular signals. In certain biological scenarios—cancer, hypoxia, nutrient stress, inflammation, endocytosis—these signaling proteins encounter acidic conditions. The Isom Lab uses experimental and computational approaches to understand how signaling proteins and their constituent networks are regulated by such pH changes.
Ivan, Michael E., M.D.	Assistant Professor	Neurological Surgery	Tumor Biology	Glioblastoma, glioma, Acoustic neuroma, meningioma, pituitary adenoma, brain metastasis, patient derived xenograft, stem cells, tumor invasion, lncRNA, tumor microenvironment, laser therapy, fluorescence guided therapy, immunotherapy, brain tumor vaccine, tumor checkpoint inhibitor	The primary focus of Dr. Ivan's clinical, academic, and research interests has been on the developing novel biomarkers, drug delivery methods, and treatments for brain tumors. His post-doctorate work focused on the role of glioma pathogenesis and invasion, and most recently he is investigating the epigenetic landscape of gliomas. Clinically his research also focuses on minimally invasive brain tumor management with state of the art treatments, including endoscopic approaches, laser interstitial thermal therapy, and fluorescence guided therapies.
Jagid, Jonathan R., M.D.	Associate Professor	Neurological Surgery	Non-Aligned	Not Provided	General neurosurgery; Neuro-oncology; Neuroprotection
Jahanzeb, Mohammad, M.D.	Professor of Clinical	Medicine	Non-Aligned	Not Provided	Hematology/oncology; Special interest in malignant disorders of the breast and lung
Jaimes, Natalia, M.D.	Assistant Professor	Dermatology & Cutaneous Surgery	Cancer Control	melanoma, early detection, Hispanics, dermoscopy, total body photography, skin cancer, nevus	Dr. Jaimes's research interests include: Melanoma, non-melanoma skin cancer, nevi, and non-invasive imaging techniques (i.e. dermoscopy, total body photography, confocal microscopy) to improve early detection, disparities of melanoma among Hispanics, education as a means to improve try and Zry prevention of skin cancer.
Jha, Amishi P., Ph.D.	Associate Professor	Psychology	Cancer Control	Mindfulness, Compassion, Resilience, Cognitive neuroscience, Attention	Dr. Jha's primary research interests include attention, working memory, and mindfulness training. However, there are key areas in which a collaboration with the SCCC would be fruitful as it relates to prevention and survivorship. For example, they are actively involved in a project with Miami-Dade Fire Rescue investigating the effectiveness of mindfulness training on firefighter resilience, which could relate to current SCCC work with firefighters.
Jiang, Xiaoyu, Ph.D.	Research Assistant Professor	Medicine	Non-Aligned	Lymphoma, B lymphocyte, BCR, Motility, HGAL	Functional study of germinal center specific gene HGAL in B cell and B cell lymphoma; Cellular signaling pathways profiling; Tumor antigen identification; Tumor and its micro-environment crosstalk; Tumor metastasis and dissemination;

Name	UM Title	Primary Department	Research Program	Keywords	Major Interests
Jimenez Jimenez, Antonio M., M.D.	Assistant Professor	Medicine	Non-Aligned	AML, Relapse, FLT3-TD, Cytogenetics, Transplantation	Dr. Jimenez Jimenez's area of clinical and research interest is the use of hematopoietic stem cell transplantation (HSCT) and cell therapy for management of high-risk acute leukemias (myeloid and lymphoid) and myelodysplastic syndromes/ myeloproliferative neoplasms (MDS/MPN). Additionally, he is interested in assessing genetic factors that predict post-transplant relapse and strategies to minimize or manage this complication. As a faculty member at Sylvester Cancer Center, Dr. Jimenez Jimenez is very interested in evaluating transplant outcomes for AML/ALL/MDS patients at their institution but most importantly develop strategies to improve clinical outcomes and help transplant recipients to achieve durable remissions. During his HSCT fellowship training, Dr. Jimenez Jimenez focused on developing a combined genetic prognostic model to predict clinical outcomes in acute myeloid leukemia patients receiving consolidation with allogeneic HSCT. Findings from this project led to peer-reviewed publications and presentations and created a risk-stratification foundation to conduct and design future interventional trials in high-risk AML patients
Jones, Patricia D., M.D.	Assistant Professor	Medicine	Cancer Control	hepatocellular carcinoma, disparities, chronic liver disease, race, implementation, dissemination, viral hepatitis, cirrhosis, liver cancer.	Dr. Jones research program aims to better understand and attenuate disparities in chronic liver disease and hepatocellular carcinoma (liver cancer). In current projects, they are investigating the needs of patients, the surrounding community and healthcare providers in an effort to build interventions that increase screening for underlying liver disease and hepatocellular carcinoma. Ultimately, the goal of our work is to improve delivery of healthcare to populations that are disproportionately affected by liver disease and have reduced survival.
Jorda, Merce, M.D., Ph.D.	Professor	Pathology	Tumor Biology	Carcinoma, Breast carcinoma, Soft tissue sarcomas, Genitourinary tract malignancies, Tumor markers, Prognosis, Diagnosis, p63 immunocytochemistry, Cytology, Cytopathology, Immunocytochemistry, Biopsy, Fine-needle biopsy, Cytological techniques	Dr. Jorda's research interests include: Diagnostic molecular pathology immunohistochemistry, prostatic cancer, sarcoma and breast cancer; Dr. Jorda's clinical interests include: Genitourinary pathology, breast pathology and soft tissue sarcomas. Dr. Jorda is interested in all clinical and anatomic pathology fields; however, her expertise is focused on clinical and anatomical aspects of genitourinary tract malignancies, breast carcinoma and soft tissue sarcomas.
Jurecic, Roland, Ph.D.	Associate Professor	Microbiology and Immunology	Tumor Biology	Cancer, chemotherapy, inflammation, hematopoiesis, stem cells, immune system, Infections, autoimmunity	Dr. Jurecic studies the characterization of cancer and chemotherapy-induced acute and long-term adverse effects on the function of the hematopoietic and immune systems in cancer patients and cancer survivors. He also aims to develop and test new therapeutic approaches to improve hematologic and immune competence of cancer patients and cancer survivors by attenuating or preventing acute and chronic adverse effects of cancer and chemotherapy. His research also explores the function of HSCs and hematopoietic and immune systems under stress and injury conditions (cancer, chemotherapy, infections).
Kasahara, Noriyuki, M.D., Ph.D.	Professor	Cell Biology	Tumor Biology	Cancer gene therapy, Oncolytic virotherapy, Immunotherapy, Genetic engineering, Stem cells	Translational development of gene therapy & oncolytic virotherapy for cancer; Development of adoptive immunotherapy and genetically engineered cell vaccines for cancer; Genetic engineering of hematopoietic stem cells for post-transplant chemoselection in vivo
Kava, Bruce R., M.D.	Professor	Urology	Tumor Biology	Not Provided	Prostate and bladder cancer; Male and female sexual dysfunction
Kesmodel, Susan B., M.D.	Associate Professor	Surgery	Cancer Control	Breast cancer, neoadjuvant endocrine therapy, obesity and breast cancer, inflammation and breast cancer, adherence to endocrine therapy	As a surgical oncologist with a specialty practice in breast cancer and melanoma, Dr. Kesmodel is focused on advancing knowledge of breast cancer and melanoma treatment by promoting clinical trial development and translational research. Her research interests include optimizing local-regional therapy for patients with breast cancer and melanoma and optimizing systemic therapy to improve both surgical and long-term outcomes. Dr. Kesmodel is particularly interested in the use of neoadjuvant endocrine therapy for breast cancer patients not only to improve surgical outcomes and provide prognostic information, but to evaluate response to new therapies, to optimize treatments that are currently available, and to investigate patient and tumor factors that result in endocrine therapy resistance. Her current research focuses on obesity and response to endocrine therapy.
Khan, Wasif, Ph.D.	Professor	Microbiology and Immunology	Tumor Biology	Non-Hodgkin's diffuse large B cell lymphomas (DLBCLs), Protein tyrosine kinase Btk, Signal transduction, B cell receptor (BCR) B cell activating factor receptor (BAFF-R), Toll-Like Receptor (TLR), Transcription factor NF-κB	Not Provided
Kim, Soyeon, Ph.D.	Assistant Professor	Communications	Cancer Control	Cancer disparities, Neighborhood effects, Multilevel modeling, Health message design and evaluation, Approach-avoidance motivations	Dr. Kim's interest in cancer research centers on examining the individual- and community-level factors that influence cancer prevention efforts to reduce cancer disparities among underserved populations. Specifically, her focus is on designing and evaluating intervention messages and channel strategies that are tailored to the psychosocial and behavioral attributes of target individuals while considering contextual barriers that may also critically influence their health choices and outcomes, including neighborhood structures (e.g., demographic and socioeconomic compositions, access to healthcare facilities) and social capital (e.g., social network, support, and information flow) within the communities in which the individuals live and interact with others.
Kim, Youngmee, Ph.D.	Professor	Psychology	Cancer Control	quality of life, survivorship, caregivers, patient-caregiver dyadic stress regulation, sociocultural investigation, global psycho-oncology	The primary goals of the UM FAMILY (Facilitating Adjustment to Medical Illness in Your family) research lab are: 1. To examine the psychosocial, physical, and spiritual impact of cancer on the family and develop programs and services to assist families in meeting their needs. 2. To investigate psychosocial and biobehavioral mechanisms of impact of cancer linking to the health of the patients and their family members/caregivers. 3. To promote healthy lifestyle behaviors among cancer survivors and their family and friends.
King, Mary Lou, Ph.D.	Professor	Cell Biology	Cancer Epigenetics	Xenopus, Uveal melanoma, Breast cancer, Stem cells, Germ cells	Molecular Developmental Biology. Study genetic pathways that determine how an embryo will be organized. Study of gene regulations to understand how organ systems are set up in the early embryo and how germ cells maintain their ability to give rise to all tissue systems. These questions are important to transplant biology. (frogs)
Kirsner, Robert, M.D., Ph.D.	Professor	Dermatology & Cutaneous Surgery	Non-Aligned	skin cancer, treatment of skin cancer, epidemiology of skin cancer	Dr. Kirsner has a doctorate in Epidemiology, and his primary interest related to cancer research is skin cancer epidemiology. He has been involved with studying primary and secondary prevention of skin cancer, the pathophysiology of skin cancer and novel treatments for skin cancer. Currently, they are evaluating the DNA repair mechanisms in patients with skin cancer, using novel vaccine therapy to prevent and treat skin cancer and evaluating risk factors for skin cancer among high risk patients and where skin cancer disparities exist.
Knaul, Felicia M., Ph.D.	Professor	Public Health Sciences	Cancer Control	Health systems; diagonal approach; palliative care and pain control; women's cancers; cancer divide	1. Lead author of Closing the Cancer Divide: An Equity Imperative and Secretariat of the Global Task Force on Expanded Access to Cancer Care and Control (GTF. CCC) in developing countries. The term "cancer divide" stems from the severe disparities in the way cancers affect the rich and poor, and this book provides evidence of research across the different facets of this phenomenon. The facets are comprised of (1) risk factors associated with cancers amenable to prevention through behavior change (e.g., smoking and lung cancer) or reduced exposure to environmental risk (e.g., indoor air pollution and lung cancer), (2) preventable infections for which no vaccine exists that are associated with cancer (e.g., HIV/AIDS and Kaposi's sarcoma) and infections that can be prevented through vaccination or detected and controlled in pre-cancerous stages (HPV and cervical cancer), (3) cancers for which treatment exists and is often made more effective by early detection (e.g., breast cancer), (4) suffering associated with the social and psychological aspects of disease or survivorship, including discrimination and stigma, and (5) pain and physical suffering associated with all cancers, including those for which neither effective treatment nor prevention is possible. 2. Apply health systems perspective to chronic care management, using cancer as a tracer illness and by utilizing a diagonal approach (strengthening health systems while simultaneously focusing on disease-specific priorities) in order to address the cancer divide and expand cancer care and control globally. 3. Promote integration of women's cancers into women and health agenda (maternal & child health, sexual reproductive health), the broader global health agenda (NCDs and universal health coverage) and wider development agenda (sustainable development goals). 4. Value of cancer care and caring (from a patient engagement perspective).
Kobetz, Erin N., Ph.D., M.P.H	Professor	Medicine	Cancer Control	Cancer disparities, community based participatory research, Human Papillomavirus (HPV), cervical cancer, prevention and early detection	Dr. Kobetz employs participatory methodologies to engage diverse stakeholders in translational science to understand and address cancer disparities. She identifies multilevel determinants of disease risk, including HPV acquisition, and then develops innovative interventions to address such factors and their associated influence on cancer onset and progression.
Komanduri, Krishna, M.D.	Professor	Medicine	Tumor Biology	Allogeneic stem cell transplantation, Human CD4+ and CD8+ T cells, Graft-versus-host disease, Immune reconstitution, Regulatory T cell biology	Immune reconstitution after stem cell transplantation (SCT); Human T cell immunity to pathogenic viruses and fungi; Graft-versus-host disease (GVHD) and graft engineering
Komotar, Ricardo J., M.D.	Associate Professor	Neurology	Tumor Biology	Brain tumor, Patient derived brain tumor cell lines, Cancer stem cells, Off-label therapy	Development of individualized cancer therapy for brain tumor patients based on their genetic tumor profile.
Kruger Gray, Huw, Ph.D.	Research Assistant Professor	Cell Biology	Non-Aligned	Flow, cytometry, fluorescence, analysis, sorting.	Dr. Kruger Gray specializes in the provision of flow cytometry analysis and cell sorting services.
Kryvenko, Oleksandr N., M.D.	Associate Professor of Clinical	Pathology	Tumor Biology	Prostate cancer, Surveillance, Genitourinary, Biopsy, Prostatectomy.	Genitourinary Cancer; Prostate cancer, active surveillance and insignificant disease are Dr. Kryvenko's particular interests.
Kumar, Naresh, Ph.D.	Associate Professor	Public Health Sciences	Cancer Control	Environmental exposure, Real-time environmental surveillance, Hybrid approach to quantify exposure	Time-space clustering of cancer incidence; Mobile sensors and technologies in exposure avoidance; Exposure to persistent organic pollutants and cancer risks
Lampidis, Theodore, Ph.D.	Professor	Cell Biology	Non-Aligned	Hypoxia, Glycolysis, 2-deoxy-D-glucose, 2DG, Viral linked glycosylation, Anticancer agents, Glycolytic inhibitors, Up-regulation of GADD153	Cellular Pharmacology, Cardiotoxicity, Anti-cancer Drugs. The laboratory studies cellular biology and cellular pharmacology as it relates to mechanisms of drug selectivity in certain types of cancer and cardiac-muscle cells growing in vitro.

Name	UM Title	Primary Department	Research Program	Keywords	Major Interests
Landgraf, Ralf, Ph.D.	Associate Professor	Biochemistry & Molecular Biology	Tumor Biology	ERBB2/HER2, ERBB3/HER3, HSP90, Ubiquitination, Aptamers, Raft microdomains	The deregulation of ERBB (HER) receptor tyrosine kinases (EGFR, ERBB2, ERBB3 and ERBB4) is a widespread phenomenon in a broad range of cancers, but ERBB signaling has the potential to elicit cell proliferation, differentiation, migration and programmed cell death, depending on the signaling context.
Landy, Howard J., M.D.	Professor	Neurological Surgery	Non-Aligned	Stereotactic radiosurgery, Brain tumor, Meningioma, Vestibular schwannoma	Stereotactic radiosurgery for brain tumors
Lee, David J., Ph.D.	Professor	Public Health Sciences	Cancer Control	Tobacco control, Occupational health factors in cancer, Cancer risk factors, Occupational exposure, Second hand smoke, Smoking-associated cancer incidence and mortality rates	Research on the effects of occupation on health, including cancer incidence and mortality among firefighters in Florida. Tobacco control and cessation in high-risk populations (ex: construction workers, ethnic minorities in South Florida). Implementation of mindfulness training among teachers, students, and medical personnel and its effect on participant well-being. Ocular research among high-risk populations (ex: diabetics, ethnic minorities) and the impact of vision loss on morbidity and mortality.
Lee, Stephen, Ph.D.	Professor	Biochemistry & Molecular Biology	Tumor Biology	Tumor Microenvironment, Hypoxia, Oxygen, Protein Synthesis, HIF-2a, Long-noncoding RNA, DNMT3a, Epigenetics, VHL.	Understanding the mechanisms involved in cancer cell adaptation to the hypoxic tumor microenvironment more precisely on long non-coding RNA and the hypoxic protein synthesis pathway that both lay dormant in normal cells but are reactivated during early cancer cell adaptation to hypoxia.
Lekakis, Lazaros J., M.D.	Associate Professor of Clinical	Medicine	Non-Aligned	Allogeneic Hematopoietic stem cell Transplantation, Autologous Hematopoietic Stem cell Transplantation, Graft versus host disease, Lymphoma, Leukemia, Myeloma, Aplastic Anemia, Myelodysplastic Syndromes, Myeloproliferative Neoplasms, Cellular Immunotherapy, Chimeric Antigen Receptor T cell therapy (CAR-T cell therapy), Engineered T-cell receptor Cellular Immunotherapy	1) Novel clinical studies with CAR-T Cellular Immunotherapy in refractory lymphomas 2) Clinical trials in acute and chronic Graft Versus Host Disease 3) Mismatched Unrelated Allogeneic Stem Cell Transplantation 4) Prevention and Treatment of post-transplant relapse of leukemias and lymphomas
Lemmon, Sandra K., Ph.D.	Professor	Molecular and Cellular Pharmacology	Tumor Biology	membrane trafficking, endocytosis, endosome, lysosome, autophagy, clathrin, yeast genetics	Dr. Lemmon's laboratory is interested in the sorting and transport of proteins along the endocytic and secretory pathways. She has studied the function of clathrin and its adaptors in membrane traffic and phosphoregulation of endocytosis. She uses molecular genetics and live cell imaging of XFP-tagged proteins in the budding yeast model system to study mechanisms of endocytosis, biogenesis of the lysosome/vacuole, autophagy and transport between the ER and Golgi.
Lemmon, Vance P., Ph.D.	Professor	Neurological Surgery	Non-Aligned	Not Provided	Cancer vaccines; Axon Regeneration; Cell Adhesion Molecules; High Content Imaging, High Content Screening, Light Sheet Fluorescence Microscopy; Ontology Development and Informatics; Vaccine development
Lesiuk, Teresa L., Ph.D.	Associate Professor	Music	Cancer Control	Music therapy, Mindfulness, Chemo-brain, Attention, Mood, Breast cancer	Dr. Lesiuk's interest is in Music Therapy to improve attention (from 'chemobrain') and decrease symptom distress (anxiety, depression, tension) in women receiving adjuvant chemotherapy for breast cancer. Specifically, testing the efficacy of mindfulness-based music therapy to improve attention and decrease symptom distress.
Levi, Joe U., M.D., Ph.D.	Professor	Surgery	Non-Aligned	Hepato-Biliary-, Pancreatic Diseases, Tumor Treatment	Benign and malignant diseases of the liver, Biliary tree; Pancreas (whipple procedure); Lower esophagus; Stomach, colon laparoscopic gallbladder, and other general surgeries
Levis, Silvina, M.D.	Professor	Medicine	Non-Aligned	Osteoporosis, Calcium disorders, Vitamin D deficiency, Frailty	Osteoporosis/calcium disorders, geriatric endocrinology, vitamin D, frailty.
Levitt, Roy C., M.D.	Professor	Anesthesiology	Cancer Control	Not Provided	Dr. Levitt's laboratory has developed a multi-disciplinary team approach to understanding genetic mechanisms of susceptibility to persistent pain, including cancer pain. They plan to use these findings to replicate the resistant phenotype with novel pharmacologic approaches to treat cancer pain and other forms of chronic pain.
Levy, Robert B., Ph.D.	Professor	Microbiology and Immunology	Tumor Biology	Hematopoietic Stem Cell Transplantation ("HSCT" / "BMT"), Tumor immunology, Transplantation, Graft versus Leukemia, T cells	Dr. Levy's lab studies regulation of T lymphocyte responses to develop cell therapy strategies for improving hematopoietic stem cell transplantation HSCT. Using pre-clinical models of HSCT, we are developing translational approaches to suppress graft versus host disease (GVHD) while maintaining graft vs. tumor (GVL) responses. Promising combinatorial experimental regimens employ fusion proteins, antibodies, and reagents to manipulate Treg and T conventional cell numbers and function while inhibiting inflammatory pathways.
Lew, John I., M.D.	Professor of Clinical	Surgery	Non-Aligned	Thyroid cancer, Thyroid nodules, Parathyroid tumors, Adrenal tumors, Adrenal masses	Thyroid cancer (well differentiated including papillary, follicular); parathyroid tumors, adrenal diseases (pheochromocytoma, Cushing's and Conn's syndromes)
Li, Jie, M.D., Ph.D.	Associate Professor	Dermatology & Cutaneous Surgery	Non-Aligned	Laminin, Extracellular matrix, Angiogenesis, Metastasis, Skin cancer	Extracellular Matrix, Angiogenesis, Metastasis, Melanoma and Squamous cell carcinoma. Role of extracellular matrix in tumor angiogenesis and tumor metastasis.
Li, Wei, Ph.D.	Research Associate Professor	Ophthalmology	Tumor Biology	Cellular ligand, angiogenic factor, ligandomics, retinoblastoma, ocular tumor.	Dr. Li's lab has developed a new technology of "ligandomics" to systematically identify disease-specific cellular ligands, including angiogenic factors and cancer-binding ligands. They have used this new approach identify retinoblastoma (RB)-specific angiogenic factors. He has a pending R21 grant application to NCI to investigate RB-specific endothelial ligands, including angiogenic factors. This technology can also be used to systematically identify cancer-specific ligands that selectively binds to cancer cells but not healthy cells.
Lichtenheld, Mathias G., M.D.	Associate Professor	Microbiology and Immunology	Non-Aligned	Stat signaling pathway, Perforin, Cytotoxic lymphocytes, Multiple myeloma, Farnesyl transferase inhibitor R115777	Cytotoxic Lymphocytes, Multiple Myeloma. The Lichtenheld laboratory is interested in understanding how genes essential for the effector function of lymphocytes and their malignant transformation are turned on. The specific research focus is on cytotoxic lymphocytes and multiple myeloma.
Liu, Fan, Ph.D.	Research Assistant Professor	Biochemistry & Molecular Biology	Non-Aligned	Epigenetic regulation, Myeloid malignancies, Protein Arginine methylation, PRMT5, RNA splicing	Epigenetic regulation in normal and malignant hematopoiesis; Aberrant regulation of epigenetic landscape by oncogenic signaling in myeloid malignancies; Targeting abnormal epigenetic regulators in myeloid malignancies.
Liu, Zhao-Jun, M.D., Ph.D.	Associate Professor	Surgery	Non-Aligned	Melanoma, Tumor Microenvironment, Cancer-Associated Fibroblasts, Angiogenesis	Dr. Liu's research interests span two areas: 1) targeting tumor microenvironment, in particular, stromal fibroblasts and tumor vasculatures; and 2) investigating the role of Notch signaling in angiogenesis and vascular diseases, including atherosclerosis as well as the signals and mechanisms underlying homing of endothelial progenitor cell (EPC) and mesenchymal stromal cells (MSC) to wound, inflammation, and tumor tissues.
Livingstone, Alan S., M.D.	Professor	Surgery	Non-Aligned	Hypercoagulable, Cancer, Hedge Hog receptor status, Notch signaling, Tumorigenicity, Esophageal cancer	Hypercoagulability in foregut malignancies; Notch signaling, Hedge Hog, sonic signaling in esophageal cancer; Clinical trials in esophageal, pancreatic, and gastric cancer; Metabolomics in GIST tumors
Lockhart, A. Craig, M.D., M.H.S	Professor	Medicine	Tumor Biology	Developmental therapies Phase I clinical trials Gastrointestinal cancers	Dr. Lockhart's specific research focuses on Phase I/II clinical trials of novel therapeutics applied to his therapeutic areas of interest: gastrointestinal cancers and refractory solid tumors. In treating these cancers, Dr. Lockhart aims to incorporate novel agents or molecular/genetic based treatment into therapeutic trials in the pursuit of personalized cancer care.
Lopez, Diana, Ph.D.	Professor	Microbiology and Immunology	Tumor Biology	Unique peptide, Immunoenhancing peptide, MUC1, Cell-mediated immunity, MMP-9, Matrix metalloproteinase-9, Mammary tumor-bearing mice	Breast Cancer, Tumor Progression, Cytokines. Role of cell mediated immunity in breast tumors progression focusing in the effect of tumor-derived factors and tumor induced cytokines.
Lossos, Izidore S., M.D.	Professor	Medicine	Tumor Biology	lymphoma, germinal center, DNA repair, long non coding RNAs, micro RNAs, BCL6, HGAL, LMO2	Dr. Lossos' laboratory is investigating pathogenesis of different subtypes of non Hodgkin's lymphomas as well as novel therapeutic approaches. Specific interests are in: 1) Function of the HGAL gene in lymphoma dissemination and BCR signaling; 2) Role of LMO2 protein in pathogenesis of DLBCL; 3) Alterations in DNA repair mechanisms in lymphoma; 4) pathogenesis of orbital marginal zone lymphomas; and 5) Function and targeting of PRMT5 protein in DLBCL.
Lundy, Donna, Ph.D.	Professor	Otolaryngology	Non-Aligned	Dysphagia, Speech pathology, Voice disorders, Speech therapy	Head and neck cancer rehabilitation; Voice disorders; Professional voice; Swallowing disorders
Mahtani, Reshma, D.O.	Associate Professor of Clinical	Medicine	Non-Aligned	endocrine therapy, targeted therapy, HER2 positive, BRCA mutations	Dr. Mahtani's area of focus is breast cancer clinical research. She has been involved as institutional principal investigator on numerous clinical trials related to various aspects of breast cancer research (see attached CV). More recently, she has authored an investigator-initiated clinical trial in the area of HER2+ metastatic breast cancer, which is an industry-supported protocol.
Malek, Thomas, Ph.D.	Professor	Microbiology and Immunology	Tumor Biology	IL-2 receptor, Regulatory T cells, Tregs, Memory cells, Cell tolerance, CD8, Antitumor immune response	Dr. Malek's current work is aimed at understanding the mechanism leading to robust amplified T memory and application of this approach to tumor-immunotherapy, including in the context of checkpoint inhibitors. This research has the potential for application to other vaccines to induced cell-mediated immunity and plans are underway to extend this approach in other areas of need.
Marchetti, Floriano, M.D.	Associate Professor	Surgery	Non-Aligned	Not Provided	Colon and rectal surgery; Laparoscopic surgery; General abdominal surgery; Crohn's disease; Hemorrhoids; Polyps; Hernia; Anorectal disease; Incontinence; Ulcerative colitis
Marcus, Erin N., M.D., M.P.H	Associate Professor of Clinical	Medicine	Cancer Control	Screening and prevention, Underserved populations, Health effects of illiteracy, Disparities in cancer screening and treatment, Neovascular age-related macular degeneration (AMD)	Screening and Prevention; Health Communications; Underserved Populations; Women's Health
Markoe, Arnold, M.D.	Professor	Radiation Oncology	Non-Aligned	LYMPHOMA, MYELOMA, OCULAR MELANOMA, BRAIN TUMORS	Dr. Markoe's research interests includes clinical research specializing in Lymphoma/Myeloma, CNS tumors, and eye tumors.

Name	UM Title	Primary Department	Research Program	Keywords	Major Interests
Marples, Brian, Ph.D.	Research Professor	Radiation Oncology	Tumor Biology	Radiobiology, radiation, X-rays, xenografts, tumor models, normal tissues, kidney, lung, Alzheimer's disease	Dr. Marples' research focuses on tumor and normal tissue radiobiology, with studies designed to improve tumor eradication by maximizing tumor radiation response while minimizing toxicity of normal tissue. These include cell culture and xenograft studies investigating the pattern of radiation delivery as a mechanism to exploit dose-dependent ATM-mediated DNA damage response pathways to improve the treatment of tumors. Other studies investigate podocyte sphingolipid homeostasis in the normal kidney after irradiation.
Martin, Paul, M.D.	Professor	Medicine	Cancer Control	Chronic Hepatitis C, Chronic Hepatitis B, Hepatocellular Carcinoma	Hepatocellular carcinoma
Maudsley, Andrew A., Ph.D.	Professor	Radiology	Cancer Control	MRI, Diagnostic imaging, Spectroscopy, Brain, Image processing.	Development and evaluation of advanced MRI methods for improved diagnosis of brain lesions. Application of magnetic resonance spectroscopy for improved characterization and detection of brain cancer.
Mavrides, Nicole, M.D.	Assistant Professor	Psychiatry & Behavioral Sciences	Cancer Control	Pediatric oncology, Pediatric psycho-oncology, Psychosocial support, Quality of Life, Adolescent and young adults (AYA) with cancer, Body image	Pediatric psycho-oncology, social support, family intervention, adolescent and young adult psycho-oncology
Mellon, Eric, M.D., Ph.D.	Assistant Professor of Clinical	Radiation Oncology	Cancer Control	MRI, radiation oncology, cancer	Dr. Mellon's area of research interest is MRI-guided radiation therapy for cancer. Dr. Mellon's group uses advanced MR and radiation techniques to plan and deliver radiation therapy to patients with cancer. His research involves the evaluation of these technologies and patient outcomes.
Merchan, Jaime, M.D.	Associate Professor	Medicine	Tumor Biology	Oncolytic measles virus, Urokinase receptor, Tumor vasculature, Tumor stroma, angiogenesis, angiogenesis biomarkers	Dr. Merchan's research interest is in the development of novel strategies to overcome resistance to antiangiogenic agents, using syngeneic and xenograft cancer models of renal cell, breast and colon cancer. Among the strategies he is investigating are the use of novel recombinant oncolytic viral agents re-designed to target tumor stromal components, and dual targeting (stromal-vascular and tumor cells). This project is currently funded by the NIH. In addition, he is investigating the effects of metabolic targeting of tumor endothelium, as a strategy to overcome resistance mechanisms. Dr. Merchan is the current Director of the Phase I program at the University of Miami, Sylvester Comprehensive Cancer Center, and has a track record of moving projects from bench to bedside, with translational projects that led to innovative phase I trials in renal cell carcinoma and solid tumor patients.
Merchant, Nipun B., M.D.	Professor	Surgery	Tumor Biology	pancreatic cancer; RAS signaling; STAT3 signaling; immune microenvironment; stroma; chemoresistance	Dr. Merchant investigates how alterations in RAS and STAT3 signaling pathways affect the tumor stroma and immune microenvironment in pancreatic cancer. Using genetically engineered mouse models and 3-dimensional in vitro models, Dr. Merchant's lab studies how cross-talk between these pathways in the tumor and stroma affect epithelial-to-mesenchymal transition, changes in the tumor microenvironment and alterations in immune response to enhance therapeutic efficacy in pancreatic cancer.
Mesri, Enrique, Ph.D.	Professor	Microbiology and Immunology	Tumor Biology	Kaposi's sarcoma, Kaposi's sarcoma herpes virus (KSHV), human herpes virus-8, G protein coupled receptor (vGPCR).	Dr. Mesri's laboratory focuses on the mechanisms of viral carcinogenesis by the Kaposi's sarcoma herpes virus (KSHV) or human herpes virus-8. KSHV is the etiological agent of Kaposi's sarcoma, the main type of cancer associated with AIDS. AIDS-KS tumors are characterized by proliferation of spindle cells and blood microvessels (angiogenesis). Elucidation of the mechanisms of viral carcinogenesis and activation of angiogenesis by KSHV is key for the identification of viral and host molecular therapeutic targets and could lead to the development of novel cures for KS. Dr. Mesri's laboratory has identified the major angiogenic activating viral oncogene of KSHV—the G protein coupled receptor (vGPCR). vGPCR is a viral gene capable of turning normal cells into cancer cells and activating the secretion of growth factors that promote blood vessel growth. More importantly, vGPCR is the only KSHV gene that can solely induce KS lesions in mice. Dr. Mesri's laboratory also recently developed a cell and animal model of virally induced KS—an important step in better understanding the mechanisms of KSHV-mediated viral carcinogenesis and the validation of viral therapeutic targets. In this experimental model, mice were induced to develop highly vascularized tumors that are infected with KSHV and that reproduce all the molecular and biological features of KS. Using this model, researchers employed a gene suppression approach that demonstrated vGPCR is essential for KS tumor growth, and therefore, a very promising therapeutic target. More recently Dr. Mesri collaborated with Dr. P. Goldschmidt in the creation of a KS mouse model based on the sole expression of an activated form of Rac. Using this and the KSHV model, they show that KS could be prevented and treated with anti-oxidants. Dr. Mesri is working on using drugs and genetic approaches to block vGPCR, in testing FDA-approved drugs that can be used to treat KS. He also is focused on understanding the virus-related or unrelated determinants of the different KS clinical forms. In addition, he is using his novel animal model to understand how KSHV and host genes mediate the paracrine mechanisms of oncogenesis induced by KSHV vGPCR. Dr. Mesri's laboratory is also currently working in new infectious models of KS, in novel anti-viral interventions based on metabolic inhibitors, and in identifying normal genetic polymorphisms that predispose to KS.
Messiah, Sarah E., Ph.D.	Research Professor	Pediatrics	Cancer Control	Obesity, Prevention, Treatment, Adolescents, Adults	Obesity-related etiology, nutrition therapy, community-based cancer control and post-Tx support programs (namely park/nature-based), bariatric surgery as a cancer prevention tool
Mihaylov, Ivaylo, Ph.D.	Associate Professor	Radiation Oncology	Tumor Biology	Radiotherapy, Inverse optimization, Quantitative imaging, Treatment planning	Novel approaches in radiotherapy inverse treatment plan optimization and development of novel treatment planning paradigms for radiation therapy. Quantitative imaging application for cancer detection and prognosis.
Moffat, Frederick, M.D.	Professor	Surgery	Non-Aligned	Not Provided	Head and neck cancer, pelvic tumors, soft tissue sarcomas, melanoma and other skin tumors, breast cancer and GI malignancy; sentinel lymph node biopsy, tumor imaging and gamma probe detection of tumors using radio-labeled anti-tumor antibodies and receptor analogues.
Moghaddass, Ramin, Ph.D.	Assistant Professor	Industrial Engineering	Cancer Control	Case-based Reasoning, Causal Inference, Survival/ Longitudinal observational data analysis, Drug surveillance and control	Dr. Moghaddass' research aims at a key underlying problem in medical decision-making, which is the issue of trust in predictive models. Dr. Moghaddass' research work will establish new interpretable statistical frameworks for cancer diagnostics and control that can help doctors leveraging large medical data sources to make better prediction, assessments, and medical decisions.
Moraes, Carlos T., Ph.D.	Professor	Neurology	Cancer Epigenetics	Mitochondrial genetics, Cytochrome c, PGC-1alpha/Beta upregulation, Human mitochondrial DNA (mtDNA)	Molecular biology of mitochondria, mitochondrial genetics in human diseases, the role of mitochondria in cell death and growth.
Morey, Lluís, Ph.D.	Research Assistant Professor	Human Genetics	Cancer Epigenetics	Polycomb, epigenetics, breast cancer, stem cells	Dr. Morey's research aims to discover and understand the epigenetic mechanisms mediated by the Polycomb-group complexes in stem cells and cancer.
Morgan, Susan, Ph.D.	Professor	Communications	Cancer Control	Not Provided	Dr. Morgan is primarily interested in developing a comprehensive approach to improving recruitment practice in order to increase accrual rates to cancer research studies and cancer clinical trials. She is currently conducting formative qualitative research (focus groups, interviews) with professional recruiters who work largely with minority populations to identify communication best practices as well as to assess the impact of systems-based features on recruitment success. Although she is in the coding and analysis stage of focus groups conducted in Indianapolis, she would like to conduct focus groups of recruiters who work with underprivileged and underserved populations here in Miami before publishing these results. She believes that there may be short-term interventions that could improve cancer research study recruitment, particularly the presentation/communication about research studies on Sylvester's website. Other projects that she has planned with collaborators at the University of Iowa include studies of family discussions about clinical trial options (and subsequent decision-making processes) offered to older cancer patients, as well as physicians' own processes of sense-making around clinical trials.
Morris, Michelle, M.D.	Professor of Clinical	Medicine	Non-Aligned	Transplant infectious diseases, Opportunistic infections, Multi-drug resistant organisms, Invasive mold infections, CMV	Infectious Complications of Immunosuppressive Therapy; Opportunistic Infections including mycobacterial, bacterial, fungal, and parasitic infections; Invasive Mold Infections; CMV; Atypical Mycobacteria Infections & Tuberculosis
Moskowitz, Craig, M.D.	Professor	Medicine	Non-Aligned	Not Provided	Dr. Moskowitz research has focused on improving the outcome of patients with poor risk Hodgkin lymphoma (HL) and diffuse large B cell lymphoma (DLBCL). This effort has been conducted along two tracks: 1) optimizing therapy for patients with relapsed and refractory disease, including high dose therapy (HDT) and autologous stem cell transplant (ASCT) and studying new agents that can be incorporated into salvage therapy, and 2) developing risk-adapted strategies to optimize the treatment of newly diagnosed DLBCL and Hodgkin's Lymphoma by using what they have learned in the relapsed and refractory setting. This research has led to changes in standard of care that include PET-adapted therapies, maintenance therapy post-ASCT, utility of clinical and molecular-derived prognostic models in the relapsed and refractory setting, and the incorporation of novel immune-based approaches in the second-line setting. Two agents were approved during these clinical investigations: Brentuximab Vedotin for maintenance therapy post-ASCT for Hodgkin lymphoma and Pembrolizumab for palliation of poor risk Hodgkin lymphoma. A third is an antibody drug conjugate for DLBCL, Denintuzumab mafadotin, which is in the midst of an ongoing phase III trial.
Moy, Vincent T., Ph.D.	Professor	Physiology and Biophysics	Non-Aligned	Not Provided	Dr. Moy's laboratory is interested in understanding how weak intermolecular forces generated by the interactions of biomolecules contribute to cellular functions. Their experimental approach involves the acquisition of direct measurements of intramolecular and intermolecular forces at the level of individual molecules. Thus, an important component of his research is the development of advanced biophysical techniques with the sensitivity and precision to investigate the submicroscopic properties of biological systems under near physiological conditions. One such technique employs the atomic force microscope (AFM) to measure the mechanical forces generated during cell adhesion and migration. In other projects, advanced confocal microscopy techniques are used to investigate immune cell functions, including signaling, adhesion and motility.
Mudad, Raja, M.D.	Assistant Professor	Medicine	Non-Aligned	Lung Cancer, Head and Neck cancer, Medical Marijuana	Dr. Mudad's primary interest and research is in the field of solid tumor oncology and specifically lung cancer. Currently also studying the attitude of lung cancer patients towards the use of medical marijuana.



Name	UM Title	Primary Department	Research Program	Keywords	Major Interests
Musselman, Dominique L., M.D.	Associate Professor	Psychiatry & Behavioral Sciences	Non-Aligned	Depression, Fatigue, Neurocognitive Dysfunction, Cytokine, Interferon-alpha, Interleukin-2, Neurobiology, Compliance, Malignant Melanoma, Squamous Cell Carcinoma, Head and Neck Cancer, Chemoradiation, Radiotherapy, Quality of Life	Prevalence, Biology, and Treatment of Cancer-Related Neurobehavioral Syndromes
Nadji, Mehrdad, M.D.	Professor	Pathology	Non-Aligned	Immunohistochemical markers, Biomolecular markers in breast cancer, Immunohistochemistry of estrogen and progesterone receptors, Biomolecular markers in gynecologic cancer, Biomolecular markers in prostate cancer	Dr. Nadji's primary area of interest has been the evaluation of diagnostic and predictive immunohistochemical and molecular markers of human solid neoplasms. He is also the source for pathology consultation on diagnostic problems at the national and international levels.
Nagathihalli, Nagaraj S., Ph.D.	Research Assistant Professor	Surgery	Tumor Biology	Pancreatic cancer, pancreatitis, CREB, chemotherapeutic resistance, STAT3, Pro-EGFR ligands	Dr. Nagathihalli's research interests are focused on understanding the role of cAMP response element binding protein (CREB) in pancreatic cancer development, progression, and chemotherapeutic resistance and how it may be a target for rational therapy. His ongoing projects focus on how smoking and alcohol-induced CREB activates target genes downstream of cytokine/chemokine signaling and integrates signals from diverse cellular events to regulate the transcription of key target genes in pancreatic cancer progression and metastasis.
Narayanan, Govindarajan, M.D.	Professor of Clinical	Radiology	Non-Aligned	Irreversible Electroporation, Transarterial Chemoembolization, Microwave, Cryoblation, Radiofrequency Ablation, Yttrium 90 delivery	Pancreatic Cancer; Liver Cancer; Colon Cancer
Nawaz, Zafar, Ph.D.	Professor	Biochemistry & Molecular Biology	Tumor Biology	Hormone receptors, Estrogen receptor (ER), Breast cancer, Androgen receptor (AR) regulation, Prostate cancer, E6-AP, UbcH7	Dr. Nawaz's research focuses on mechanisms of steroid hormone receptor and coactivator action in normal and cancerous tissues, with important emphasis on estrogen receptor (ER) regulation in breast cancer and androgen receptor (AR) regulation in prostate cancer. Steroid hormones are important regulators of cell growth and influence cancer development, exerting biological effects on target tissues through intracellular receptors. Coactivators positively influence steroid hormone receptor-mediated transcription. Dr. Nawaz's research group was among the first to show that ER is ubiquitinated and that ligand binding activates rapid steroid hormone receptor proteolysis via the ubiquitin-proteasome pathway. For certain receptors such as ER and AR proteasome-dependent degradation is required for their proper functioning. Dr. Nawaz's research group went on to show that an E3 ubiquitin-protein ligase enzyme named E6-associated protein (E6-AP) and an E2 ubiquitin-conjugation enzyme, UbcH7, both act as coactivators of steroid hormone receptors. Currently, Dr. Nawaz's research group is studying the role of E6-AP and UbcH7 in the regulation of steroid hormone receptors protein stability, steroid hormone receptor-dependent gene transactivation with emphasis on breast and prostate carcinogenesis. In order to identify the genes that are either activated or repressed by E6-AP in the breast carcinoma cells, Dr. Nawaz's laboratory is utilizing the state-of-the-art technique known as chromatin immunoprecipitation followed by microarray or genome wide location analysis. The data from this analysis will give researchers a global perspective of the different functions of E6-AP, and help to better understand the specific role of E6-AP's involvement in cellular pathways in the breast. To further investigate the role of E6-AP in breast carcinogenesis and progression, Dr. Nawaz's laboratory has developed and is utilizing mammary gland specific E6-AP transgenic mice and stable in vitro cell line models. Using prostate transgenic mouse lines and in vitro stable cell lines, Dr. Nawaz's group also has shown that E6-AP influences normal prostate gland development and prostate tumorigenesis by modulating the levels and functions of AR, apoptosis, and cell signaling pathways. Using these models, Dr. Nawaz's laboratory is learning about the factors and pathways responsible for the development of breast and prostate cancers. Dr. Nawaz's group also has identified WW-domain binding protein 2 (WBP-2) as an E6-AP interacting protein, and has shown it acts as a coactivator of certain steroid hormone receptors. Presently, Dr. Nawaz's research group is examining the mechanism by which WBP-2 regulates functions of steroid hormone receptors and its role in breast carcinogenesis. All of these studies will be helpful in designing novel smart drugs for treatment of breast and prostate cancers.
Nemeroff, Charles B., M.D., Ph.D.	Professor	Psychiatry & Behavioral Sciences	Cancer Control	Depression, Anxiety, Psychoimmunology, Psychoneuroendocrinology, Effects of cancer treatment on cognition and mood	Role of depression in cancer risk and course; Treatment of depression in cancer patients; Psychiatric effects of cancer treatment
Nguyen, Dao M., M.D.	Professor of Clinical	Surgery	Non-Aligned	lung cancer, thymoma/thymic carcinoma, malignant pleural mesothelioma.	Dr. Nguyen focuses on the optimization of surgical outcomes of patients undergoing operations for thoracic malignancies, developing strategies to minimize opioid usage following thoracic surgical procedures, and surgical outcomes of robotic thoracoscopic surgical procedures for thoracic malignancies. He also collaborates with basic scientists whose research centers on translational lung cancer research.
Nimer, Stephen D., M.D.	Professor	Medicine	Cancer Epigenetics	Hematologic malignancies, Leukemia, Cancer Epigenetics, Stem Cell Biology, Transcription Regulation, Chromatin Biology	Dr. Nimer has been conducting extensive clinical and basic science research into the treatment and genetic basis of adult leukemia and bone marrow failure states, defining the regulatory mechanisms that control the production of blood cells and exploring ways to improve the treatment of blood based cancers.
Nouri, Keyvan, M.D.	Professor	Dermatology & Cutaneous Surgery	Non-Aligned	Laser, Light, Wounds, BCC, Scars	Melanoma; Mohs micrographic surgery; Skin cancer surgery; Reconstruction, dermatologic and laser surgery
Omuro, Antonio, M.D.	Associate Professor of Clinical	Neurology	Non-Aligned	Neuro-oncology, brain tumor, glioma, primary CNS lymphoma	Dr. Omuro is a Neuro-Oncologist focused on the development of new treatments for brain tumors. He has been involved in designing clinical trials, from early phase I studies with pharmacokinetic and pharmacodynamic evaluation to late phase III studies, with quality of life and advanced biostatistics components. The trials include comprehensive translational research, including evaluation of target modulation, mechanisms of resistance, pharmacokinetics, tumor drug penetration, advanced neuroimaging, biomarkers and patient selection through genomics.
Padgett, Kyle R., Ph.D.	Research Assistant Professor	Radiation Oncology	Tumor Biology	MRI, Prostate Cancer, Head and Neck Cancer, Radiation Oncology Physics, Diffusion Weighted Imaging	Dr. Padgett's interest in cancer related research center on the integration of advanced MRI techniques into cancer staging, tailoring therapy approaches and into the radiation planning process. He is involved with several studies that attempt to classify more aggressive tumors by utilizing high-field MRI systems to collect tissue perfusion data and perform tissue modeling on this data. Currently he is employing these techniques on Prostate and Head and Neck cancers. Dr. Padgett's other research interests attempt to utilize high-resolution, spatially accurate distortion free MRI datasets to replace CT scans for radiation planning. Presently he is focusing these efforts on high-dose-rate cervical brachytherapy and low-dose-rate prostate brachytherapy.
Pahwa, Savita, M.D.	Professor	Microbiology and Immunology	Cancer Control	Aging, Immunology, Inflammation, Cytokines, HIV, Infants, PD-1, Checkpoint molecules	Dr. Pawha conducts aging research including human aging research concerning inflammation, immune dysfunction, vaccine responses, and HIV and aging, as well as monkey model aging studies to explore the microbiome, immunity, vaccine responses, lymph node architecture, co-morbidities, immunotherapy approaches to augment vaccine responses, and SIV infection. She also studies Infant immune responses in HIV exposed uninfected and infected infants and aims to find strategies to cure HIV in infants. Additionally, she investigates T follicular helper cells and interaction with B cells for antibody responses and conducts collaborative projects in immunology, colon polyps, kidney transplants, and HPV. Interest in cancer research skin and soft tissue tumors including: melanoma, squamous cell and basal cell, as well as breast cancer research.
Panthaki, Zubin J., M.D.	Professor of Clinical	Surgery	Non-Aligned	Not Provided	Prostate cancer, bladder cancer, kidney cancer
Parekh, Dipen J., M.D.	Professor	Urology	Tumor Biology	Robotic, Prostate cancer, Radical cystectomy, Bladder cancer	Prostate cancer, bladder cancer, kidney cancer
Patin, Dennis, M.D.	Associate Professor	Anesthesiology	Non-Aligned	Not Provided	Therapy for pain treatment
Pearson, Matt, M.D.	Assistant Professor	Obstetrics & Gynecology	Non-Aligned	Not Provided	Not Provided
Pei, Xin-Hai, M.D., Ph.D.	Associate Professor	Surgery	Tumor Biology	Differentiation, Cell cycle, cancer stem cells, breast cancer, endocrine tumor	Dr. Pei's research is primarily focused on how cell cycle inhibitors control cancer stem cells and tumorigenesis in multiple organs. Dr. Pei is very interested in how tumor suppressors (Brca1, Pten, Men1) and transcription factors (GATA3, Bmi1) regulate and collaborate with the INK4 family of CDK inhibitors to control cell proliferation, differentiation, and tumorigenesis. More specifically, his research uses genetically engineered mice as a tool to determine how INK4 genes control cancer stem cells in lung, breast, prostate, and endocrine organs.
Pelaez, Daniel, Ph.D.	Assistant Professor	Ophthalmology	Non-Aligned	Cancer Stem Cells, Retinoblastoma, Orbital Tumors, Ocular Oncology	Orbital Tumors: Adenoid Cystic Carcinoma, Sebaceous Cell Carcinoma, Optic Nerve Glioma; Ocular tumors: Retinoblastoma
Penedo, Frank J., Ph.D.	Professor	Psychology	Cancer Control	Psychosocial intervention, quality of life, patient reported outcomes, precision oncology, translational sciences, psychoneuroimmunology, cancer, disparities, Hispanics, eHealth, mHealth, behavioral RCTs, culture	Dr. Penedo's work evaluates the role of sociocultural, biobehavioral, and psychosocial mechanisms underlying disease activity and health outcomes, and the efficacy of evidence-based psychosocial interventions in promoting optimal chronic disease management and health outcomes in cancer. His work also involves translational research evaluating the impact of symptom and toxicities monitoring and management in ambulatory oncology, patient reported outcomes (PROs) in survivorship care, precision oncology and phase-1 trials, as well as the implementation of evidence-based behavioral interventions delivered within health systems and the community to improve patient and system level outcomes.
Peng, DunFa, M.D., Ph.D.	Research Assistant Professor	Surgery	Tumor Biology	Gastric cancer, esophageal adenocarcinoma, epigenetics, oxidative stress, H. Pylori	Dr. Peng's major interest in cancer research has been focused on elucidating the molecular mechanisms of gastrointestinal tract tumors and searching for novel potential biomarkers and therapeutic solutions.

Name	UM Title	Primary Department	Research Program	Keywords	Major Interests
Pereira, Denise L., M.D.	Assistant Professor of Clinical	Medicine	Non-Aligned	Lymphoma, Bone marrow transplant, Myeloma, Leukemia, Myeloproliferative disorders	Lymphoma, bone marrow transplant, myeloma, leukemia and myeloproliferative disorders; Lymphoma and bone marrow transplant; Stem cell transplant
Perez, Alejandra T., M.D.	Associate Professor of Clinical	Medicine	Non-Aligned	Breast cancer, survivorship, high risk, disparities, genetics	Survivorship research Adjuvant, Neoadjuvant and metastatic breast cancer High risk - breast cancer Disparities
Perez-Stable, Carlos, Ph.D.	Research Associate Professor	Medicine	Non-Aligned	prostate cancer, hepatocellular carcinoma, apoptosis, proteotoxic stress, endoplasmic reticulum stress, unfolded protein response, deubiquitinases, androgen receptor, cyclophilins, ubiquitin-proteasome inhibitors	Dr. Perez-Stable's research aims to 1) Determine if deubiquitinase inhibitors that reduce expression of androgen receptor (AR) improves sensitivity to AR antagonists such as enzalutamide in prostate cancer therapy; and 2) Determine if the combination of cyclophilin and proteasome inhibitors amplifies proteotoxic stress, overwhelms pro-survival pathways, and forces cancer cells toward apoptotic cell death without harming normal cells.
Pillai, Asha B., M.D.	Associate Professor	Pediatrics	Tumor Biology	Innate immunity, Regulatory T cells, transplant tolerance, immune tolerance, immunotherapy, CAR-T cells, natural killer cells, natural killer T cells, Treg, MDSC, myeloid suppressor cells, haploidentical, stem cell transplant, stem cell transplantation, bone marrow transplant, bone marrow transplantation, immune therapy, graft-versus-host disease, GVHD, graft-versus-tumor activity.	The Pillai group was first to discover innate-adaptive networks inducing histocompatibility-mismatched stem cell transplant (SCT) tolerance, defining the role of invariant natural killer T cells (iNKT cells) in setting up myeloid and Foxp3+Regulatory cell activity and regulating GVHD while maintaining graft-versus-tumor activity (GVT). This has successfully translated to novel SCT techniques for children and adults nationally. The group is developing novel haplo-SCT strategies and iNKT immunotherapies for cancer, infectious diseases, and autoimmunity.
Pinheiro, Paulo S., M.D., M.Sc., Ph.D.	Research Associate Professor	Public Health Sciences	Cancer Control	epidemiology, registry, race/ethnicity, survival, risk	Dr. Pinheiro major interests in cancer research are population-based cancer indicators, particularly among Hispanic minority groups (Mexican, Cuban, Puerto Rican, etc.) but also among Asian and Black subgroups (including American Black and Caribbean Black, etc.) in Florida. He documents and study the determinants of disparities in incidence, survival, and mortality among these groups and also explore migrant cancer patterns. Based on cancer surveillance data he has created and assessed new methodologies to study these groups.
Pinto, Andre, M.D.	Assistant Professor	Pathology	Non-Aligned	Gynecologic Pathology, Genitourinary Pathology, Sarcomas, Immunohistochemistry	Dr. Pinto's research interests include: Morphological and immunohistochemical evaluation of tumors; Prognostic biomarkers in gynecologic cancer; and Molecular pathology.
Piri, William, M.D., M.P.H	Associate Professor	Psychiatry & Behavioral Sciences	Cancer Control	Psychosocial, Palliative care, Quality of life, Behavioral, Psychiatric	Over the past fifteen years, Dr. Piri's research has focused on improving symptoms and quality of life in patients with advanced cancer. This work includes studies examining psychological and physical symptoms; testing new interventions; and exploring practice patterns of oncology providers. He has a particular interest in the influence of depression on cancer outcomes.
Podda, Antonello, M.D.	Assistant Professor	Pediatrics	Non-Aligned	Pediatric Neuro-Oncology	Pediatric Neuro-Oncology
Pollack, Alan, M.D., Ph.D.	Professor	Radiation Oncology	Cancer Control	Prostate cancer, biomarkers, quantitative MRI imaging, nanocarrier and viral vector targeted delivery with radiation therapy	Dr. Pollack's research interests have centered on the management of prostate cancer with an emphasis on active surveillance, radiotherapy (RT), the role and length of androgen deprivation therapy (ADT), radiation dose escalation, and radiation fractionation. He also has an active program in small molecule/gene/viral vector targeted therapy and tissue biopsy, liquid biopsy, and imaging markers of outcome. He oversees a number of active clinical trials and co-leads the genitourinary translational research program in the NRG cooperative group.
Portelance, Lorraine, M.D.	Professor of Clinical	Radiation Oncology	Tumor Biology	MRI guided radiation therapy Adaptive radiation therapy Gynecological cancer Gastro Intestinal cancer Brachytherapy Yttrium-90 liver directed therapy Intensity modulated radiation therapy	Dr. Portelance clinical research concentrates on the development of innovative ways to improve outcomes from radiation treatment for gastrointestinal and gynecological cancer. It includes using magnetic resonance image-guided adaptive radiation therapy (MRI-g ART) to precisely target tumors of the abdomen and pelvis. His research program also explores better ways to integrate brachytherapy in the management of liver (dosimetric studies to understand for intraarterial Yttrium-90 treatment) and gynecological cancer (MRI-g endocavitary and interstitial brachytherapy).
Potter, JoNell, Ph.D.	Professor	Obstetrics & Gynecology	Cancer Control	Not Provided	Human papillomavirus (HPV) prevention, detection, and treatment; The impact of HPV on women living with HIV; HPV prevention
Prado, Guillermo, Ph.D.	Professor	Public Health Sciences	Cancer Control	Preventive Interventions, health disparities	Dr. Prado's research focuses on developing, evaluating, and translating preventive interventions for addressing smoking, alcohol, drug abuse, HIV, and obesity health disparities among Hispanic youth.
Prilleltensky, Isaac, Ph.D.	Professor	Anesthesiology	Cancer Control	Online interventions, Multidimensional well-being, RCT, Well-being assessments, Prevention	Promotion of well-being & healthy lifestyles through online technologies and community interventions.
Punnen, Sanoj, M.D.	Assistant Professor of Clinical	Urology	Tumor Biology	Localized prostate cancer, Radical prostatectomy, Active surveillance, Prostate cancer screening, Risk stratification, Bio-markers	Dr. Punnen's primary research interest in localized prostate cancer. Specifically, He is involved in research on imaging, molecular, and genomic markers that play a role in prostate cancer diagnosis and prognosis. He also does outcomes and health service research on trends in the incidence and management of prostate cancer.
Rai, Priyamvada, Ph.D.	Associate Professor	Medicine	Tumor Biology	oxidative stress, ROS, DNA damage, RAS, MTH1, thioredoxin, senescence, cell cycle, p53, prostate cancer, lung cancer	Dr. Rai's research program focuses on development of molecular strategies to activate tumor suppressor pathways in cancer cells through modulation of cellular redox status and DNA repair mechanisms. These mechanisms are typically enhanced in aggressive tumors to overcome intrinsic oncogenic stress arising from elevated levels of reactive oxygen species (ROS) that mediate pro-malignant signaling. Dr. Rai's studies have identified novel therapeutic targets for RAS-driven lung cancer and hormone-refractory prostate cancer, which have few current treatment options.
Ramakrishnan, Sundaram, Ph.D.	Professor	Surgery	Tumor Biology	Ovarian cancer, tumor hypoxia, microRNA, iron homeostasis, cancer vaccines, gut microbiome and cancer chemotherapy	Dr. Ramakrishnan's laboratory is investigating hypoxia-driven changes in the tumor microenvironment. These studies are focusing on micro-RNA network and cellular iron homeostasis modulating gut microbiome, tumor angiogenesis and immunophenotype of ovarian cancer. He and his team are developing autologous cancer vaccines based on genetically engineered super antigens to induce immune response against peritoneal metastasis
Ramasamy, Ranjith, M.D.	Assistant Professor	Urology	Cancer Control	Fertility preservation, Cancer survivorship, Hypogonadism, Sperm cryopreservation	Fertility preservation in men prior to undergoing cancer therapy; Leydig stem cells in men with testicular failure secondary to cancer treatment
Ramos, Juan C., M.D.	Associate Professor	Medicine	Cancer Epigenetics	Adult T-cell leukemia (ATL), interferon (IFN) resistance, viral-related lymphomas, interferon regulatory factor 4 (IRF-4), NF-κB	Dr. Ramos' research focuses on studying the pathophysiology of viral-related lymphomas and developing new targeted therapies from bench to clinic for these diseases. He is currently the principal investigator of several clinical trials and translational projects designed to study and treat HTLV-1 related adult T-cell leukemia-lymphoma and AIDS-related malignancies as part of NIH-NCI-sponsored research.
Rao, J. Sunil, Ph.D.	Professor	Public Health Sciences	Cancer Control	High dimensional model selection, High throughput genomic data, High throughput proteomic data, Quantitative Aspects of (Colon) Cancer Metastasis	Dr. Rao works on various aspects of modeling cancer data from high dimensional genomic data to small area estimation (estimating quantities in areas/locations where little or no direct data is collected), all the way through to modeling health disparity data. Most recently, Dr. Rao has begun working in modeling pharmacogenomic data - both in trying to identify novel drug targets but also in trying to validate high throughput pharmacogenomic studies. Finally, Dr. Rao has developed a number of R software modules that are used widely around the world.
Reis, Isildinha, Ph.D.	Research Professor	Public Health Sciences	Non-Aligned	clinical trials methodology, survival and competing risk analysis, repeated measures, and statistical modelling	Dr. Reis has extensive experience in design and analysis of clinical trials, basic-science/translational investigations, and epidemiologic studies related to cancer. Dr. Reis has well-established collaborations with Sylvester researchers, evaluating novel cancer treatments, biomarkers, and outcomes such as treatment-related side effects, risk of recurrence and metastasis, and death. Research interests: clinical trials methodology, survival and competing risk analysis, repeated measures, and statistical modelling.
Richman, Stephen P., M.D.	Professor	Medicine	Non-Aligned	Not Provided	Drug development and behavioral studies, psychosocial aspects of pain management relating to cancer care
Rieger, Sandra, Ph.D.	Associate Professor	Biology	Cancer Control	Paclitaxel-induced peripheral neuropathy; MMP-13; Skin; Agr2; Antimicrobial	1. Dr. Rieger is interested in developing therapies for paclitaxel-induced peripheral neuropathy (PIPN). She has identified MMP-13 as a target of paclitaxel in the epidermis that when inhibited alleviates neuropathy/neurotoxicity. Her lab is currently studying the mechanisms by which paclitaxel activates MMP-13, and they are determining how MMP-13 induces axon degeneration. Dr. Rieger would like to develop MMP-13 inhibitors into clinical applications for the prevention of neuropathy or the treatment of chemotherapy patients with already existing neuropathy. MMP-13 inhibition also shows efficacy in diabetic neuropathy in zebrafish and mice. She, therefore, envisions additional research on the mechanisms leading to MMP-13-dependent diabetic neuropathy and to develop treatments for this condition. 2. Dr. Rieger is working on Anterior Gradient Protein 2, a proto-oncogene that plays a role as an antimicrobial factor in the intestine. Dr. Rieger's team have found a similar function during mouse digit tip regeneration. One goal is to determine whether parallel functions of Agr2 also promote cancer formation.
Riley, Richard L., Ph.D.	Professor	Microbiology and Immunology	Tumor Biology	B lymphocytes, Antibody-producing B cells, Immune competence, Aging process, Senescence, Altered B lymphopoiesis, IL-7 responsiveness, E2A expression	Regulation of B Lymphocyte Development in Health and Disease. The focus of his research is to understand the regulatory mechanisms governing the formation of antibody-producing B lymphocytes. In particular, the Riley lab seeks to determine the effects of disease processes as well as normal aging upon B lymphocyte formation and function and the ramifications of abnormal B lymphocyte development upon immune competence.
Ritch, Chad R., M.D., MBA	Assistant Professor	Urology	Tumor Biology	Bladder cancer, Radical cystectomy, Prostate cancer, Race, Biomarkers	Role of race in prostate cancer outcome Predictive biomarkers in bladder cancer Clinical management of oligometastatic prostate cancer Imaging in prostate cancer Nutrition intervention in radical cystectomy
Robbins, David J., Ph.D.	Professor	Surgery	Tumor Biology	Hedgehog, Wnt, Colorectal cancer, Medulloblastoma, Lung cancer	Hedgehog and Wnt signaling; Medulloblastoma; Colorectal cancer; Lung cancer; Drug development
Rodgers, Steve, M.D., Ph.D.	Associate Professor	Surgery	Non-Aligned	Pancreatic cancer, Papillary thyroid carcinoma, Hyperparathyroidism, Adrenal tumors, Parathyroid cancer	Outcomes research in thyroid cancer; Outcomes research in pancreatic cancer and other GI malignancies; Imaging techniques for preoperative localization of parathyroid tumors

Name	UM Title	Primary Department	Research Program	Keywords	Major Interests
Rodriguez, Maria, M.D.	Associate Professor	Pathology	Non-Aligned	Congenital malformations, Kidney, Pathology, Prematurity, Placenta	Diagnostic pathology
Rojas, Claudia, M.D.	Assistant Professor	Pathology	Non-Aligned	Immunohistochemistry, Cholestatic liver disease, Pancreatic neoplasms, Gastrointestinal neoplasms, Hepatobiliary neoplasms	Hepatobiliary, pancreatic and gastrointestinal disorders and neoplasms in adolescents and young adult population.
Roper, Stephen D., Ph.D.	Professor	Physiology and Biophysics	Cancer Control	chemotherapy, orosensory, taste, oral, oxaliplatin, cisplatin, dysgeusia, alodynia, dysesthesia	Dr. Roper's laboratory investigates chemotherapy-induced peripheral neuropathy, specifically the adverse orosensory side effects of oxaliplatin and cisplatin. To study these side effects, Dr. Roper's lab uses genetically-engineered mice and sophisticated scanning laser confocal calcium imaging to record sensory ganglion neuron activity in anesthetized mice.
Rosa-Cunha, Isabella, M.D.	Associate Professor of Clinical	Medicine	Cancer Control	HIV, HPV, Anal dysplasia, Anal cancer, Cervical dysplasia, Cervical cancer.	Anal dysplasia program- Dr. Rosa-Cunha anal dysplasia program is a unique program in South Florida that brings the opportunity to increase awareness, screening and ultimately prevention of anal cancer. - ANCHOR STUDY- Anal cancer preventive study. This study is expected to define future direction, algorithms and guidelines on anal cancer prevention.
Rosenberg, Andrew E., M.D.	Professor	Pathology	Non-Aligned	Mesenchymal, Bone, Soft tissue, Neoplasm, Sarcoma	Pathophysiology and biology of diseases of the musculoskeletal system
Rosenblatt, Joseph D., M.D.	Professor	Medicine	Tumor Biology	HSV amplicon vectors, Chronic lymphocytic leukemia(PLL), Antibody fusion proteins, Endostatin, B cell depletion	The Rosenblatt laboratory is engaged in the development of novel targeted therapeutic approaches including antibody fusion proteins directed at known cancer antigens such as EGFR, HER2 and CD20 that are designed to deliver a fused biological payload, which can inhibit angiogenesis, vasculogenic mimicry and/or evoke an immune response against cancer cells. In addition the laboratory has been investigating the role of B regulatory cells in modulating antitumor immune response, and the potential for modulating B regulatory activity.
Roy, Sabita, Ph.D.	Professor	Surgery	Tumor Biology	Opioids, Pain Management, Microbiome, Immune-Modulation	Microbiome and tumor growth and proliferation, Pain management and cancer, Tumor Biology Angiogenesis, Microenvironment
Ruan, Shigui, Ph.D.	Professor	Mathematics	Non-Aligned	Mathematical modeling, numerical simulations, tumor cells, immune system, hematopoiesis process, chronic myelogenous leukemia, infectious diseases	Dr. Ruan focuses his research efforts on 1) modeling the interaction of tumor cells and immune system and hematopoiesis process with applications to chronic myelogenous leukemia; and 2) Modeling transmission dynamics of some infectious diseases (for instance, malaria, Rift Valley Fever in Egypt, Hepatitis B virus, Schistosomiasis, human rabies, West Nile virus, dengue, Zika, etc.) and antibiotic-resistant bacteria infection in hospital and community.
Safren, Steven A., Ph.D.	Professor	Psychology	Cancer Control	Adherence, Mental health, HIV, Sexual health, LGBT	Adherence to cancer treatment; Mental health comorbidities (e.g. anxiety and depression); Risk factors common to cancers and HIV; Substance use and smoking in HIV and cancer
Salas, Nelson, Ph.D.	Research Assistant Professor	Biomedical Engineering	Non-Aligned	Laser, Tumors, Radiofrequency, Thermal, Microwave	Dr. Salas' major research interest has been the minimally-invasive or non-invasive treatment of solid tumors. His graduate work focused on the optimal delivery method for laser interstitial thermotherapy of breast tumors. After graduation, his initial work focused on investigating multiple types of energy-ablative treatments for renal tumors, including radiofrequency ablation, microwave ablation, and laser interstitial thermotherapy. Dr. Salas' was one of the first presenters of irreversible electroporation in kidneys in a major conference. Upon becoming part of the Interventional Radiology department, his research interest has expanded to optimizing minimally-invasive or non-invasive treatments of tumors in various other organs, including the liver. Such treatments include those involving energy and those not involving energy, including treatment arterial embolization. Other research areas include biomedical optics and laser-tissue interactions.
Saluja, Ashok, Ph.D.	Professor	Surgery	Tumor Biology	pancreas, pancreatic cancer, Minnelide, HSP70	Dr. Saluja's research is primarily focused on pancreatic diseases and how it can be taken from bench to bedside. The Saluja Laboratory is interested in the role played by heat shock proteins in the pathophysiology of this resistance. The Lab has demonstrated that HSP70 is overexpressed in pancreatic cancer cells and that its inhibition leads to apoptotic cell death.
Samuels, Michael A., M.D.	Associate Professor of Clinical	Radiation Oncology	Cancer Control	DNA protein kinase inhibitor, human papilloma virus, oropharynx cancer, episomal, oral mucositis	Use of DNA-protein kinase inhibitors with radiation therapy and immunotherapy in the treatment of advanced head and neck squamous cell carcinomas. Analysis of HPV-associated oropharynx tumors for episomal HPV DNA. Reduction of oral mucositis in patients receiving concurrent chemoradiation for head and neck cancer.
Sargi, Zoukaa B., M.D.	Associate Professor of Clinical	Otolaryngology	Cancer Control	Head and neck cancer, Survivorship, Disfigurement, Quality of Life, Education	Survivorship research; Disfigurement perception; Mental health outcomes; Smoking cessation; Education
Savaraj, Niramol, M.D.	Research Professor	Medicine	Non-Aligned	Tumor metabolism, DNA repair , ROS	Tumor metabolism and signaling
Schaefer Solle, Natasha, Ph.D.	Research Assistant Professor	Medicine	Cancer Control	cancer prevention, occupational health, occupational cancer, qualitative research, nurse scientist	Dr. Schaefer Solle's research interests focus on occupational cancer risks and improving cancer screening in underserved communities. She has played a critical role in the conception of the Firefighter Cancer Initiative (FCI), a multi-faceted project funded by the state of Florida to study firefighters' exposure to carcinogens, examine their cancer risk, and develop methods of education about prevention and early detection. She has led multiple projects within FCI focusing on the epidemiology and cancer screening behaviors of active and retired firefighters.
Schally, Andrew V., Ph.D., MDHC, DScHC	Professor	Pathology	Tumor Biology	Antagonists of growth hormone-releasing hormone, prostate cancer, pancreatic cancer	Development of new therapies for prostatic, breast, colorectal, pancreatic, renal, bladder, brain, ovarian, endometrial, lung, gastric cancer, and other solid cancers as well as for acute myeloid leukemia, based on antagonistic analogs of growth hormone-releasing hormone (GHRH).
Schatz, Jonathan H., M.D.	Associate Professor	Medicine	Tumor Biology	Lymphoma, Protein Translation, Drug Discovery, ALK Signaling, Mouse Models, CRISPR/Cas9	Dr. Schatz's lab is interested in understanding mechanisms of resistance to therapy in cancer, with a particular focus on the non-Hodgkin lymphomas. While many lymphomas may be curable or manageable through a series of treatments over a period of years, more than 25,000 Americans die annually from these diseases. By understanding the pathways within lymphoma cells that drive them to become resistant to treatment, his team is laying the groundwork for novel treatment approaches suitable for evaluation in clinical trials.
Schiff, Eugene R., M.D.	Professor	Medicine	Cancer Control	Fatty Liver (NASH, NAFLD) HCC - Hepatocellular Carcinoma Liver Cirrhosis Liver Fibrosis Autoimmune Liver Diseases Alcoholic Liver Disease Fibrosan Hepatitis A, B, C, D or E Alpha 1 antitrypsin deficiency Primary sclerosing cholangitis (PSC) and primary biliary cholangitis (PBC) Liver Transplantation Porphyria	Dr. Schiff is the Executive Director of the Schiff Center for Liver Diseases running 80 active clinical trials and 35 recruiting trials. He studies new therapeutic approaches for chronic Hepatitis B, as well as effective therapies for patients with primary sclerosing cholangitis (PSC) and primary biliary cholangitis (PBC). He is conducting clinical trials for the study of NASH, a liver disease that resembles alcoholic liver disease but occurs in patients who drink little or no alcohol, trials concerning alcoholic and autoimmune liver diseases, and a longitudinal Fibrosan study to identify patients with worsening fibrosis that may be at increased risk for HCC.
Schlumbrecht, Matthew P., M.D.	Associate Professor	Obstetrics & Gynecology	Cancer Control	Gynecologic oncology, Survivorship, Disparities, Endometrial, Prevention, Ovarian, Cervix	Fellow and resident education: Dr. Schlumbrecht is currently evaluating current didactic curricula in gynecologic oncology across programs to determine if trainees are receiving adequate instruction in the business of both private and academic medicine, including protocol development, creating and implementing research plans, understanding billing and coding, and fundamentals of practice. He is also interested in ways of evaluating surgical performance, and variables that may affect both trainee and faculty perception of skill in the operating room.; Cancer Survivorship: Survivorship should be as personalized as therapeutic oncology, with an understanding of specific survivor needs. Appreciating the psychosocial changes that occur as a result of cancer treatment, including distress, family interaction, and financial strain, and investigating how this may affect compliance with survivorship follow-up care and secondary cancer screening is important. Dr. Schlumbrecht specific interest is identifying these needs in minority groups, including women of Haitian and Latin descent, and members of the LGBT community.; Cancer Prevention: Certain types of endometrial cancer disproportionately affect Blacks. Dr. Schlumbrecht is interested in determining if there are certain ethnic groups or specific countries of origin which may put individuals at higher risk for these diseases. If so, developing novel screening methods and educational platforms will be required. He is also interested in identifying genetic risk factors for these diseases, and if expansion of genetic testing services will potentially increase detection of individuals at risk.; Quality Improvement: Polypharmacy has been associated with multiple comorbidities, and in non-GYN disease sites, has been associated with shorter survival. He is interested in investigating polypharmacy in gynecologic cancer patients, and determining if certain factors are involved with its development over the cancer continuum, with the ultimate goal of implementing a quality/safety program for medication review and communication with referring providers.
Schneiderman, Neil, Ph.D.	Professor	Psychology	Cancer Control	Cognitive-behavioral stress management, CBMS intervention, Prostate cancer, Quality of life, Quality of life indicators	Behavioral medicine research in cardiovascular disease, HIV and cancer, and CNS control of circulation and conditioning.
Schürer, Stephan C., Ph.D.	Associate Professor	Molecular and Cellular Pharmacology	Cancer Epigenetics	Drug discovery, Computational systems biology, Cheminformatics, Medicinal chemistry, Polypharmacology drugs	Dr. Schürer's research interest in cancer is the identification and development of small molecule compounds with targeted polypharmacology profiles to improve efficacy, reduce resistance, and thus improve clinical duration; while avoiding off target liabilities. Dr. Schürer's group uses advanced computational methods such as machine learning based on very large datasets, molecular mechanics simulations and various other virtual screening methods to predict likely targets of small molecules. A recent proof of concept study they successfully identified the first dual EGFR kinase and BRD4 BET inhibitor ( <a href="http://med.miami.edu/news/sylvester-researchers-use-powerful-screening-tools-to-identify-new-cancer-1">http://med.miami.edu/news/sylvester-researchers-use-powerful-screening-tools-to-identify-new-cancer-1</a> ).
Scott, Gwendolyn, M.D.	Professor	Pediatrics	Cancer Control	Pediatric infectious disease, Pediatric HIV/AIDS, HIV/AIDS Pediatric Clinical trials: Prevention of perinatal transmission, Antiretroviral agents, Adherence to antiretrovirals	Pediatric infectious disease and immunodeficiency syndromes; HIV infection in children. AIDS malignancies

Name	UM Title	Primary Department	Research Program	Keywords	Major Interests
Seay, Julia, Ph.D.	Research Assistant Professor	Medicine	Cancer Control	LGBT, health disparity, cervical cancer, screening, prevention	Dr. Seay's research focuses on addressing cancer-related health disparities among underserved sexual and gender minority populations using a community-based participatory research approach. Currently, she is developing and examining interventions aiming to improve cervical cancer screening among LBQ women and transgender men. Additionally, Dr. Seay, alongside investigators at Moffitt and UF Cancer Centers, co-leads an interinstitutional initiative to develop and evaluate LGBT cultural competency training for oncologists.
Sengul, Tulay, Ph.D.	Professor	Public Health Sciences	Non-Aligned	Statistical methods for biological responses, Biostatistics, Analysis of clinical trials, Statistical genetics, Longitudinal data analysis, Joint modeling of longitudinal survival data, High dimensional medical data	Dr. Koru-Sengul statistical research interests include development and application of statistical methods for biological responses that vary in time and occasion, design and analysis of clinical trials, missing data analysis, high dimensional medical and population-based studies, and statistical methods for epidemiology. Her current funded cancer research interests focus on the areas of health disparities in cancer diagnosis, prevention, screening, treatment, survival and other health-related outcomes using large population-based databases and clinical trials.
Serafini, Aldo, M.D.	Professor	Radiology	Tumor Biology	Not Provided	Dr. Serafini's research interests focus on diagnosis and treatment of cancer. His clinical expertise are in diagnostic and therapeutic uses of nuclear medicine.
Serafini, Paolo, Ph.D.	Research Assistant Professor	Microbiology and Immunology	Tumor Biology	*Myeloid derived suppressor cells*, HNSCC, Tumor-induced tolerance, Tumor immunity, Innate immunesystem.	Dr. Serafini's research interests focus principally on understanding the molecular and cellular pathways that regulate immune tolerance in physiological status as well as in disease. One of the hallmarks of a progressive tumor is activation of abnormal pathological myelopoiesis and recruitment of a heterogeneous population of myeloid cells at different maturation stage characterized by a strong suppressive activity called myeloid derived suppressor cells (MDSC). MDSCs accumulation in the periphery and at the tumor site has been associated with tumor stage and an unfavorable prognosis in many human malignancies and By the release of hematopoietic factors, growing tumors alter the "normal" myelopoiesis and induce the accumulation of MDSC and macrophages that facilitate cancer growth. These cells inhibit the anti-tumor immunity and directly promote tumor growth, angiogenesis, and metastasis. Dr. Serafini's research interests are: To disclose the molecular mechanisms by which tumor derived factors alter myelopoiesis and to identify molecular target that may restore a myeloid cell differentiation.; Determine the molecular mechanism(s) by which MDSCs restrain tumor immunity to identify new pharmaceutical targets for the generation of new checkpoint inhibitors.; Undisclosed the mechanisms by which MDSCs promote the expansion of antigen specific regulatory T cell. This goal aimed to shift the balance between effector and regulatory T cells with important application in autoimmunity and graft vs host disease.
Shembade, Noula D., Ph.D.	Associate Professor	Microbiology and Immunology	Tumor Biology	NF- $\kappa$ B, inflammation, ubiquitination, KSHV, HTLV-1, IFNs, and JAK/STAT	Chronic inflammation mediated by a transcription factor, NF- $\kappa$ B, in HTLV-1, EBV, and KSHV-infected cells plays a critical role in the development of oncogenic virus-associated malignancies. One of the main mechanisms of persistent NF- $\kappa$ B activation in oncogenic virus-infected cells is dysregulation of function of host factors by viral oncogenes. However, the cellular host factors required for persistent NF- $\kappa$ B activation in oncogenic virus-infected cells remains largely unknown. Thus, their focus determines the host factors that are involved in chronic activation of NF- $\kappa$ B and inflammation in HTLV-1, EBV, and KSHV-infected cells.
Shiekhattar, Ramin, Ph.D.	Professor	Human Genetics	Cancer Epigenetics	Epigenetics, Transcription, Chromatin, Cancer, Enhancers, Regulatory landscape	Regulation of genomic silencing and its link to cancer; Mechanism of Tumor suppressor functions; Analysis of the role of chromatin-remodeling complexes in transcription and DNA repair; Mechanism of transcriptional silencers; Role of noncoding RNA in the formation of higher order chromatin structure and in posttranscriptional silencing
Shin, Seung-Uon U., Ph.D.	Research Associate Professor	Medicine	Tumor Biology	Antibody, Endostatin, Antibody fusion protein, Anti-angiogenesis, Vasculogenic mimicry	Dr. Shin has developed novel reagents designed to target micrometastatic disease. His long term research goal has been to develop therapeutic anti-tumor antibody fusion proteins, which employ the targeting flexibility of antibodies to direct localization of biological active molecules to the tumor site, and to investigate potential mechanisms of anti-tumor efficacy. He will study mechanisms by which antibody-endostatin fusion proteins inhibit angiogenesis and/or vasculogenic mimicry (VM) which may contribute to the formation of capillary like vascular channel structures in tumors, and whether antibody-endostatin fusion proteins used will prove more effective in tumors.
Signorile, Joseph F., Ph.D.	Professor	Biochemistry & Molecular Biology	Non-Aligned	Prescription exercise, Rehabilitation, prevention, Independence, Neuromuscular training, Cardiometabolic training	Exercise Intervention
Singal, Rakesh, M.D.	Associate Professor	Medicine	Tumor Biology	Prostate cancer, Methylation, Biomarkers, Epigenetics	Research interests: Carcinogenesis, epigenetics, biomarkers, prostate cancer. Clinical interests: Dr. Singal's clinical interests focus on genitourinary malignancies, prostate cancer, and bladder cancer.
Singh, Mahendra K., Ph.D.	Research Assistant Professor	Surgery	Tumor Biology	Adhesion Signaling, Nedd9, Aurora Kinase A, FAK, Focal Adhesions, CASS4, Breast Cancer, Gallbladder Cancer, Cancer Therapeutics, Resistance	Dr. Singh's research interests include: 1) Role of adhesion signaling proteins in modulating the effects of small molecule inhibitors in cancer therapy; and 2) Molecular pathogenesis and identification of therapeutic targets in gallbladder cancer, a rare but aggressive malignancy with poor survival rate and disproportionately high rates among Hispanics. With the ultimate goal of improving clinical care of cancer, Dr. Singh wishes to elucidate the mechanisms underlying tumorigenesis and drug resistance.
Sleeman, Danny, M.D.	Professor	Surgery	Non-Aligned	Not Provided	
Stepak, Vladen Z., Ph.D.	Professor	Molecular and Cellular Pharmacology	Tumor Biology	GPCR, G protein, Calcium, Phosphorylation	Dr. Stepak is interested in novel molecular mechanisms of signal transduction, and his primary area of studies involves heterotrimeric (large) G proteins. G protein coupled receptors (GPCRs) are the largest protein family in the body and the target of most pharmaceuticals. Dr. Stepak is excited about novel GPCRs that regulate growth or other functions of cancer cells. He would like to pursue their finding that some members of olfactory GPCR subfamily are expressed in prostate, investigating their potential as pharmacological targets.
Slingerland, Joyce M., M.D., Ph.D.	Professor	Medicine	Cancer Epigenetics	Cell cycle, ER, p27, Src, Stem cells	Dr. Slingerland has a longstanding track record in funded breast cancer research. Her work has focused on cell cycle regulation and signal transduction via the TGF- $\beta$ /MEK, Src and PI3K pathways. She discovered the cell cycle inhibitor p27, and her work has contributed to understanding the G1 to S phase transition and how aberrant signal transduction in cancer cells disrupts cell cycle regulators. She has investigated use of targeted therapies with MEK and Src inhibitors to reverse antiestrogen resistance in breast and ovarian cancer. Her research studies effects of oncogenic PI3K signaling on cell cycle, EMT, invasion and metastasis and stem cell function. Recent work has focused on understanding heterogeneity and hierarchies in breast cancer stem cells may contribute to resistance to anti-cancer therapies. Current funded research also investigates how VEGF, cytokines and contact with adipose tissue affects mammary stem cell self-renewal.
Slomovitz, Brian M., M.D.	Professor	Obstetrics & Gynecology	Cancer Control	endometrial cancer sentinel node immunotherapy viral therapy	Dr. Slomovitz research involves clinical trial development and implementation for gynecologic malignancies. Specifically, He is using the latest immunotherapy, targeted therapy and other rational therapies to limit deaths due to the diseases he treats. One recent example, He was the first to investigate mTOR inhibition in patients with endometrial cancer. In addition, He has led two NCI trials of sentinel lymph node removal for women with early stage vulvar cancer. These have led to the inclusion of this procedure on NCCN guidelines.
St. George, Sara M., Ph.D.	Assistant Professor	Public Health Sciences	Cancer Control	obesity prevention, intervention, family-based, ethnic minorities, cancer prevention	Dr. St. George's research focuses on developing and testing theoretically-based web- and mobile device-delivered (eHealth) obesity prevention interventions for ethnic minority populations, which integrate multiple influential systems (e.g., parents, grandparents, peers) to improve healthy lifestyle behaviors including physical activity, sedentary behavior, and dietary intake patterns.
Stevenson, Mario, Ph.D.	Professor	Medicine	Non-Aligned	Retrovirus biology, Oncoretroviruses, Cell transduction, HIV/AIDS, Myeloid cells	Research focuses on the viral etiology of AIDS
Stoutenberg, Mark, Ph.D.	Research Assistant Professor	Public Health Sciences	Cancer Control	Energy balance, Physical activity, Functionality, Quality of life, Survivorship	Dr. Stoutenberg's research interests focus on understanding and developing interventions to promote the use of physical activity interventions in improving outcomes in cancer survivors
Stoyanova, Radka, Ph.D.	Research Professor	Radiation Oncology	Tumor Biology	Pattern recognition, In vivo imaging, Metabolomics, Cancer, Radiotherapy	Dr. Stoyanova's main interests are developing quantitative approaches for delineation and visualization of malignant tissues based on advanced in vivo imaging techniques. Correlating the imaging findings with pathology and variety of biomarkers has broadened Dr. Stoyanova's scientific interest in the area of genomics and metabolomics. Her research is closely related to the clinical needs for tumor delineation in the area of radiotherapy and the goal is to translate imaging findings in radiation treatment planning in seamless and transparent way.
Strbo, Natasa, M.D., Ph.D.	Research Assistant Professor	Microbiology and Immunology	Non-Aligned	cancer vaccines, secreted heat shock proteins, CD8 T cells, gamma delta T cells, T regulatory cells	Dr. Strbo's laboratory studies the development of the secreted heat shock protein cancer vaccines. In patients with cancer, the hypoxia in the tumor microenvironment generates extracellular adenosine which is highly suppressive for CTL cytotoxicity and prevents complete tumor rejection by the CTL that were generated by vaccination. Currently, he and his team are developing combinatorial vaccine gp96 vaccine approach with oxygenation that will inhibit adenosine generation and enable the vaccine-generated CTL to completely reject tumors.
Subhawong, Ty K., M.D.	Associate Professor of Clinical	Radiology	Non-Aligned	MRI, quantitative imaging, musculoskeletal, sarcoma	Using advanced MRI techniques to develop better imaging strategies in determining tumor type or grade, in assessing tumor response to therapy, and in surveillance for disease recurrence. Techniques have included diffusion-weighted MRI, dynamic contrast-enhanced MRI, and volumetric segmentation of tumors for analysis of size and internal signal characteristics.
Sussman, Daniel A., M.D.	Associate Professor of Clinical	Medicine	Cancer Control	Familial cancer, young-onset cancer, colon cancer, Lynch Syndrome, FAP, HIV, colon cancer screening, colonoscopy, FIT	Dr. Sussman aims to: 1) improve strategies to identify families with heritable GI cancer syndromes 2) improve methods to identify and prevent CRC, including underused modalities like fecal immunochemical testing; 3) identify and clarify the role of molecular markers of GI malignancy; and 4) to develop a repository for patients with GI tract neoplasia related to heritable cancer syndromes, early-onset cancer, or HIV.
Takita, Cristiane, M.D.	Professor of Clinical	Radiation Oncology	Non-Aligned	Not Provided	Radiation oncology. Specializes in the treatment of breast cancer, lung cancer, and brain tumors

Name	UM Title	Primary Department	Research Program	Keywords	Major Interests
Tang, Jennifer C., M.D.	Assistant Professor	Dermatology & Cutaneous Surgery	Tumor Biology	Nonmelanoma skin cancer, high risk skin cancers	Dr. Tang's major interest in cancer research is high risk cutaneous squamous cell carcinoma. She is interested in the small subset (< 5%) of patients with poor prognosis including metastasis and mortality. There are evolving criteria for high risk tumors and no consensus on management. Dr. Tang wants to close this practice gap in determining appropriate treatment guidelines.
Thomas, Emmanuel, M.D., Ph.D.	Assistant Professor	Microbiology and Immunology	Cancer Control	Hepatocellular carcinoma, liver cancer, viral hepatitis, Hepatitis B, Hepatitis C, liver disease, cancer risk prediction, innate immunity, NASH, Cholangiocarcinoma, Hepatic Adenoma	Dr. Thomas' area of expertise is on Hepatitis B/C and hepatocellular carcinoma (HCC). Dr. Thomas has an active viral hepatitis screening program, and he is developing advanced models to study hepatocarcinogenesis. His integrated, multidisciplinary program is funded by the NIH through an NIGMS five-year, renewable Outstanding Investigator Award (R35) on chronic viral infections. In addition, he has a five-year Bankhead-Coley Clinical Cancer Research Grant for the early identification of patients with liver disease most at risk to develop HCC.
Thomas, Giovana, M.D.	Associate Professor	Otolaryngology	Non-Aligned	Head and neck cancer, HNSCC, Prognostic markers, CD80 co-stimulatory molecule regulation	Head and neck surgery, research in immunology of head and neck cancer. Head & Neck Cancer, Immunotherapy. Dr. Thomas' major research goal is to conduct basic and translational studies to develop immunological approaches in the treatment of Head and Neck cancers. Elucidation of the role of the immune system in preventing progression of early Head & Neck cancers. Head and neck squamous cell carcinoma (HNSCC) of the upper aerodigestive tract is a devastating disease that impacts human communication and survival. Lack of effective immune responses is important in the progression of HNSCC, and is a prognostic marker for poor clinical response and decreased survival. The long-range goal of Dr. Thomas' research studies is to develop novel therapeutic modalities to improve anti-tumor immunity in patients with HNSCC, who continue to have disappointingly low survival rates despite aggressive treatments. The CD80/CD28 co-stimulation pathway is critical for T-cell activation and proliferation. It has been well documented in the literature that engagement of CD80 on antigen presenting cells by its receptor CD28 on T cells leads to multiple effects on immune responses in addition to increasing the synthesis of autocrine growth factors such as IL-2. To date, however, not much is known regarding the role of CD80 co-stimulatory molecules in generating anti-tumor immune responses against tumors formed from epithelial cells. Dr. Thomas' objective is to determine the role and regulation of CD80 co-stimulatory molecule during tumor progression of HNSCC. Her laboratory has previously characterized the expression of CD80 in different murine HNSCC clones derived naturally following tumor progression in the absence of T cell-mediated immunity in severe combined immune deficient (SCID) mice. One exciting feature observed during study was that HNSCC that did not express CD80 grew as progressors, while those that expressed CD80 were regressors when grown in immune competent animals. Preliminary data shows that CD80 mediated T-cell dependent anti-tumor immunity and the generation of protective immunity in animals resistant to rechallenge. In addition, they found that constitutive expression of one or more of the cytokines IL-1 $\alpha$ , IL-6, and GM-CSF is associated with down-modulation of CD80 co-stimulatory molecule expression in oral HNSCC cells. The HNSCC cell lines that exhibit a combination of constitutive cytokine expression and low CD80 expression also exhibit increased tumorigenic potential in immune competent mice, as previously reported. Reduction of CD80 co-stimulatory molecule expression by pro-inflammatory cytokines IL-1 $\alpha$ , IL-6, and GM-CSF has not been described previously. This decrease in CD80 expression during malignant progression of HNSCC may result in dysfunctional anti-tumor immunity, thereby promoting malignant growth. Studies are underway to determine the regulatory mechanisms of cytokine-induced down-regulation of CD80 expression and to determine the prognostic significance of its expression on tumor specimens from patients with HNSCC. Once the role and regulation of CD80 in HNSCC are understood, CD80 expression can be up-regulated pharmacologically in new and innovative approaches to increase anti-tumor immune responses for the prevention and treatment of HNSCC.
Toborek, Michal, M.D., Ph.D.	Professor	Biochemistry & Molecular Biology	Cancer Epigenetics	blood-brain barrier, brain endothelium, brain metastasis, exercise, life style modifications	Dr. Toborek's laboratory has strong interest in studies on the involvement of the brain endothelium in brain metastases. Specifically, the laboratory evaluates how the adhesive and chemotactic properties of the brain endothelium influence transendothelial migration of tumor cells into the brain. Important aspects of this project involve evaluation of the protective effects of exercise against the development of brain metastases.
Tookes III, Hansel E., M.D., M.P.H	Assistant Professor	Medicine	Cancer Control	HIV, hepatitis C, health policy, drug use, cancer control	Dr. Tookes' research interests include behavioral interventions and innovative approaches to HIV prevention. His goal is to continue to conduct translational research that will effect changes in health policy to improve the health of our community. While syringe exchange is an evidence-based approach to HIV prevention, He hopes to study other innovative methods of prevention in this high risk population, such as PrEP, medication assisted treatment for HIV seropositive opioid use dependent individuals, and early interventions for the treatment of hepatitis C.
Trent, Jonathan, M.D., Ph.D.	Professor	Medicine	Tumor Biology	Sarcoma, Signaling, Kinase, Apoptosis, GI Stromal Tumor	Sarcoma Experimental Therapeutics
Trucco, Matteo, M.D.	Assistant Professor	Pediatrics	Non-Aligned	Pediatric, Sarcoma, Clinical Trials, Adolescent and Young Adult	Dr. Trucco's primary research interest is the development of novel treatments for pediatric cancers. He designs and conducts clinical trials for test new treatments for a variety of cancers that affect children and young adults. His particular focus is targeting cancer stem cells, cancer metabolism and the cancer microenvironment especially in sarcomas.
Tsinoremas, Nicholas, Ph.D.	Research Professor	Medicine	Cancer Control	Computational science, High throughput	Dr. Tsinoremas is focused on high throughput chemical approaches integrated with state-of-the-art post-genome sequence, cell, molecular, and in vivo biology to provide a rapid and facile mechanism for enhancing the process of biomedical science and the discovery of proof-of-concept molecules
VanSaun, Michael N., Ph.D.	Research Assistant Professor	Surgery	Tumor Biology	Cancer, adipokines, obesity, pancreas, pancreatic cancer, adiponectin, leptin, STAT3, pancreatitis, GEMM, genetic models, Ras, cytokines, mmp, liver, hcc, hepatocellular carcinoma, steatosis.	Dr. VanSaun's research aims to identify novel therapeutics to prevent and/or reduce the mortality from pancreatic cancer. His lab is focused on understanding obesity as a risk factor and the effect of adipokines on cancer progression. They have generated genetically engineered mouse (GEM) models and established a bank of pancreatic patient-derived xenograft models to study disease progression as well as to test targeted therapeutics in translationally applicable models.
Vega-Vazquez, Francisco, M.D., Ph.D.	Professor of Clinical	Pathology	Cancer Epigenetics	Diffuse large B cell lymphoma, Hedgehog signaling, chemotherapy, lipid rafts	Dr. Vega's research focuses on the problem of chemoresistance in diffuse large B cell lymphoma (DLBCL), in particular in cellular adaptation at the membrane level and its contribution to drug resistance as well as cellular responses as established treatment modalities.
Velazquez, Omaid C., M.D.	Professor	Surgery	Tumor Biology	Vasculogenesis, Oxidative stress, Hyperbaric oxygen, Angiogenesis, Vascular channel formation, HIF-1 protein expression, Thioredoxin 1 (Trx1), Endothelial progenitor cells (EPCs), EPC mobilization, EPC neovascularization, Hyperoxia	Angiogenesis, vasculogenesis in tumors
Verde, Fulvia, Ph.D.	Associate Professor	Molecular and Cellular Pharmacology	Non-Aligned	cell polarity, Cdc42 GTPase, control of cell morphogenesis by conserved kinases, role of mRNA binding proteins and phase transition in cell growth and cell resilience, sbk1/PRMT5 arginine methyltransferase	Dr. Verde's long-term goal is to understand the cellular functions that govern cell shape, and in particular the signaling networks that coordinate cell polarity with cell growth. Alteration of cell polarity and disruption of tissue architecture are a common histological features in cancer. The conserved NDR kinase plays a key role in the control of cell morphology and cell proliferation in several organisms ranging from yeast to mammals. His laboratory has defined the role of NDR kinase in the spatial control of Cdc42 GTPase, a key regulator of cell polarity, and in promoting polarized cell growth, by inhibiting degradation of specific messenger RNAs.
Verdun, Ramiro E., Ph.D.	Associate Professor	Medicine	Cancer Epigenetics	DNA repair, DNA damage, telomeres, immunoglobulin class switch recombination, chromosomal translocations, genotoxic agents	Dr. Verdun's lab concentrates on understanding of the mechanisms used by human cells to maintain genome stability. Maintenance of genome stability depends on appropriate responses to DNA damage. Inadequate response and repair of DNA lesions results in an accumulation of chromosomes aberrations, genome instability, and finally cell death or even cell transformation. His team studies telomeres, the natural ends of our chromosomes, and antibody class switch recombination as model systems to understand how the different DNA repair mechanisms maintain genome stability.
Villamizar Ortiz, Nestor R., M.D.	Assistant Professor of Clinical	Surgery	Non-Aligned	Lung cancer, Screening, Thoracoscopic lobectomy, Robotic lobectomy, Morbidity	Lung cancer screening; Mesothelioma
Vogel, Charles, M.D.	Professor of Clinical	Medicine	Non-Aligned	Breast Cancer, Clinical Trials	Breast cancer clinical trials
Wahlestedt, Claes, M.D., Ph.D.	Professor	Psychiatry & Behavioral Sciences	Cancer Epigenetics	Drug discovery, epigenetics, translational research	Dr. Wahlestedt's laboratory pursues drug discovery and evaluation of combination therapies for various cancers. His team has been successful in identifying and bringing forward - towards testing in human - several novel inhibitors of epigenetic and other drug targets. They are also conducting personalized ex vivo drug screening (with the cancer patient's own cells) to aid optimized treatment.
Wang, Gaofeng, Ph.D.	Associate Professor	Human Genetics	Cancer Epigenetics	vitamin C, G-protein coupled receptors, cAMP, labile Fe(II), DNA demethylation, TET, histone modifications, melanoma, breast cancer, translational, clinical trials	Dr. Wang's lab works to identify how environmental factors affect the epigenomes relevant to cancer treatment. The goal of his research is to develop novel therapeutics for melanoma and breast cancer. His current focus is on how vitamin C improves cancer drug responses by epigenetic regulation and how G-protein coupled receptors transduce the environmental cues to epigenetic modifications.
Wang, Lily, Ph.D.	Associate Professor	Public Health Sciences	Cancer Control	genomic research, statistical analysis, bioinformatics, DNA methylation	Dr. Wang's research interest is to develop effective statistical models for the analysis of high throughput genomics datasets. Her recent work includes development of mixed effects models for pathway-based analysis of gene expression datasets and genome-wide association studies, as well as new statistical models for analyzing DNA methylation datasets.
Wang, Yingcai, Ph.D.	Research Assistant Professor	Molecular and Cellular Pharmacology	Non-Aligned	Transgenic mouse model, Knockout mouse model, Cancer, P53 and senescence, Achondroplasia	1. p53 tumor suppressor protein. 2. P21 tumor growth inhibitor protein. 3. Gene engineered mouse model production and utilization in cancer research.
Wangpaichit, Medhi, Ph.D.	Research Assistant Professor	Surgery	Non-Aligned	Lung Cancer, Oxidative Metabolism, Drug Resistance	Dr. Wangpaichit's work is centered on: 1) overcoming cisplatin resistance in lung cancer cells (both small cell lung cancer; SCLC and non small cell lung cancer; NSCLC); and 2) why metabolism is altered when tumors become resistant to chemotherapy.

Name	UM Title	Primary Department	Research Program	Keywords	Major Interests
Watkins, David I., Ph.D.	Professor	Pathology	Non-Aligned	Cellular immune responses, HIV vaccine development, SIV pathogenesis	Understand the cellular immune responses, with the goal of rationally develop effective vaccines.
Watts, Justin M., M.D.	Assistant Professor	Medicine	Cancer Epigenetics	acute myeloid leukemia, myelodysplastic syndrome, myelofibrosis, epigenetics, translational research, phase 1 clinical trials, precision medicine, drug development	Dr. Watts' research focuses on generating new therapeutic options for patients with acute myeloid leukemia and myelodysplastic syndrome. He does this through translational research with laboratory investigators and by designing and conducting early phase clinical trials of novel agents and precision medicine approaches, and by analyzing patients cells in the lab to understand the mechanisms of action. His research specifically focuses on developing epigenetic-targeted therapies for these diseases.
Weed, Donald T., M.D.	Professor	Otolaryngology	Non-Aligned	head and neck cancer, squamous cell carcinoma head and neck, tadalafil, immunomodulator, immunotherapy, head and neck surgery, checkpoint inhibitor	Dr. Weed investigates novel methods to reverse tumor induced immune suppression in patients with head and neck squamous cell carcinoma. His collaborative team has designed clinical trials investigating the use of a phosphodiesterase 5 inhibitor (Tadalafil) as an immunomodulator in patients with recurrent head and neck cancer and has a currently open clinical trial utilizing tadalafil and an anti-tumor vaccine (anti-MUC1) in this same patient population. A new trial is being designed combining a checkpoint inhibitor with this treatment strategy.
Weiss, Roy E., M.D., Ph.D.	Professor	Medicine	Cancer Control	Thyroid cancer, Thyroid hormone replacement therapy, Health disparities, Transsexual radiation, radiobiology, DNA repair, hypoxia, metabolism, glioblastoma, renal cell carcinoma.	Molecular basis of differentiated thyroid cancer; Hormone replacement therapy in patients with thyroid cancer; Cancer health disparities in transsexual populations
Welford, Scott, Ph.D.	Associate Professor	Radiation Oncology	Tumor Biology		Dr. Welford's laboratory investigates mechanisms of radiation responses in cancer cells, the effect of hypoxia on cancer metabolism and signaling, and space radiobiology as it impacts radiation induced carcinogenesis. Dr. Welford's lab is interested in brain and renal cancer models, taking advantage of similarities in their poor responses to therapy and hypoxic phenotypes. His overall goal is to identify novel therapeutic pathways and targets.
Welsh, Catherine F., M.D.	Associate Professor	Medicine	Non-Aligned	Cell Cycle, Growth Factors, Cell Adhesion	Dr. Welsh's research focuses on the study of cell cycle progression through the G1 phase and its regulation by growth factor receptors and adhesion to the extracellular matrix. The Welsh laboratory is investigating the pathways underlying such autonomous growth in breast cancer cells and studying strategies designed to suppress these malignant properties.
Wieder, Eric D., Ph.D.	Research Associate Professor	Medicine	Tumor Biology	Flow Cytometry, T cell immune function, T cell phenotyping, virus-specific immunity, regulatory T cells, allogeneic stem cell transplant.	Dr. Wieder's research focuses on immunology in the context of stem cell transplantation as a treatment for hematologic malignancies. His expertise is in complex multi-color flow cytometry and in assays of immune function. A major focus of his research is to develop strategies to improve understanding of virus-specific immune recovery and to reduce graft-versus-host disease in allogeneic stem cell transplant recipients. He also has worked collaboratively to perform immune monitoring and perform immune biomarker studies in novel clinical trials.
Wilky, Breeilyn A., M.D.	Assistant Professor	Medicine	Non-Aligned	sarcoma, immunotherapy, Phase I, Phase II	Dr. Wilky conducts clinical and translational research in sarcomas, immunotherapy, and targeted therapies.
Williams, Sion L., Ph.D.	Research Assistant Professor	Neurology	Cancer Epigenetics	Mitochondria, mtDNA, TALEN, CRISPR, Somatic mutation	Dr. Williams' work with the OCF necessitates an interest in many aspects of cancer genomics. This work covers miRNAs, gene expression profiling, mutation screening and single-cell applications. Beyond Dr Williams' service role he is very keen to develop collaborations to explore the contribution of kilobase- to megabase-scale structural variants in cancer development. Such variants are very poorly studied but tools are now becoming available at a price point suitable for discovery projects. He is also keen to investigate the role of mitochondrial DNA variants in cancer development. Dr. Williams currently collaborates on grant applications outside UMich looking at the roles of germline variants and somatic variants in cancer.
Wilson, James N., Ph.D.	Associate Professor	Chemistry	Tumor Biology	Kinase inhibitor, Fluorophore, Organic chemistry, Synthesis	Development of novel probes and chemical tools to investigate signaling pathways.
Wolfson, Aaron H., M.D.	Professor	Radiation Oncology	Non-Aligned	radiation therapy, gynecologic cancers, skin cancers, sarcomas, benign diseases of skin	Dr. Wolfson conducts clinical research in the areas of gynecological malignancies, skin cancers, sarcomas, and benign skin diseases involving role of radiation therapy
Wuchty, Stefan, Ph.D.	Associate Professor	Center for Computational Science	Non-Aligned	Cancer systems biology, Bioinformatics, Protein interactions, Network analysis, Complex systems modeling	Currently, Dr. Wuchty research interests are focused on complex biological/biochemical systems that entail the skillful integration and modeling of disparate data sources such as large-scale expression, genomic and molecular interaction data. In complex diseases such as different cancer types, such modeling efforts focus on the information traversal from genomic variations to dys-regulated disease genes through a network of molecular interactions. Currently, they model such a system as an electric circuit where expression correlations of interactions serve as electric resistances. Such considerations allow Dr. Wuchty's lab to identify truly causal genes for the observed dys-regulation of disease relevant genes, as well as the determination of causal paths. In particular, such an approach can be applied to any disease system for which expression, genomic and interaction data is available. As a welcomed side effect results potentially may indicate points of therapeutic intervention. Furthermore, their modeling approach is not limited to disease systems. In fact, it can also be applied to any biological system where causality plays a role.
Xu, Mingjiang, M.D., Ph.D.	Associate Professor	Biochemistry & Molecular Biology	Cancer Epigenetics	TET2, leukemogenesis, epigenetic regulation	Dr. Xu's research aims to define how changes in the epigenetic landscape influence the pathogenesis of hematological malignancies and identify the biochemical mediators involved in the process. Dr. Xu is focusing on the frequently mutated genes in human hematological malignancies (TET2, PHF6 and ASXL1) that are involved in the epigenetic machinery. He is also trying to identify pivotal oncogenic lncRNAs in leukemogenesis. His ultimate goal is to translate meaningful basic discoveries into the clinic for novel therapeutic approaches and improved clinical outcomes.
Xu, Xiangxi (Mike), Ph.D.	Professor	Cell Biology	Tumor Biology	ovarian cancer, embryogenesis, epithelial morphogenesis, chromosomal instability, signal transduction, Ras/MAPK	Dr. Xu is interested in ovarian cancer biology and the mechanism of early embryogenesis.
Xu, Ye, M.D., Ph.D.	Research Assistant Professor	Medicine	Non-Aligned	Leukemogenesis, Epigenetics, AML, Carcinogenesis, Cancer stem cells	Impact of epigenetic factors on normal and malignant hematopoiesis; The regulation of epigenetic factors on stem cell properties; Translational study of epigenetic factors in leukemia therapy
Yakoub, Danny, M.D., Ph.D.	Assistant Professor of Clinical	Surgery	Non-Aligned	Metabolomics, 1H-NMR spectroscopy, Chemometrics, Field cancerization, GIST, Esophageal cancer, Evidence based practice, Meta-analysis	Metabolomic profiling of soft tissue sarcomas, GIST and GI malignancies.
Yang, Feng-Chun, M.D., Ph.D.	Professor	Biochemistry & Molecular Biology	Cancer Epigenetics	Epigenetic Regulation, Myeloid Malignancies, Mouse Models	Dr. Yang's laboratory has been focused on investigating the underlying mechanism of hematopoietic malignancies, with a specific focus on the role of ASXL family, BAP1, and NF1 in the pathogenesis of myeloid malignancies. Alteration of ASXL family genes are in multiple forms of myeloid malignancies, including myelodysplastic syndrome (MDS), myeloproliferative neoplasms (MPN), MDS/MPN (such as CMML and JMML), and acute myeloid leukemia (AML). However, the role of ASXL1 in the pathogenesis of myeloid malignancies and in normal hematopoiesis remains largely.
Yang, Yidong, Ph.D.	Assistant Professor	Radiation Oncology	Tumor Biology	X-ray CT, Bioluminescence tomography, Fluorescence molecular tomography, Image guided radiation therapy, Multi-modality molecular imaging	Precision molecular imaging of tumor models with multiple imaging modalities such as x-ray computed tomography (CT), bioluminescence tomography (BLT) and fluorescence molecular tomography (FMT); image guided precision tumor irradiation; accurate evaluation of tumor response following chemotherapy or radiotherapy.
Yechieli, Raphael L., M.D.	Assistant Professor of Clinical	Radiation Oncology	Cancer Control	Sarcoma, Lung, Thoracic, Palliation, Adolescent and Young Adult, Fertility Preservation, Education	Dr. Yechieli currently studies the process of care delivery from diagnosis through survivorship, specifically outcomes research focused on sarcoma and thoracic tumors, and outcomes and care delivery for adolescent and young adult oncology patients.
Yepes, Monica, M.D.	Associate Professor	Radiology	Cancer Control	Breast imaging, High risk, Breast density, Recurrence score, Risk assessment	Biomarkers in breast imaging; Imaging of High Risk patients; Tomosynthesis; Breast MRI; Imaging evaluation of response to treatment; Communication of imaging and results to patients
Zaika, Alexander, Ph.D.	Associate Professor	Surgery	Tumor Biology	gastric cancer, esophageal cancer, cancer chemoprevention, Helicobacter pylori, GERD, p53, p63, p73.	Dr. Zaika's group is interested in understanding of gastric and esophageal tumorigenesis. They study how pathological factors such as inflammatory diseases and infections promote tumor development and progression. Based on our findings, they develop and test novel cancer chemopreventive agents.
Zaw, Khin M., M.D.	Assistant Professor of Clinical	Medicine	Non-Aligned	Pain management, Prognosis, Communication, Patient provider relation	Palliative care aspects of cancer care: pain management, prognosis, communication, patient provider relation, and impact on outcomes; Dr. Zaw's current work is mainly clinical services, program development and clinical education. No active research at this time.
Zhai, R. Grace, Ph.D.	Associate Professor	Molecular and Cellular Pharmacology	Non-Aligned	Drosophila, CIPN, chemotherapy-induced neuropathy, NAD+	
Zhang, Fangliang, Ph.D.	Assistant Professor	Molecular and Cellular Pharmacology	Tumor Biology	Posttranslational modification, Arginylation, Ubiquitination, Acetylation, Proteasome, Protein degradation, Contact inhibition, Metastasis	Dr. Zhang's lab is one of the very few groups studying arginyltransferase Ate1, a posttranslational modification enzyme with a potential evolution root from a mitochondrial ancestor, alpha-proteobacteria. Their recent studies have shown that Ate1 is essential for stress response and related to cell cycle checkpoint, mutation suppression, and metabolism regulation. They found that the changes of Ate1 affect many diseases including cancer development and acute injuries.
Zhang, Yanbin, Ph.D.	Associate Professor	Biochemistry & Molecular Biology	Cancer Epigenetics	Genome instability, DNA repair, Cancer development	Dr. Zhang is interested in understanding the causes of genome instability and how it contributes to cancer development. One of the most predominant hallmarks driving human cancer is genome instability, as it creates genome-wide diversity that enables cells to acquire additional capabilities required for cancer development and progression. In particular, Dr. Zhang's lab is trying to determine how the proteins in the Fanconi anemia DNA repair pathway affect cancer development and whether FA proteins are targetable for cancer treatment.
Zhang, Yu Dana, M.D.	Research Assistant Professor	Medicine	Non-Aligned	B regulatory cells, Anti-tumor immunity, PD1-PD-L1 interaction, TGF-beta, Vascular mimicry	1). B regulatory cells and mechanisms in inhibition of anti-tumor immunity in mouse and human solid tumors. 2). Vasculogenic mimicry and suppression of the immune response in cancer
Zuchner, Stephan L., M.D., Ph.D.	Professor	Institute for Human Genomics	Cancer Epigenetics	Cancer genes, Cancer related DNA and epigenetic changes, Pharmacogenetics	Dr. Zuchner's scientific interests lie in mapping disease genes and genomic variation that is related to disease.