Cardiovascular Translational Research Center University of South Carolina

Progress Report March 1, 2020 to December 31, 2021

November 17, 2021

Overview

Cardiovascular disease is the leading cause of death in the United States and is a prominent health concern in South Carolina. The Cardiovascular Translational Research Center (CTRC) has been established to promote integrated research into the pathogenesis, diagnosis and treatment of cardiovascular disease.

The CTRC will make significant progress in cardiovascular research. With a comprehensive goal to improve cardiovascular health in South Carolina and elsewhere, the CTRC will be at the forefront of research, bringing together basic scientists, clinicians and trainees. The CTRC was launched in 2020 by the Board of Trustees as a University of South Carolina Excellence Initiative.

- The CTRC will have significant impact upon the University of South Carolina landscape and upon the citizens of South Carolina. The anticipated impact of the CTRC, which will be a "ground up" initiative over the next five years, including increased funding for basic and translational biomedical research, training a diverse workforce to meet regional needs in a changing healthcare environment, and educational outreach to patient populations in South Carolina.
- The CTRC will build upon existing strengths and establish unique collaborations across multiple
 disciplines, colleges, and clinical partners resulting in novel approaches to combat cardiovascular
 disease, which is reaching epidemic proportions in South Carolina.

Lead Faculty

R. Clinton Webb, Ph.D. Director Mohamad Azhar, Ph.D. Kurt Barringhaus, M.D. Wayne Carver, Ph.D. Cynthia Corbett, Ph.D., RN, FAAN. Taixing Cui, M.D., Ph.D., FAHA John Eberth, Ph.D. Edie Goldsmith, PhD Donald DiPette, M.D. Rich Goodwin, Ph.D. Abbi Lane-Cordova, Ph.D. Susan Lessner, Ph.D. Lydia Matesic, Ph.D. Roy O. Mathew, M.D., FASN Cameron McCarthy, Ph.D.

Melissa Moss, Ph.D.
Thomas Nathaniel, M.D.
Bernardine Pinto, Ph.D.
Jay Potts, Ph.D.
Fernanda Priviero, Ph.D.
Robert L. Price, Ph.D.
Mark Sarzynski, Ph.D.
Souvik Sen, M.D.
Tarek Shazly, Ph.D.
Francis G. Spinale, M.D., Ph.D.
Wenbin Tan, Ph.D.
Mark Uline, Ph.D.
Camilla Wenceslau, Ph.D.
Susan Wood, Ph.D.

Timeline of Notable Events

2020

March 1: Dr. Clinton Webb hired as the Director of the CTRC

May 1: CTRC Seminar Series established (Clinton Webb, Department of Cell Biology and

Anatomy and Mark Uline, Program Director, Biomedical Engineering)

October 21: Document submitted to Provost to establish the CTRC

December 15: Board of Trustees approve recommendation to create the CTRC effective Spring

of 2021

2021

February 5: CTRC takes the lead in the American Heart Association Heart Walk for the USC

School of Medicine

March 1: Dr. Mark Uline appointed Director of the Biomedical Engineering Program

March 22: First meeting to plan Program Project Grant Application (PO1) to the National

Institutes of Health (NIH) - Clinton Webb and Frank Spinale

July 29: Theme, Projects and Cores for PPG application set. Theme: Chronic

unpredictable stress initiates inflammatory events to cause hypertension. Project

leaders: Clinton Webb (Director), Fiona Hollis, Michael Ryan, Frank Spinale.

Core leaders: Clinton Webb, Susan Wood, Fernanda Priviero

August 1: Drs. Camilla Wenceslau and Cameron McCarthy join the faculty of the CTRC

September 1: Dr. Lydia Matesic appointed Director of Cardiovascular Technology Program

September 16: Ms. Andrenette Hudley hired as the Director of Operations of the CTRC

September 20: Social media (Twitter @CTRC_UofSCSOM) and webpage for CTRC launched

September 24 CTRC Journal Club established

October 10: Webpage created

October 18: CTRC Newsletter launched

November 12: Drs. Lydia Matesic and Mark Uline attended Provost's Health Professions Retreat

Publications

Lead faculty published 32 scientific papers in 2020 and 36 in 2021. A listing of these publications is available on our website.

Funding

During 2020-22. lead faculty were funded by 18 awards (16 extramural). A listing of these awards is available on our website.

Goals for 2022

Set benchmarks for publications and grant submissions

Submit PPG application to NIH

Establish Journal Club as a graduate level course (1 hour credit)

Recruit additional faculty

Webpage

https://www.sc.edu/study/colleges_schools/medicine/centers_and_institutes_new/cardiovascular_translational_res_earch_center/