

Introduction

The Foundation for Sarcoidosis Research (FSR) is the leading international organization dedicated to finding a cure for sarcoidosis and improving care for sarcoidosis patients through research, education, and support. Since its establishment in 2000, FSR has fostered over \$7 million in sarcoidosis-specific research efforts.

Screening for cardiac sarcoidosis (CS) conventionally relies on symptoms and electrocardiogram (ECG). However, there are no validated screening instruments for symptom assessment, and the utility of symptoms (e.g. palpitations, chest pain, presyncope) prompting evaluation for CS has not been assessed. This study aims to identify whether routine screening in sarcoidosis patients with abnormal findings noted on patient medical history and ECG may lead to a higher percentage of cardiac sarcoidosis cases than typically reported (2-5%). Further, it aims to determine screening with dedicated cardiac testing (echocardiogram and ambulatory ECG) in patients without abnormal clinical findings leads to diagnosis of CS.

Methods

Investigators from 12 recognized centers of excellence for management of sarcoidosis participated in this unblinded, randomized screening study. In the chart screening arm, data was collected retrospectively for newly evaluated sarcoidosis patients with no prior history of cardiac sarcoidosis. In the enhanced screening arm, patients without abnormal findings were randomized to either standard care via symptom assessment and ECG, or enhanced screening tests via echocardiogram and ambulatory ECG.

Conclusions

The prompted diagnostic interventions that lead to diagnosis of CS was variable among well recognized centers for excellence for management of sarcoidosis. Variability was found between individual providers in defining abnormal findings or standard testing. Two centers have already adopted enhanced screening techniques into standard care. Analysis will be undertaken to elucidate cardiac sarcoidosis prevalence through routine screening, and the potential impact of enhanced screening in detecting cardiac abnormalities.

Figure 2. Patient Gender

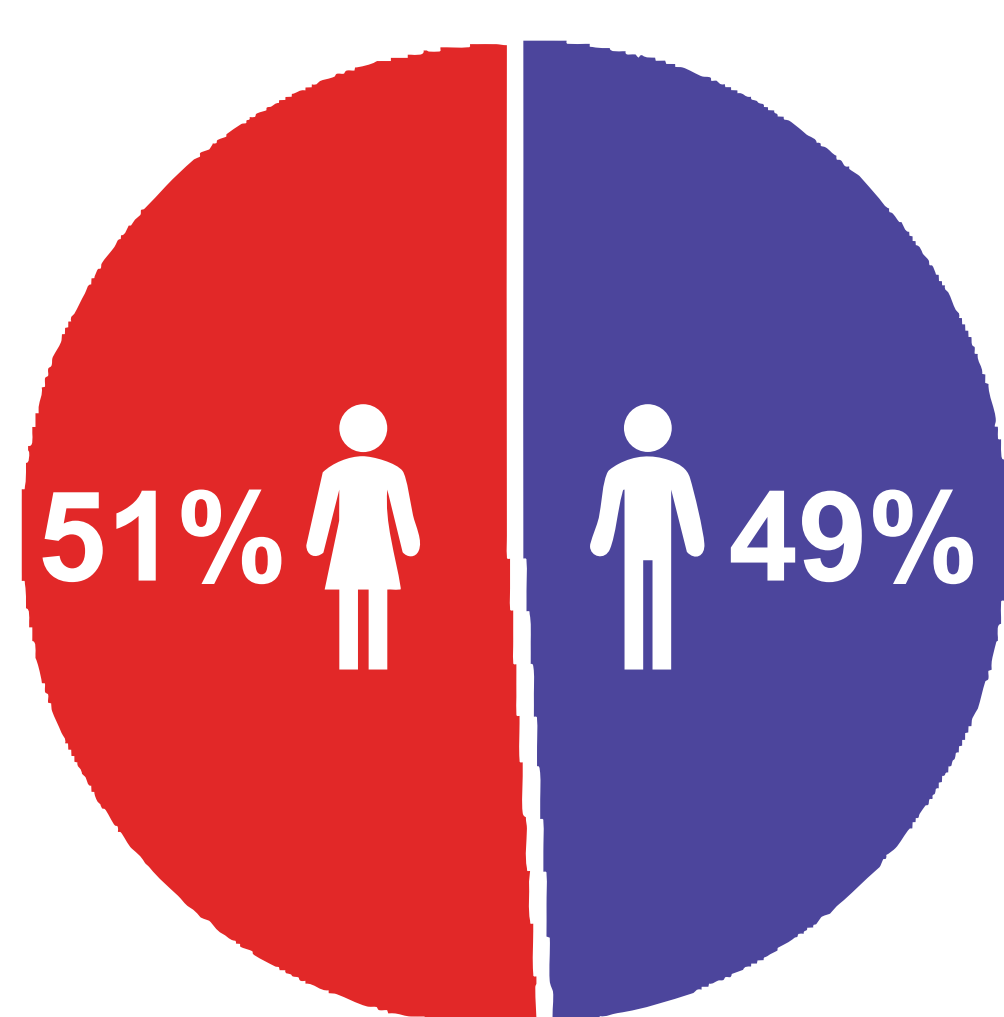


Figure 3. Patient Race & Ethnicity

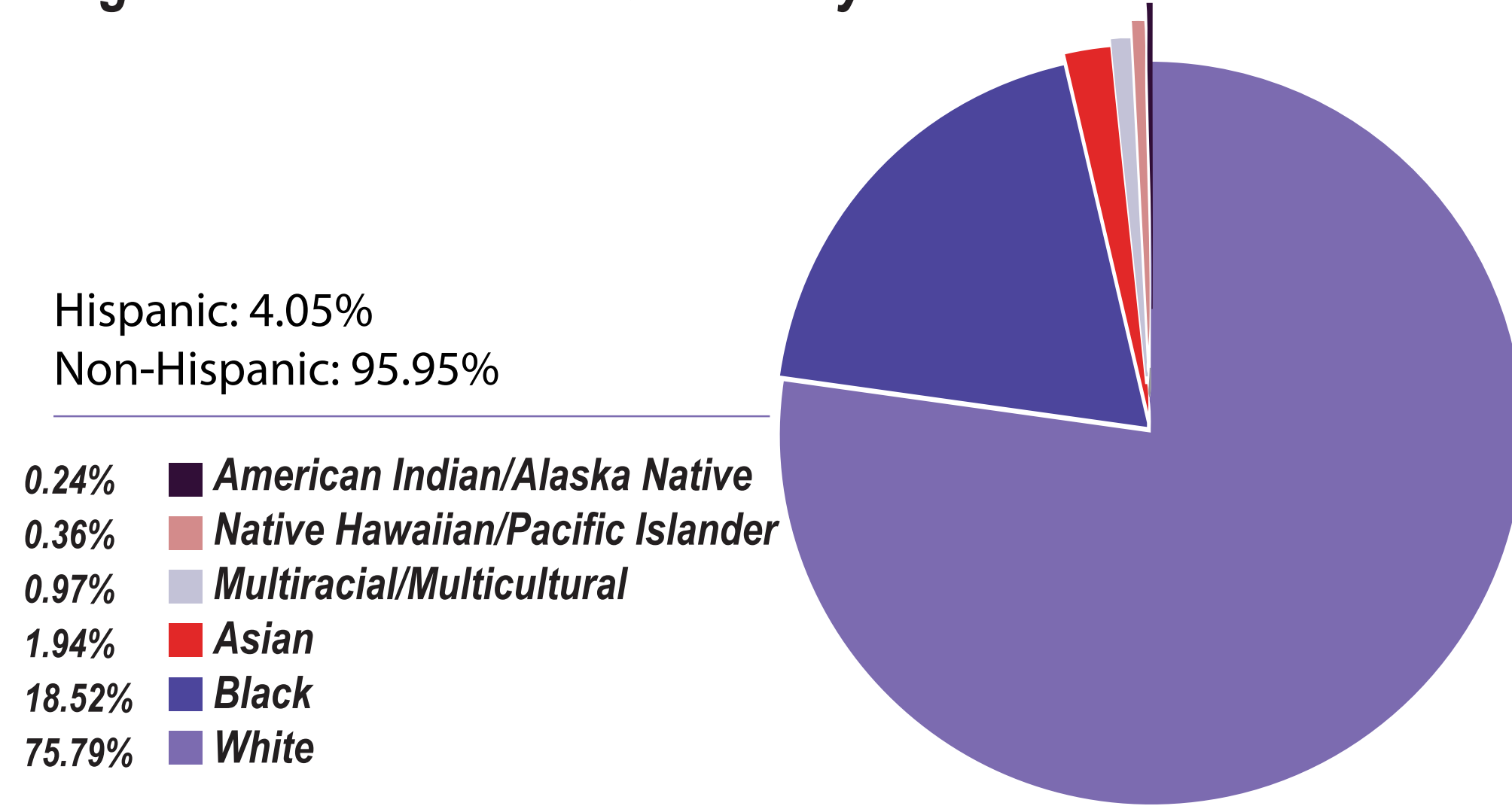
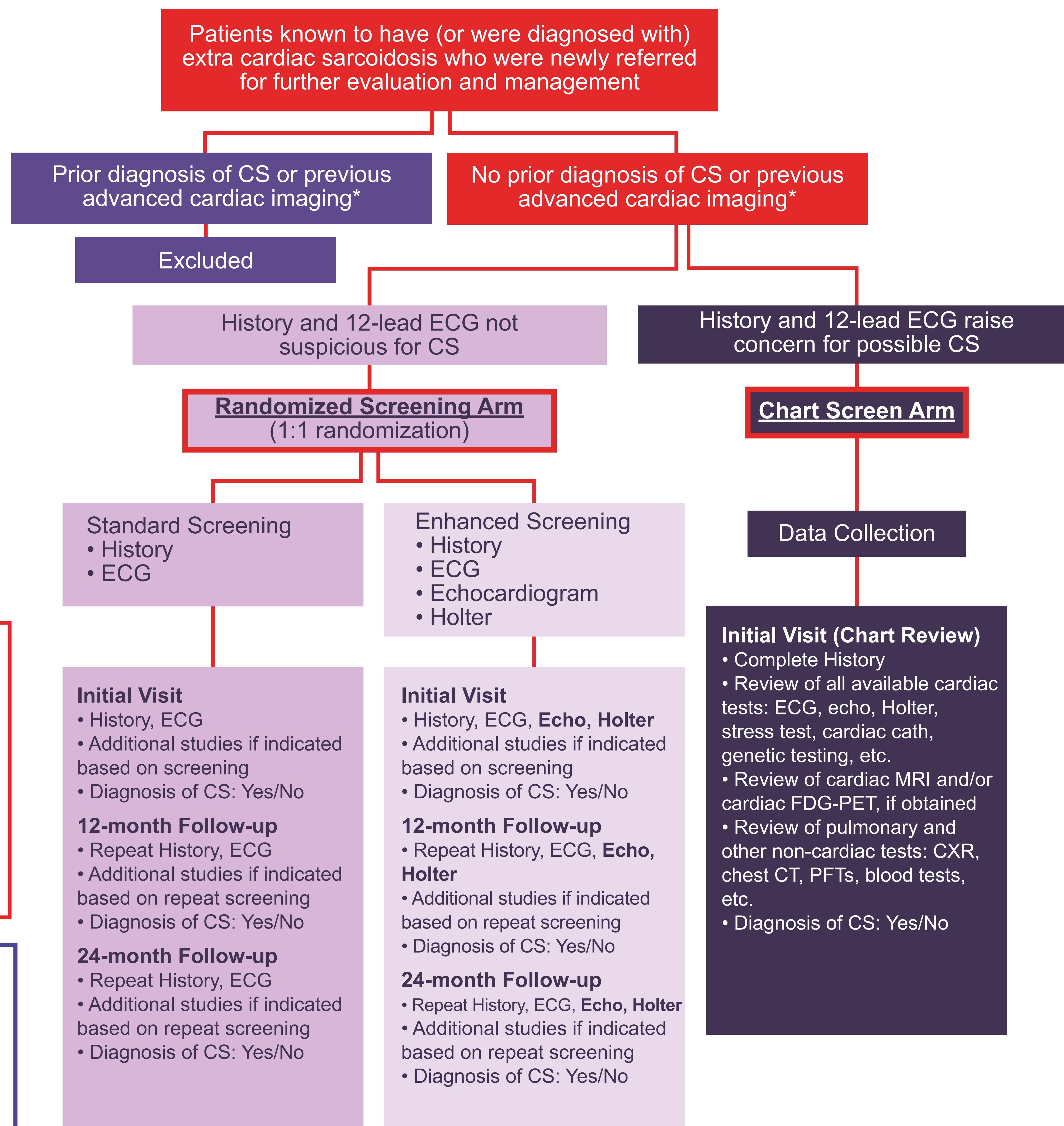


Figure 1. Papland Study Design – Patient Eligibility, Randomization, and Data Collection Flowchart

PAPLAND Cardiac Sarcoidosis (CS) Screening Study



* Advanced cardiac imaging: Cardiac MRI of cardiac FDG-PET for evaluation of suspected cardiac sarcoidosis
ECG = electrocardiogram; MRI = magnetic resonance imaging; FDG-PET = fluorodeoxyglucose positron emission tomography;
CXR = chest X-ray; CT = computed tomography; PFT = pulmonary function test

Authors

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Table 1. Patient Enrollment

Study Arm	Patients Enrolled
Chart Screening Arm	554 patients
Enhanced Screening Arm	338 patients

Table 2. Study Centers & Principal Investigators

Study Site	Principal Investigator
Cleveland Clinic	Daniel Culver, DO
Royal Papworth Hospital	Muhunthan Thillai, BA MRCP PhD
Albany Medical Center	Marc Judson, MD
Medical University of South Carolina	W. Ennis James, MD
National Jewish Health	Lisa A. Maier, MD MSPH FCCP
Northwestern University	Peter H. Sporn, MD
St. Antonius Hospital	Marcel Veltkamp, PhD MD
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University of Illinois Chicago	Dr. Nadera Sweiss, MD
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University of Washington	Ganesh Raghu, MD

Acknowledgements and Resources



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PAPLAND on ClinicalTrials.Org

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FSR Homepage
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