



March 22, 2024

**SC COBRE
IN OXIDANTS,
REDOX BALANCE,
AND STRESS SIGNALING**

COBRE EXECUTIVE ADVISORY BOARD



Kenneth D. Tew, PhD, DSc, FASPET
Medical University of South Carolina



Franklin G. Berger, PhD
University of South Carolina



Dean P. Jones, PhD
Emory University of Medicine



Gary O. Rankin, PhD
Marshall University



Stephen J. Cutler, PhD
University of South Carolina

EAB Members unable to attend:

Yvonne Janssen-Heininger, PhD

The University of Vermont

Garth Powis, D. Phil

Formally, Sanford Burnham Prebys Medical Discovery Institute

ABOUT THE COBRE

We are now in the middle stages of the Phase III funding period of the third period of the COBRE program. We continue our goal of bringing together junior and senior investigators from disparate backgrounds with shared research interests in oxidants, redox balance and stress signaling.

To facilitate continued development of the Center for the period of 2024-2025, we maintain three scientific core facilities funded by a reduced budget. Our long-term plan continues to be to develop in South Carolina a Center of Excellence in the scientific discipline of redox biology. Over the first 12 years of support, RO1 successes have permitted >20 graduates to establish successful independent careers. Their projects have interfaced with the fundamentals of oxidant stress, redox homeostasis and stress signaling and helped to enhance programmatic development. We continue to support investigation through our pilot grant program where their scientific aims are supported by our three scientific cores in Proteomics, Cell and Molecular Imaging, and Analytical Redox.

Our central hypothesis has not changed and continues to be that redox regulated pathways impact the pathobiology of diseases such as cancer, aging, diabetes, inflammation, and neurodegeneration. The administrative core continues to provide business management, faculty development, mentoring, pilot project assignments, program planning and sustainability. We have appointed oversight committees in Steering, Internal Advisors and External Advisors. Our advisory groups contain individuals who have scientific expertise in chosen disciplines and also considerable mentoring experience.

Future development of the program at MUSC is also presently served by existing financial commitments from the Deans of Medicine and Pharmacy and the Provost's Office. As we move forward with supplementation of our core facilities, our goals remain support for peer review investigator grants and support for MUSC faculty.

In the past year, we have been successful in obtaining an equipment supplemental grant that has expanded redox metabolomics in the Analytical Redox Core. Moreover, we continue to organize the Summer Redox Course together with the Karolinska Institute and University of Nebraska-Lincoln with a June date in 2024 in Lincoln Nebraska.

Friday, March 22

8:00 - 9:00 AM

Breakfast

9:00- 9:05 AM

Kenneth Tew, PhD, DSc COBRE PI,
Opening Remarks

9:05- 9:50 AM



Lauren Ball, PhD
Director, Proteomics Core

9:50- 9:55 AM

Scott Eblen, PhD
Introduction to Pilot Awardees

10:00- 10:30 AM

Saverio Gentile, PhD
"Ion channels and mitochondria: a link to unveil cancer vulnerability"

10:30- 10:50 AM

Break

10:50- 11:20 AM

Russel Spencer-Smith, PhD
"Elucidating the roles of ROS, CRAF and ASK1 in KRAS-driven lung cancer"

Friday, March 22

11:20- 12:05 PM



Danyelle Townsend, PhD

Director, Analytical Redox Biology &
Bioenergetics Profiling Core

12:05-1:20 PM

Lunch break

1:20-1:40 PM

**COBRE Summer Course description & student
discussion**

-led by Townsend/Tew

1:45-2:30 PM

Li Li, PhD

Core Manager, Cell and Molecular Imaging Core

Presenting in place of John Lamasters, Core

Director

2:30-3:00 PM

Break

3:00- 3:45 PM



Steve Duncan, PhD

Discussion of the MUSC COBRE in
Digestive and Liver Disease



3:45- 3:55 PM Closing Remarks: Danyelle Townsend, PhD

4:00- 4:30 PM *Closed session. PI Admin Co-director and EAB members*

NOTES

SC COBRE EAB Retreat 2024

Thank you
for
joining us

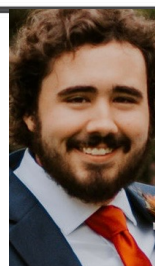
COBRE Administrative Core



Deza Finn
Department
Administrator



**Caitlin Myers-
Hernandez**
Grants
Administrator



Andrew King
Fiscal
Technician



Niki Turner
Administrative
Coordinator