2021 ACS CAN Research and Health Equity Forum: Researcher Biographies

Dr. Lisa Cervia, Ph.D. - floor 1 table #1
Studying the role of BIRC6 in the pathogenesis of cancer will allow Dr. Cervia to gain insights into its novel interactors and functional domains, thereby revealing disease mechanisms that can be utilized to develop therapeutics. Their team identified a heretofore unrecognized ubiquitination ligase complex that prevents activation of the integrated stress response in a subset of cancer cells. This provides novel insight on the regulation of ISR and exposes therapeutic opportunity to selectively eliminate these cancer cells.

Dr. Rena Conti, Ph.D. - floor 1 table #2
Dr. Conti is an expert on the biopharmaceutical market. They study demand for these products, supply of these products and their pricing. They teach strategy in biopharmaceutical markets. They have a longstanding interest in equity in access to new therapies and eliminating barriers to high quality cancer care.

Dr. Christina Dieli-Conwright, Ph.D., MPH - floor 1 table #3
Rooted in clinical exercise physiology, Dr. Dieli-Conwright's research examines mechanisms by which post-diagnosis exercise can impact cancer outcomes. They have a specific focus on biomarkers related to body composition, inflammation, metabolic dysregulation and cognition. They derive randomized controlled trials to test whether various types of prescriptive exercise improve cancer outcomes in individuals from diverse racial and ethnic backgrounds diagnosed with cancer across the lifespan, from adolescents and young adults to older adults.

Dr. Lynne Elmore, Ph.D.- floor 1 table #4
As Scientific Director of the Cell Biology and Preclinical Cancer Research program in the Extramural Discovery Sciences department at the American Cancer Society, Dr. Elmore oversees peer review and grants management in the areas of cancer cell biology, metastasis and microenvironment, experimental therapeutics, and cancer detection and progression. Dr. Elmore is committed to leveraging internal and external partnerships to promote scientific advancement for the benefit of cancer patients and to enhance training opportunities for cancer leaders of the future.

Dr. Hui Feng, MD, Ph.D. - floor 1 table #5
Dr. Feng's research interests focus on identifying novel genes and pathways that are essential for MYC-driven tumor transformation and progression, particularly for T-cell lymphoblastic lymphoma/leukemia, neuroblastoma, and breast cancer. The research strategy of their laboratory is to couple the genomic and molecular analyses of human cancer cells with genetic and imaging capacities of the zebrafish system. The long-term goal of the laboratory is to partner with industry and clinicians to translate basic research to the bedside for improved management and treatment of aggressive and metastatic cancers.

Dr. Susanna Greer, Ph.D. - floor 1 table #6
Dr. Greer is the Senior Scientific Director of Biochemistry and Immunology at the American Cancer Society. Dr. Greer received her Ph.D. in Immunology from the University of Alabama at Birmingham and was a postdoctoral fellow at the Lineberger Comprehensive Cancer Center at the University of North Carolina. Dr. Greer was recruited to Georgia State University as a Georgia Cancer Coalition Distinguished Cancer Scholar where she was a tenured Associate Professor and Director of the Center for the Molecular Basis of Disease. In 2012, Dr. Greer launched Greer Consulting, Science Speak Easy, a consulting firm focused on facilitating communication between scientists and lay audiences.

Dr. Aditi Hazra, Ph.D., MPH- floor 1 table #7
Dr. Hazra is a genomic epidemiologist, humanitarian and an Assistant Professor of Medicine at Harvard Medical School/Brigham and Women's Hospital. Dr. Hazra's American Cancer Society Research Scholar Grant aims to improve risk stratification of DCIS (ductal carcinoma in situ) by integrating SMARTer-Sequencing expression data in DCIS

specimens with epidemiological variables (inc. SDoH) to personalize treatment for diverse DCIS patients. The long-term vision of this "precision health equity" is to prevent DCIS progression to invasive breast cancer.

Dr. Nada Kalaany Ph.D.- floor 1 table #8
Dr. Kalaany's lab research aims at identifying metabolic vulnerabilities in cancers under distinct systemic metabolic states to potentially target them in the clinic. Focusing on lung and pancreatic cancers, they address questions such as *how do tumors overcome and thrive in their nutrient deprived micro-environments* or *how are the growth and metabolism of tumors affected by the systemic metabolic state of their host* (e.g. obese/lean, diet-restricted, insulin resistant)?

Dr. Mo Motamedi, Ph.D. - floor 1 table #9
Dr. Motamedi's research is focused on understanding how cells establish epigenetic states which can be inherited upon cell division. Specifically, their group is interested in understanding how to reverse chemotherapy resistance or prevent the emergence of chemotherapy resistant cells in cancers.

Dr. Taru Muranen, Ph.D. - floor 1 table #10
Dr. Muranen obtained their PhD in University of Helsinki, Finland, after which they did their post-doc at Harvard Medical School studying drug resistance and how the tumor microenvironment and extracellular matrix proteins play a role in treatment resistance. They started their own group at Beth Israel Deaconess Medical Center in 2016, focusing on stroma rich cancers such as breast and pancreatic cancers. They are now studying how the tumor microenvironment contributes to treatment resistance.

Dr. Jessica L. Petrick, Ph.D., M.P.H. - floor 1 table #11
Dr. Petrick's research program focuses on the epidemiology of gastrointestinal cancers, including colorectal, liver, and esophageal. Dr. Petrick became a co-Investigator with the Black Women's Health Study (BWHS) in 2019, but she has been collaborating with BWHS since she began her post-doctoral fellowship at the National Cancer Institute (NCI) in 2014. BWHS is a member of the NCI Cancer Cohort Consortium and participated in the Liver Cancer Pooling Project, within which Dr. Petrick led numerous studies. The emphasis of her current research portfolio is on nutritional and molecular factors, including the metabolome and microbiome, which may contribute to racial disparities along the cancer continuum—from precursor lesions to invasive cancer through mortality.

Dr. Michaela Reagan, Ph.D. - floor 1 table #12
Dr. Reagan is a Faculty Scientist III and PI of the Reagan Laboratory at the Maine Medical Center Research Institute, an Assistant Professor at Tufts University School of Medicine and the chair of the Women in Bone and Mineral Research Committee in the American Society of Bone and Mineral Research. Dr. Reagan leads a team of researchers interrogating the mechanisms that drive disease progression of the blood cancer multiple myeloma. They study the interaction of bone marrow fat cells (adipocytes) and tumor cells, which led to Dr. Reagan's NIH/NCI R37 and ACS grants that supported research into Fatty Acid Binding Proteins.

Dr. Richard Sherwood, Ph.D. - floor 1 table #13
Dr. Sherwood is an Assistant Professor of Medicine at Brigham and Women's Hospital and Harvard Medical School. Their lab combines genomics, CRISPR-Cas9 genome editing, stem cell biology and machine learning to understand how genome sequence encodes gene regulatory activity and to predict how changes in patients' genome sequences cause diseases such as cancer. Dr. Sherwood's lab has made seminal contributions to our understanding of how CRISPR-Cas9 can be harnessed to study and treat genetic disease.

Dr. Anne Smolko, Ph.D. floor 1 table #14
Dr. Smolko is in their third year as a postdoctoral fellow and their project is focused on understanding the mechanism by which the leukemic fusion protein, MOZ-TIF2, alters transcription to result in leukemogenesis. MOZ is a histone acyltransferase that is inappropriately fused to a transcriptional co-activator, TIF2. They are exploring if MOZ-TIF2 bypasses cell-specific transcription factor signaling and prevents repressive signals from controlling appropriate levels of transcription. This would result in transcriptional dysregulation that may prevent hematopoietic cell differentiation and contribute to leukemia generation.

Dr. Quoc-Dien Trinh, MD - floor 1 table #15
Dr. Trinh is an Associate Professor of Surgery at Harvard Medical School, Director of Ambulatory Clinical Operations at the Division of Urological Surgery at Brigham and Women's Hospital, and Co-Director of the Dana-Farber/Brigham and Women's Prostate Cancer Center.

Dr. Xaralabos (Bob) Varelas, Ph.D. - floor 2 table #1
Dr. Varelas is an Associate Professor in the department of Biochemistry at the Boston University School of Medicine. His group studies how cell polarity and mechanical cues contribute to the etiology of cancer, with a focus on understanding the role of such signals in non-small cell lung cancers. Currently, Dr. Varelas' lab is focused on understanding and targeting signals that promote the expansion of lung stem cells in the precancerous lung microenvironment with the hope of translating novel findings to the clinic for lung cancer interception or treatment.

Dr. Anita Wagner, Pharm.D., MPH, Dr.PH. - floor 2 table #2
As a clinical pharmacist, policy researcher, and ethicist, Dr. Wagner leads empirical research, co-directs a fellowship program and a cancer policy evaluation center and directs the organizational ethics program of a non-profit insurer. They and their colleagues seek to generate evidence for informing regulatory, pricing and reimbursement decisions on new cancer therapeutics, in the US and elsewhere. Their ACS-funded research assesses oral targeted cancer medication use, access and spending, by insurance benefit designs.

Dr. Johannes Walter, Ph.D. - floor 2 table #3
Dr. Walter has been studying DNA replication and repair for many years. Their lab uses frog egg extracts to discover new DNA repair mechanisms, many of which are mutated in human cancer. An example is the repair of DNA protein cross-links (DPCs). They showed that these lesions are fixed when a replication fork collides with the DNA damage, which leads to proteolysis of the DPC by a protease called SPRTN, mutations of which cause liver cancer.

Dr. Meng-Ju Wu, Ph.D. - floor 2 table #4
Dr. Wu is studying how liver cells with IDH1 mutations become intrahepatic cholangiocarcinoma tumors, informing our ability to inhibit these cancer-causing pathways using drugs. Their research could answer the question of whether mutant IDH1-driven global metabolic reprogramming affects the communication between neoplastic and immune cells in the tumor microenvironment. Understanding immune escape mechanisms in cancer development will permit the identification of improved approaches to treat IDH1 mutant ICC.

Dr. Xuehong Zhang, MD, Sc.D. - floor 2 table #5
Dr. Zhang is a cancer epidemiologist with training in clinical medicine and nutrition. They have extensive experience in conducting cohort and case-control studies and international consortia. They integrate epidemiology, lifestyles, nutrition, pathology and omic techniques to conduct multidisciplinary investigations. The overall theme of Dr. Zhang's

research program is to identify dietary, lifestyle, genetic and biological determinants of cancer and determine whether these factors inform early detection and diagnosis, as well as survival among cancer survivors.