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AREA(S) OF FOCUS:

Applying micro- and nano-technology to advance diagnostics, therapeutics, and tissue engineering

The Bashir lab is developing (i) novel point of care sensors to revolutionize biomedical diagnostics, and (ii) bio-fabricated 3-D tissues and cellular systems for biomedical and engineering applications.

KEY RESEARCH AREAS:

POC diagnostics

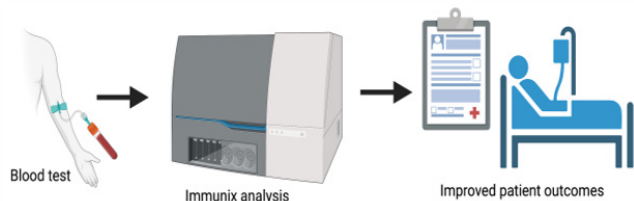
Pioneer new electrical, mechanical and microfluidic biosensors and techniques to detect biomolecules, pathogens, and cell from blood, saliva, swabs, etc.

Instrumented microfluidic tissue models

Develop innovative chip-based tissue culture systems for inflammation and cancer.

3D Printing of biological machines

Create polymeric scaffolds and tissue building blocks to develop multi-cellular engineered living systems for biological soft robotics and neural based biological computing.



ENTREPRENEURIAL SUCCESS:



Bobby Reddy, Jr., PhD
Co-founder CEP

Prenosis uses artificial intelligence and point-of-care sensors to predict patient outcomes based on biological data and clinical history. Their algorithms optimize therapies and reduce healthcare costs.

Their lead precision diagnostics platform, Immunix, uses advanced machine learning algorithms to analyze a patient's immune profile and identify the patients most at risk for sepsis or other complications.

Their pipeline includes Sepsis ImmunoScore, an AI software that identifies biological signs of sepsis and patient risk factors to help clinicians predict, diagnose, and treat sepsis earlier.

Under leadership of Dr. Bobby Reddy, Jr., Prenosis has raised over \$20M in venture and grant funding.