

CANCER RESEARCH AT SYLVESTER (FACCA ATTENDEES)

Samita S. Andreansky, Ph.D.

Department: Pediatrics

Research Program: Non-Aligned Email: sandreansky@med.miami.edu

 Treatment of cancer using synergistic approaches using immune enhancing drugs and oncolytic viruses

Raymond R.Balise, Ph.D.

Department: Urology

Research Program: Cancer Control Email: sandreansky@med.miami.edu

- Provides the biostatistics and informatics needs for all the oncology projects based in the Department of Urology
- Interested in all aspects (from bench research to patient outcomes) of bladder, prostate and kidney cancer research

Bonnie Blomberg, Ph.D.

Department: Microbiology & Immunology Research Program: Tumor Biology Email: bblomber@med.miami.edu

Aging B Lymphocytes and Immune Response in Breast Cancer Patients.
 Dr. Blomberg's laboratory is funded for projects within the immune system:
 1) to determine the molecular and cellular basis for the decline in the humoral immune response seen in aged mice and humans and 2) to assess the effect of psychosocial intervention on the immune system, inflammation and survival in breast cancer patients



Kerry Burnstein, Ph.D.

Department: Molecular & Cellular Pharmacology

Research Program: Tumor Biology Email: kburnstein@med.miami.edu

- Mechanisms of steroid hormone receptor action in endocrine cancers
- Androgen receptor signaling in prostate cancer and its role in the development of therapeutic resistance
- Molecular basis for the tumorigenic activities of Vav3/Rac1 and evaluating novel therapeutic approaches in endocrine cancers

Xi Steven Chen, Ph.D.

Department: Public Health Sciences Research Program: Cancer Control Email: steven.chen@med.miami.edu

- Developing innovative statistical methods for pathway analysis in systems biology research
- Building prognosis and prediction models for colon cancer
- Identification of triple-negative breast cancer subtypes

Zhibin Chen, M.D., Ph.D.

Department: Microbiology & Immunology Research Program: Tumor Biology

Email: zchen@med.miami.edu

 Genetic and genomic basis of autoimmunity-mediated cancer promotion and tumor killings

Sylvia Daunert, Ph.D.

Department: Biochemistry & Molecular Biology

Research Program: Viral Oncology Email: sdaunert@med.miami.edu

 Developing new molecular diagnostics tools employing nanotechnology approaches as well as nanocarrier-based targeted drug delivery platform with potential applications in cancer therapy



Sophia George, Ph.D.

Department: Obstetrics & Gynecology Research Program: Cancer Control Email: sophia.george@med.miami.edu

 The biological determinants of breast and ovarian cancer predisposition within the population of women at highest risk for developing these aggressive diseases

Pascal J. Goldschmidt-Clermont, M.D.

Department: Medicine

Research Program: Viral Oncology Email: pgoldschmidt@med.miami.edu

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

Barry I. Hudson, Ph.D.

Department: Medicine

Research Program: Tumor Biology Email: bhudson@med.miami.edu

• The role of RAGE / RAGE-ligands in cancer progression and metastasis

Tan A. Ince, M.D., Ph.D.

Department: Pathology

Research Program: Tumor Biology Email: tince@med.miami.edu

- The role of cell-of-origin in determining tumor phenotype
- Development of culture systems for in vitro culture of primary human tissues and tumors



Patricia D. Jones, M.D.

Department: Medicine

Research Program: Cancer Control Email: pdjones@med.miami.edu

Disparities in diagnosis, management and outcomes of hepatocellular carcinoma

Wasif Khan, Ph.D.

Department: Microbiology & Immunology Research Program: Tumor Biology

Email: wnkhan@med.miami.edu

- 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-kB

Erin N. Kobetz-Kerman, Ph.D.

Department: Medicine

Research Program: Cancer Control

ekobetz@med.miami.edu

- Social epidemiology
- Health inequality
- · Cancer prevention and control
- · Social determinants of health and health care utilization



Suzanne C. Lechner, Ph.D.

Department: Psychiatry

Research Program: Cancer Control Email: slenchner@med.miami.edu

- Research program focuses primarily on biobehavioral interventions for individuals with cancer
- Funded projects include randomized trials of stress management and cancer wellness among populations that suffer from health disparities, such as Black women and Spanish-speaking Hispanic women
- Interested in psychoneuroimmunology and collaborate on studies that investigate the role of aging on immune system functioning

Vance P. Lemmon, Ph.D.

Department: Neurological Surgery Research Program: Non-Aligned Email: vlemmon@med.miami.edu

- Cancer vaccines
- Axon Regeneration
- Cell Adhesion Molecules
- High Content Imaging, High Content Screening, Light Sheet Fluorescence Microscopy
- Ontology Development and Informatics
- Vaccine development

Robert B. Levy, Ph.D.

Department: Microbiology & Immunology Research Program: Tumor Biology

Email: rlevy@med.miami.edu

- T-Cells in Bone Marrow Transplantation and Cancer
- Immunotherapy



Zhao-Jun Liu, M.D., Ph.D.

Department: Surgery

Research Program: Non-Aligned Email: zliu@med.miami.edu

 Focus on molecular mechanism and signaling pathways in melanoma initiation, progression, and metastasis

Enrique Mesri, Ph.D.

Department: Microbiology & Immunology Research Program: Viral Oncology Email: emesri@med.miami.edu

 Mechanisms of viral carcinogenesis by the Kaposi's sarcoma herpes virus (KSHV) or human herpes virus-8

Stephen D. Nimer, M.D.

Department: Medicine

Research Program: Cancer Epigenetics

Email: snimer@med.miami.edu

- Care of patients with hematologic cancers and with bone marrow that does not function normally
- Clinical investigations of hematopoietic growth factors and immunosuppressive therapies, and transcriptional modifying therapies
- Investigation of the molecular defects that underlie myeloid malignancies such as AML, myelodysplastic syndromes, or myeloproliferative neoplasms
- Understanding how cancer cells resist chemotherapy or radiation therapy

Alan Pollack, M.D., Ph.D.

Department: Radiation Oncology Research Program: Tumor Biology Email: apollack@med.miami.edu

Research centers on GU malignancies with an emphasis on prostate cancer



Lorraine Portelance, M.D.

Department: Radiation Oncology Research Program: Tumor Biology Email: lportelance@med.miami.edu

 Use of Intensity Modulated Radiation Therapy (IMRT) for the treatment of patients with gynecological and gastro-intestinal malignancies and the use of image guided high dose rate brachytherapy for patients with gynecological cancer

Isildinha Reis, Ph.D.

Department: Public Health Sciences Research Program: Non-Aligned Email: ireis@med.miami.edu

Biostatistical analysis

Radka Stoyanova, Ph.D.

Department: Radiation Oncology Research Program: Tumor Biology

Email: ireis@med.miami.edu

- Main interest is 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 broaden scientific interests in the area of genomics and metabolomics.
- 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

Daniel A. Sussman, M.D.

Department: Medicine

Research Program: Cancer Control Email: dsussman@med.miami.edu

colorectal cancer; cancer prevention



Cristiane Takita, M.D.

Department: Radiation Oncology Research Program: Non-Aligned Email: ctakita@med.miami.edu

- Radiation oncology
- specializes in the treatment of breast cancer, lung cancer, and brain tumors

Emmanuel Thomas, M.D., Ph.D.

Department: Cell Biology

Research Program: Viral Oncology Email: ethomas1@med.miami.edu

Hepatocellular Carcinoma

Jonathan Trent, M.D., Ph.D.

Department: Medicine

Research Program: Tumor Biology Email: jtrent@med.miami.edu

Sarcoma Experimental Therapeutics

Gaofeng Wang, Ph.D.

Department: Human Genetics

Research Program: Cancer Epigenetics

Email: gwang@med.miami.edu

- Regulation of cancer epigenome by ascorbate treatment
- Identification of novel genomic and epigenomic biomarker for eye cancers



Sion L. Williams, Ph.D.

Department: Neurology

Research Program: Cancer Epigenetics

slwilliams@med.miami.edu

- miRNAs, gene expression profiling, mutation screening and single-cell applications
- The contribution of kilobase- to megabase-scale structural variants in cancer development
- The role of mitochondrial DNA variants in cancer development

Mingjiang Xu. Ph.D., M.D.

Department: Biochemistry & Molecular Biology

Research Program: Cancer Epigenetics

Email: mxx51@miami.edu

- Roles of TET2, ASXL1 and SETBP1 mutations in the pathogenesis of myeloid malignancies
- Roles of TETs in the pathogenesis of lymphoid malignancies
- Roles of PHF6 mutations in the pathogenesis of hematological malignancies
- Development of novel therapeutics for myeloid and lymphoid malignancies
- Roles of TET2, ASXL1 and PHF6 in the normal development of hematopoiesis

Feng-Chun Yang, M.D., Ph.D.

Department: Biochemistry & Molecular Biology

Research Program: Cancer Epigenetics

Email: fxy37@med.miami.edu

- The underlying mechanism of hematopoietic malignancies, with a specific focus on the role of NF1 and ASXL1 in the pathogenesis of myeloid malignancies
- Novel therapeutic targets and to develop rational therapies to treat myeloid malignancies



Fangliang Zhang, Ph.D.

Department: Molecular & Cellular Pharmacology

Research Program: Tumor Biology Email: fzhang2@med.miami.edu

• Post-translational protein arginylation and its role in cancer development

Yanbin Zhang, Ph.D.

Department: Biochemistry & Molecular Biology

Research Program: Cancer Epigenetics

Email: yzhang4@med.miami.edu

 Unveiling the molecular mechanism of interstrand cross-link repair whose deficiency causes Fanconi anemia and hereditary cancers and discovering the drug resistance mechanism caused by the proficient repair

 Identification of novel DNA mismatch repair factors such as helicases and nucleases that could serve as colorectal cancer markers