Heriberto Nieves

Wahlen Award
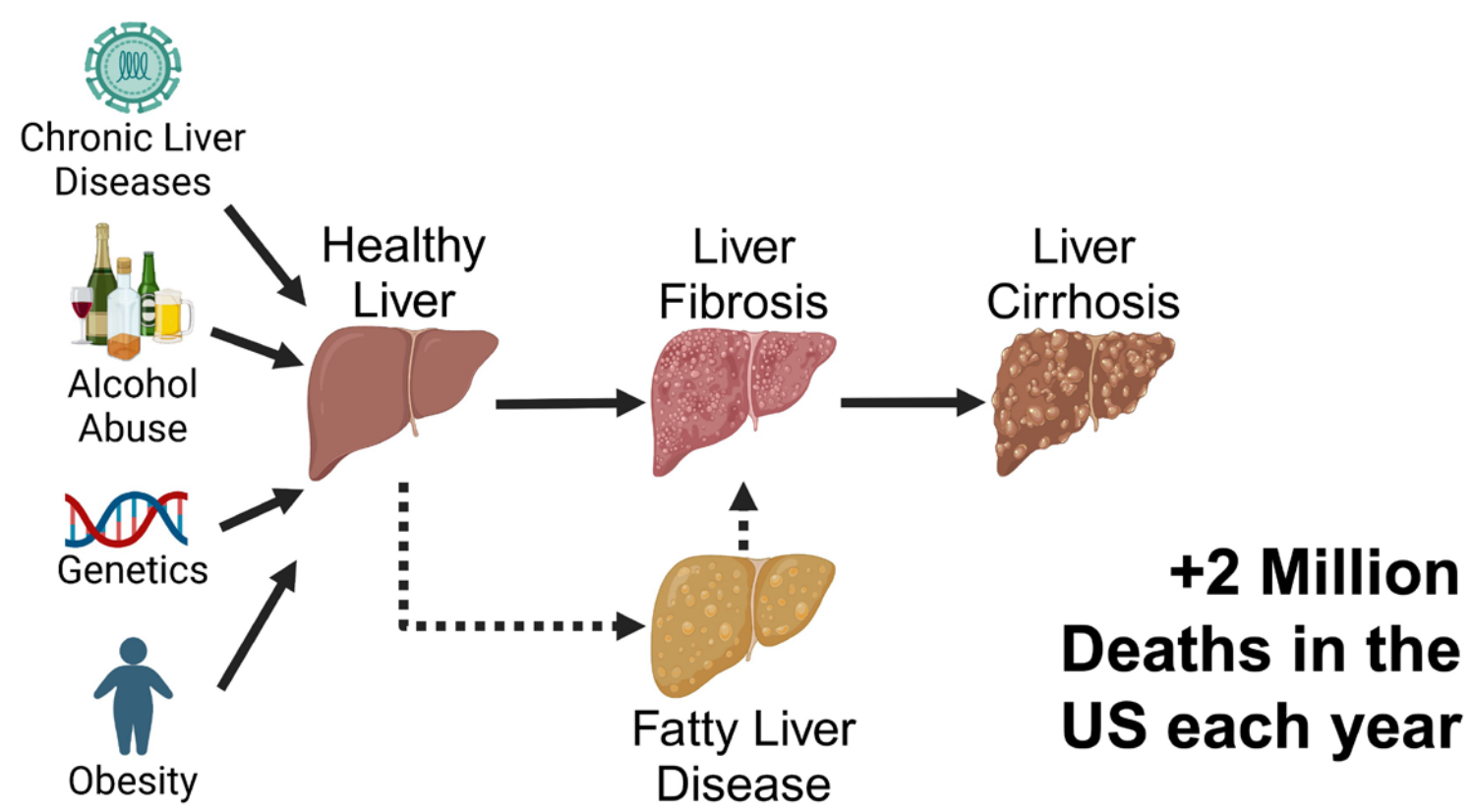*Ph.D. Student, Biomedical Engineering, Robotics*
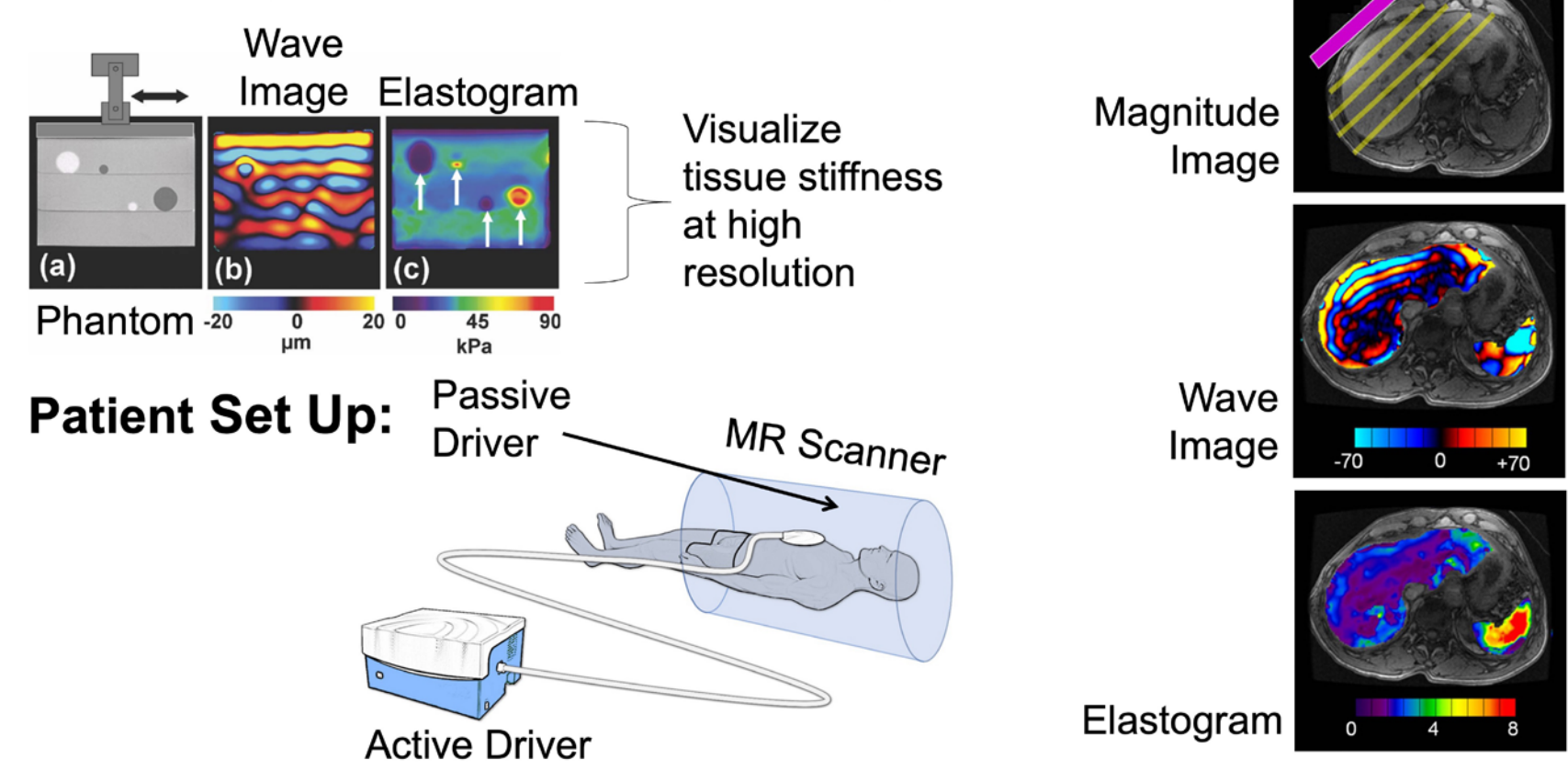*First Year ARCS Scholar*

Georgia Tech

Automated Quality Control and Liver Stiffness Measurements of Magnetic Resonance Elastography using Deep Learning

Magnetic resonance elastography (MRE) is a key imaging technology for diagnosing liver fibrosis. This translational research improves the manual quality control and measurement processes by applying deep learning to perform real-time liver assessment and streamlining fibrosis diagnosis.
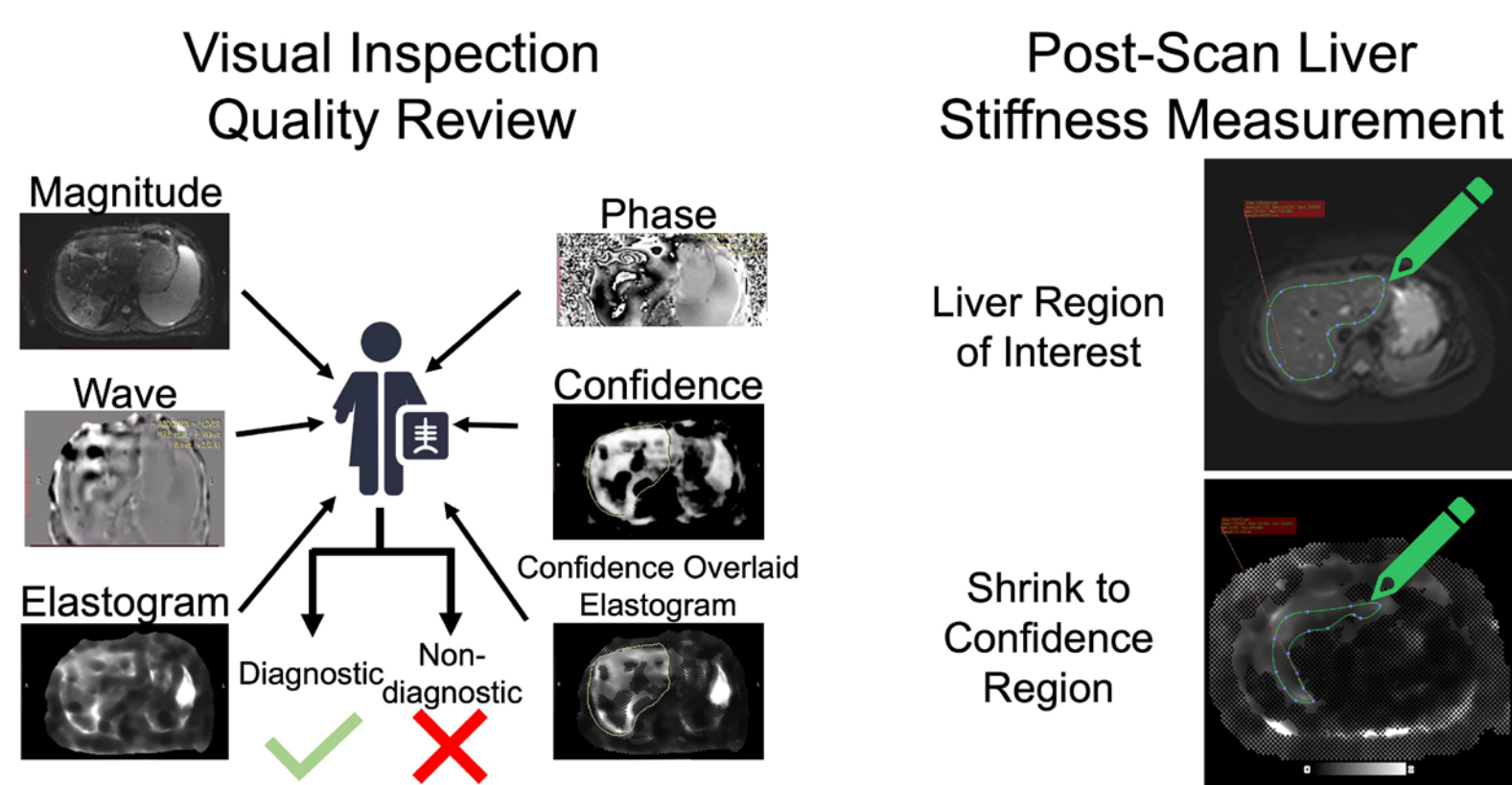
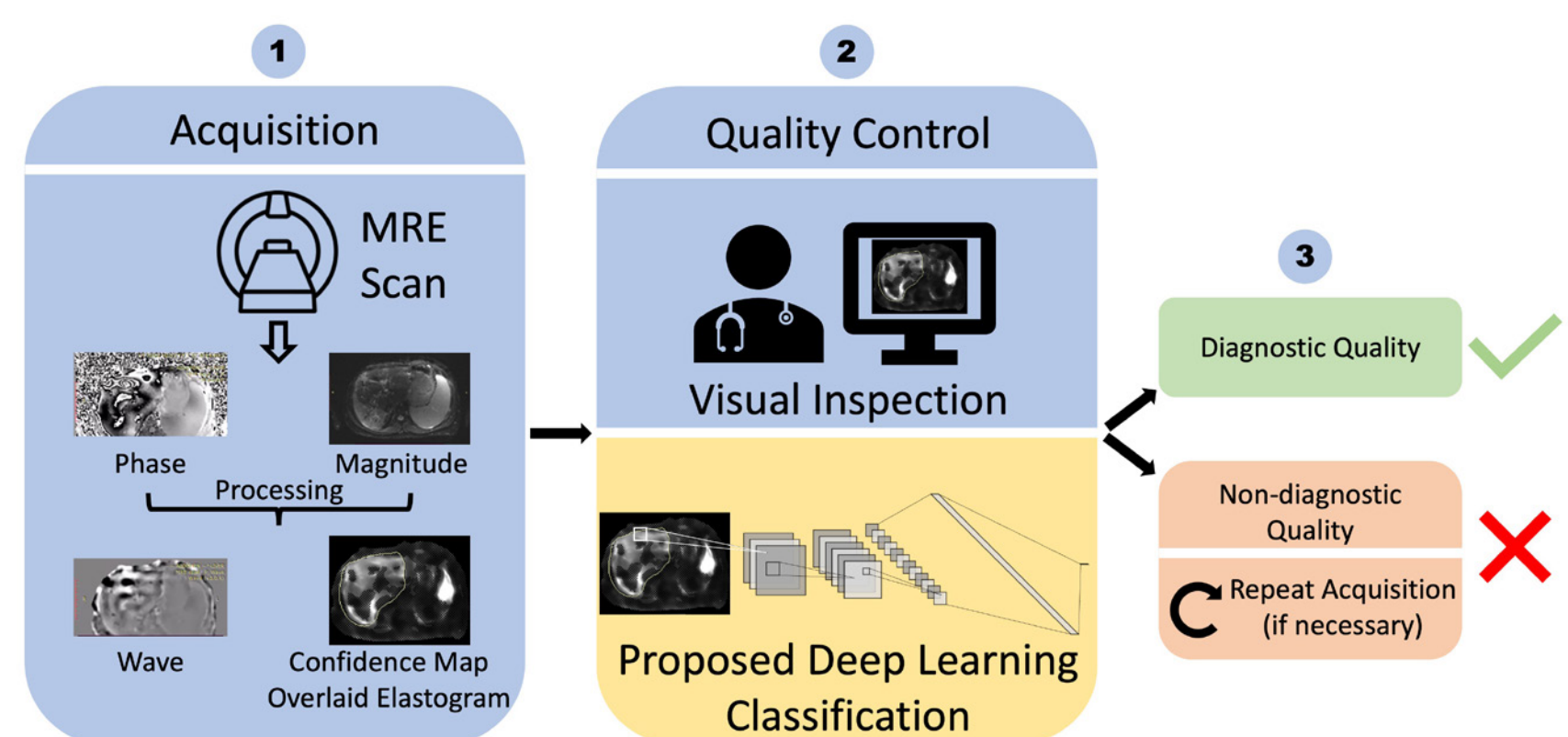## Importance of Diagnosing and Monitoring Liver Fibrosis

Magnetic Resonance Elastography (MRE): Capturing Tissue Stiffness To Diagnose Fibrosis

MRE Requires Time-Consuming Manual Processes

Deep Learning for Automating MRE Quality Review

Deep Learning for Liver Stiffness Measurement Automation

Research Impact:
- Standardize QC and LSM
- Decrease patient wait time
- Reduce radiologist workload

Scholar Awards Celebration
November 13, 2024

ARCS
SCHOLAR AWARDS CELEBRATION
ARCS FOUNDATION ATLANTA

Igniting Innovation in Georgia