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Assistant Professor of Pathology
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36 H-Index

80+ Research Articles

5233 Citations

Research Interests

Tumorigenesis
Cancer Cell Evolution

Reprogrammed Mitochondrial Function
Mitochondrial Biomarkers

Exosome-Related Biomarkers
Cancer Biomarkers/Therapeutics

Experimental Capabilities

Mitochondrial Genomics
Extracellular Vesicle Analysis

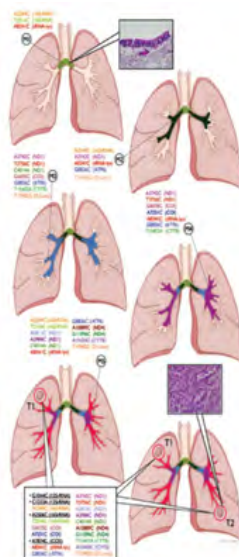
Human Cancer Tissue Analysis
Body Fluid Analysis

Digital Pathology
Microbiome Analysis

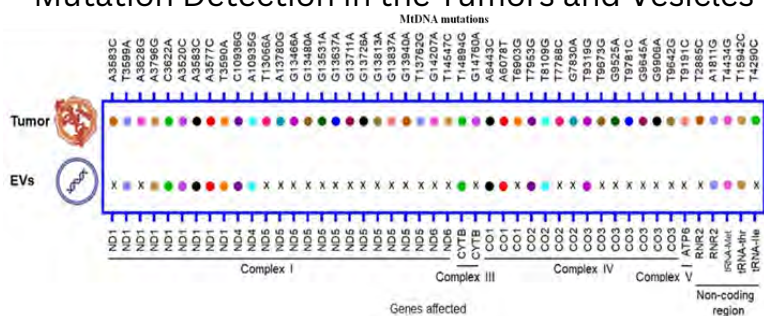


Mitochondria

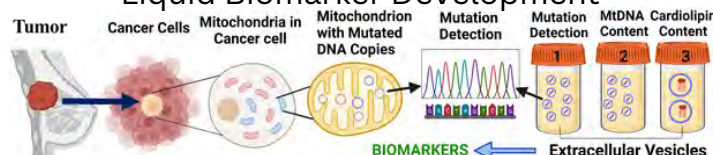
(Right) Clonal MtDNA Mutation Detection in Lung Cancer



Mutation Detection in the Tumors and Vesicles



Liquid Biomarker Development



2016

Clinical Cancer Research

"Mitochondrial Reprogramming Regulates Breast Cancer Progression"

2022

Scientific Reports

"Detection of Mitochondrial DNA Mutations in Circulating Mitochondria-Originated Extracellular Vesicles for Potential Diagnostic Applications in Pancreatic Adenocarcinoma"

2023

FASEB Bioadv

"Profiling Mitochondrial DNA Mutations in Tumors and Circulating Extracellular Vesicles of Triple-Negative Breast Cancer Patients for Potential Biomarker Development"

2024

Molecular Cancer Research

"Mitochondrial Translocase TOMM22 Is Overexpressed in Pancreatic Cancer and Promotes Aggressive Growth by Modulating Mitochondrial Protein Import and Function"



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