**RCTH Project # 80004238** Azhar (PI) 04/01/21 – 06/30/22

Research Center for Transforming Health, Univ South Carolina \$25,000

Development and Characterization of a Mouse Model of Peripheral Arterial Disease Associated with Chronic Kidney Disease and Atherosclerosis

The major goal of this project is to use high phosphate-adenine die and hypercholesterolemia to establish a mouse model of medial arterial calcification and myopathy in the lower extremities. Role: PI

**ASPIRE - II Project # 80004438** Azhar (PI) 07/01/21 – 09/30/22

Office of the Vice President of Research, Univ South Carolina \$100,000

Calcific Aortic Valve Stenosis: Sex-Specific Mechanisms and Therapy

The major goal of this project is to use gonadectomy and hormone replacement strategies to determine the effect of sex on development and progression of CAVD in mice.

Role: PI of the Pilot Project

**Project # 10011023** Azhar (PI) 04/01/21-08/31/22

Elastrin Therapeutics, Inc \$30,000

Reversal of mitral valve calcification by chelation therapy

The major goal is to test a novel drug candidate for reversing valve calcification.

Role: PI

**5P20GM103641-09** (COBRE Pilot Project) Nagarkatti (PI) 07/01/21-06/30/22

Resveratrol Therapy for Calcific Aortic Valve Disease \$50,000

The major goal is to determine if resveratrol can block and/or reverse the aortic valve calcification in mice.

Role: PI of the Pilot Project

**2P20GM103499** Goldsmith (PI) 09/01/21-08/31/22

(SC INBRE Bioinformatics Pilot Project) \$10,000

Identification of Differentially Expressed Genes Involved in Thoracic Aortopathy

The major goal is to determine altered gene expression (via RNASeq) responsible for aortic aneurysm, dissection and lethal aortic rupture in juvenile smooth muscle cell specific *Tgfb2* conditional knockout mice.

Role: PI of the Pilot Project

**Project # 10011532** Azhar (PI) 10/15/21-04/14/23

KOR Life Science, Inc \$100,000

Drug discovery for calcific aortic valve disease

The major goal is to test the efficacy of a novel to treat aortic valve calcification

Role: PI

The <u>Letter of intent</u> submission to The Marfan Foundation's Everest Award Program was selected to submit a full application (Deadline of submission: January 10, 2022).

**Everest Grant Award Program** Azhar (PI) 06/01/22-05/31/26 The Marfan Foundation \$800,000

Development of thereby for proventing therebic certic rupture

Development of therapy for preventing thoracic aortic rupture Role: PI

2021-2023 NIH/NIGMS University of South Carolina Center of Biomedical Research Excellence (COBRE), Research Center for Child Well-being, Role: Co-I (PI: Chandrashekar). Project Title: Development of open-source tools for measurement of heart rate in free living children - \$40,000

Status information on Multi-Principal Investigator Application to NIH received. Proposal Title: LRRC8 anion channels, superoxide and RhoA in diabetic erectile dysfunction. PIs: R. Clinton Webb and Fred S. Lamb. Institutions: University of South Carolina and Vanderbilt University. Impact score: 18. Percentile: 1.0

Using EHR and Community Data to Predict Medication-Related Post-Discharge Acute Care Utilization. Ronda Hughes, PhD (PI), **Cynthia Corbett, PhD**, Nathaniel Bell, PhD, Hikmet Niset, PhD, Karen McGee, PharmD, Chen Liang, PhD. Big Data Health Science Center. August 2020-August 2021. Analyses in progress.

<u>Mentored Grants</u> (not sure if these are applicable, but people with medication use during care transitions is applicable to all, including those with heart disease—patients with CHF actually have the highest 30-day rehospitalization rates and medication use is often a problem).

Magellan Scholar Grant, UofSC Office of Undergraduate Research. Patient perspectives on post-hospitalization medication adherence: A meta-synthesis. Isabel Stringfellow (PI), **Cynthia Corbett, PhD (mentor)**, Pamela Wright, PhD(c) (co-mentor). January – April 2022

Tailoring Exercise for Women with PCOS. Pamela Wright, MExS (PI), **Cynthia Corbett, PhD (co-sponsor)**, Bernadine Pinto, PhD (co-sponsor), Robin Estrada, PhD (collaborator), Michael Wirth (collaborator), Richard Legro, MD (consultant). NIH NINR, grant number 1F31NR019206-01A1, November 2020-April 2022.

I01 CX002062, VA merit award 03/30/2025

Taixing Cui (PI)

04/01/2021-

Title: To explore the potential of UCH-L1 as a novel therapeutic and diagnostic target in heart failure

This proposal is to test the hypothesis that targeting UCH-L1 is a novel approach for the treatment of heart failure and circulating UCH-L1 serves as novel biomarkers of heart failure.

Role: PI

Award Total: (\$1,200,000) Direct: \$1,200,000 Indirect: N/A