

## Collaboration & Multidisciplinary Team Science (updated 2022)

Newly funded ARC	
A Multi-Disciplinary Program to Identify Predictors of Efficacy and Resistance to Cancer Checkpoint Inhibition (PIPER-C)	The findings from our study should shed light not only on how specific biomarkers are associated with immune status and treatment outcomes, but also on how these biomarkers may differ in diverse patient populations. As such, our study has broad implications for understanding cancer biology and optimizing cancer treatment. URL: <u>https://tinyurl.com/PIPER-C-ARC</u>
ARC established 2020, in response to the emergence of the COVID-19 virus	
Respiratory Viruses: a focus on COVID-19 ARC	Rapidly responding to Covid-19 epidemic crisis by developing this ARC includes over 25 investigators with expertise in various disciplines with the goals to (1) generate tools for the investigation of COVID-19, (2) delineate the molecular mechanisms that underlie the COVID-19 pathophysiology, and (3) to develop therapeutic options for the treatment of COVID-19 URL: <u>https://tinyurl.com/COVID-19ARC</u>
We have continued to develop the following ARC Programs and goals:	
Tobacco Regulatory Science (TRS) ARC Program	This ARC brings together a multidisciplinary investigative team with the mission of understanding complex tobacco use patterns and health impacts in vulnerable populations across the life-course URL: https://tinyurl.com/TobaccoARC
Fibrosis ARC Program: Connecting Tissues and Investigators	This ARC investigates shared and tissue-specific factors in organ fibrosis that can be utilized to develop improved diagnostics and therapies URL: https://tinyurl.com/FibrosisARC
Systems Biology Approaches to Microbiome Research ARC Program	This ARC develops new, multi-level mechanistic understanding of how microbe-microbe, microbe-environment, and microbe-host interactions in human health and disease URL: https://tinyurl.com/MicrobiomeARC
Mobile and Electronic (ME)-Health ARC Program	This ARC develops digital platforms, such as Virtual Reality, mobile apps, web, social media, text messaging, connected devices, that have been deployed in real-world clinical and public health settings URL: <a href="https://tinyurl.com/MEhealthARC">https://tinyurl.com/MEhealthARC</a>
Thrombosis and Hemostasis ARC Program	This ARC program has developed techniques based on machine-learning to study propensity of thrombosis in various organ pathologies in different human cohorts URL: https://tinyurl.com/ThrombosisHemostasisARC
Protein Trafficking and Neurodegenerative Disease ARC Program	This ARC program explores the role of genes involved in protein trafficking in the etiology and pathophysiology of Alzheimer Disease and other neurodegenerative disorders URL: https://tinyurl.com/ProteinTraffickingARC
Precision Medicine for Alzheimer Disease and Related Disorders ARC Program	This ARC program uses diverse expertise to investigate personalized biological underpinnings disorder subtypes, and identifies new therapeutic targets specific for these subtypes URL: <u>https://tinyurl.com/PrecisionMedicineARC</u>

