



Cardiovascular Research Training Program



Tom Resta, Ph.D.

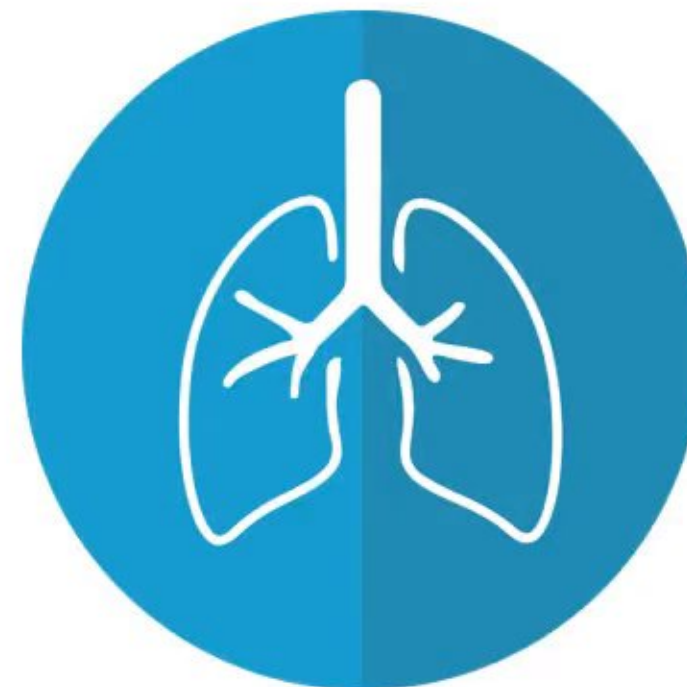
Professor - Cell Biology and Physiology

Senior Associate Dean – Research Education

Director – Cardiovascular Research Training Program

Why Cardiovascular Research?

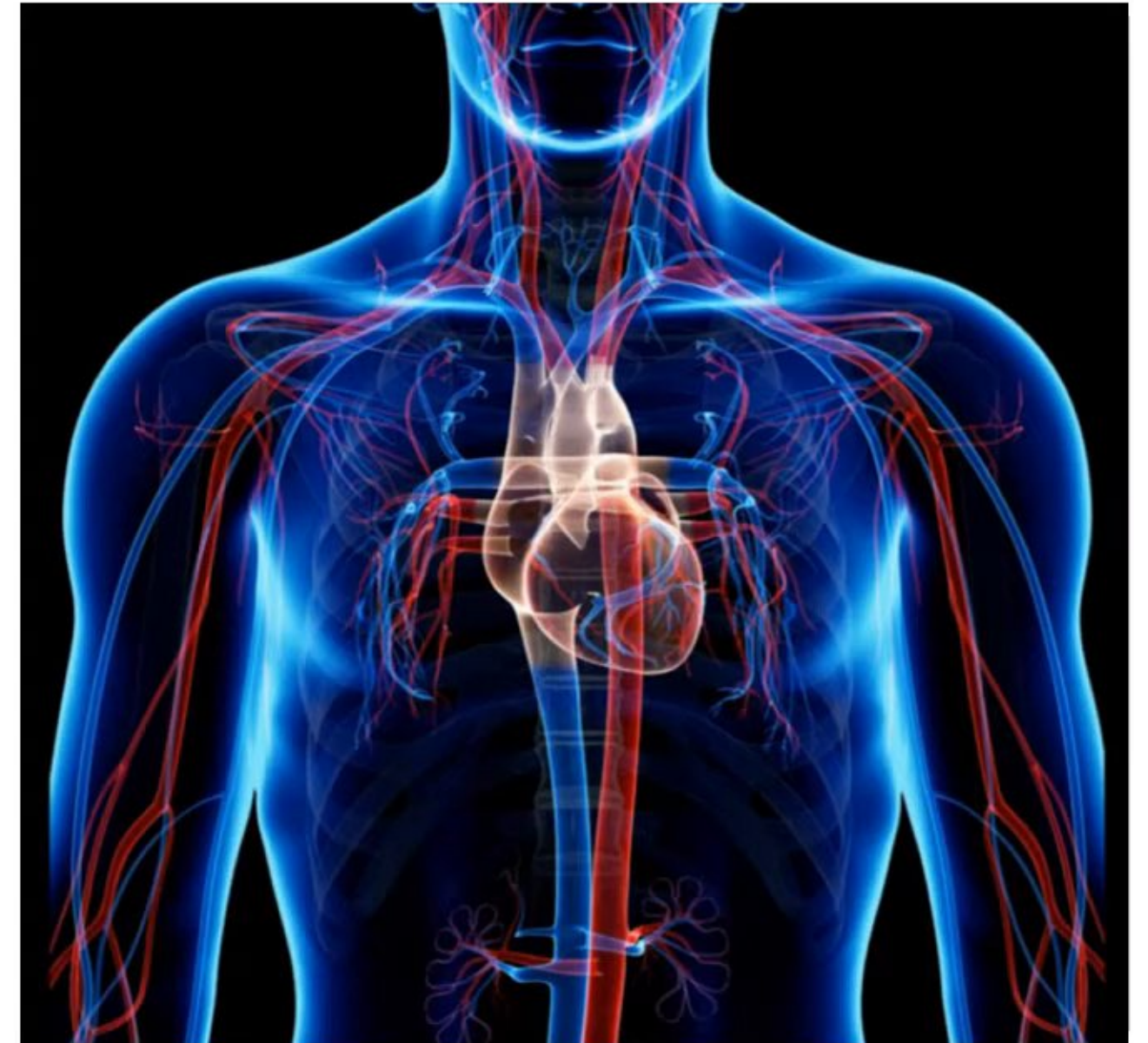
- Cardiovascular disease is the leading cause of death in the U.S.
- Lower respiratory diseases are the 3rd leading cause of death.



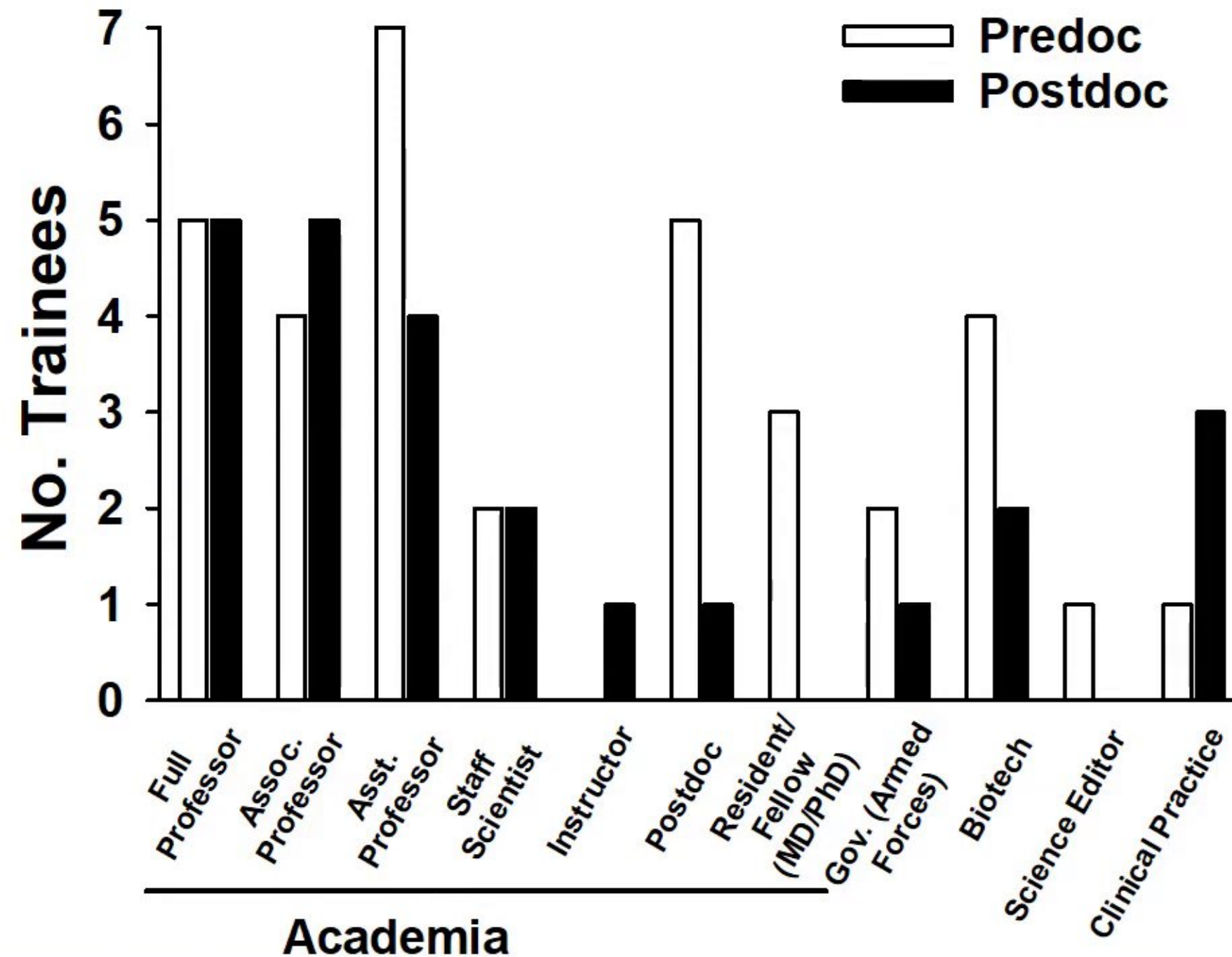


Cardiovascular Research Training Program (CRTTP)

- Funded by NIH since 1993
- 25 faculty mentors from both basic science/clinical departments
- Currently funds 6 predoctoral and 2 postdoctoral trainees



Current Positions of Trainees (1993-2020)



Kris Marjon, PhD
Senior Scientist,
Forty Seven Inc., CA



Scott Earley, PhD
Professor, Univ. of Nevada.



Jessica Snow, PhD
Professor, NM Highlands Univ.



Melissa Riddle, PhD
Officer, Dept. of Defense
Chief, Clinical Reference Lab

Provisions and Benefits

- Stipend Support
- Tuition
- Travel
- Training-Related Expenses



Support and Eligibility

Support: Can extend throughout your training (many trainees receive alternate fellowships)

Requirements:

- U.S. citizen or permanent resident

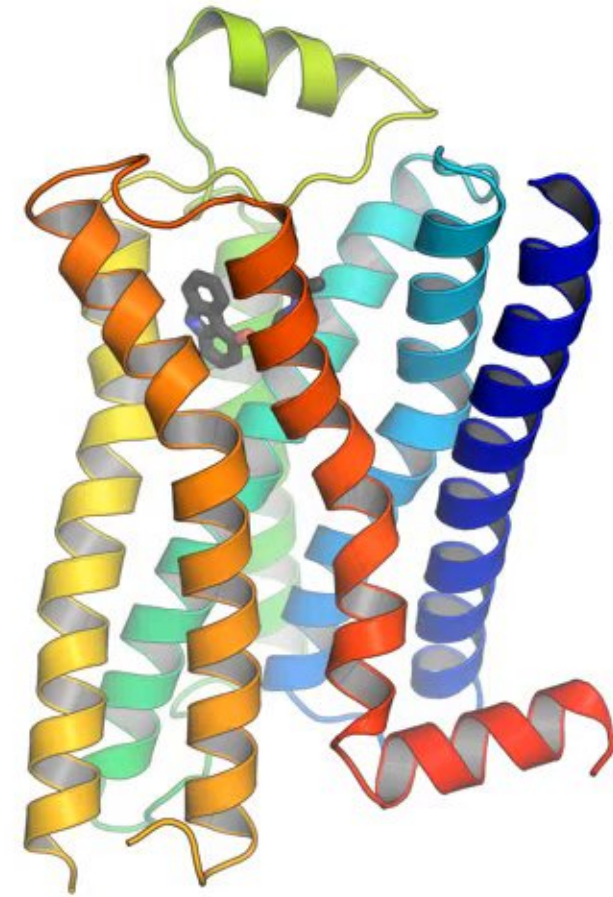
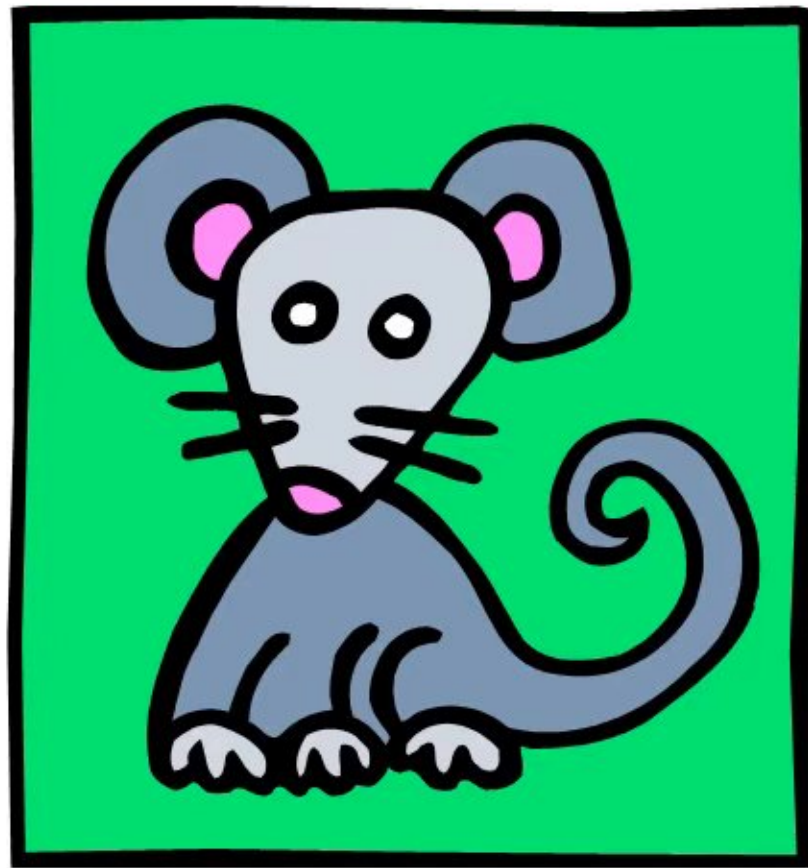
- Work with a mentor on the T32

- Enroll in CV Journal Club/Seminar Series

- Submit pre- or post-doctoral fellowship application

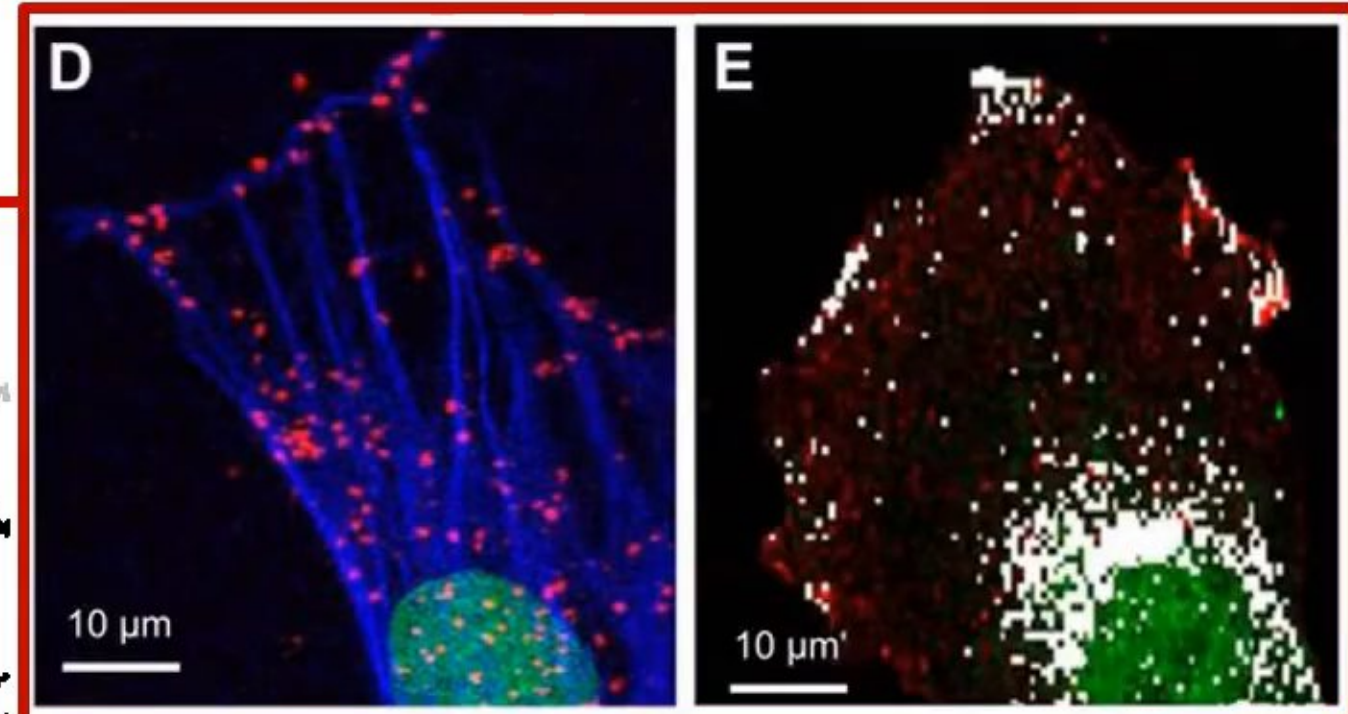
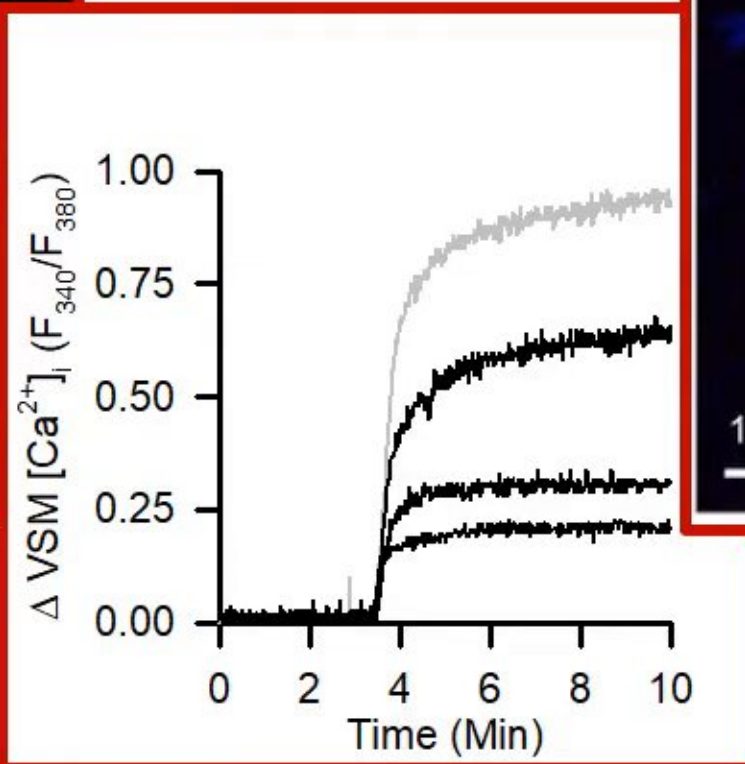
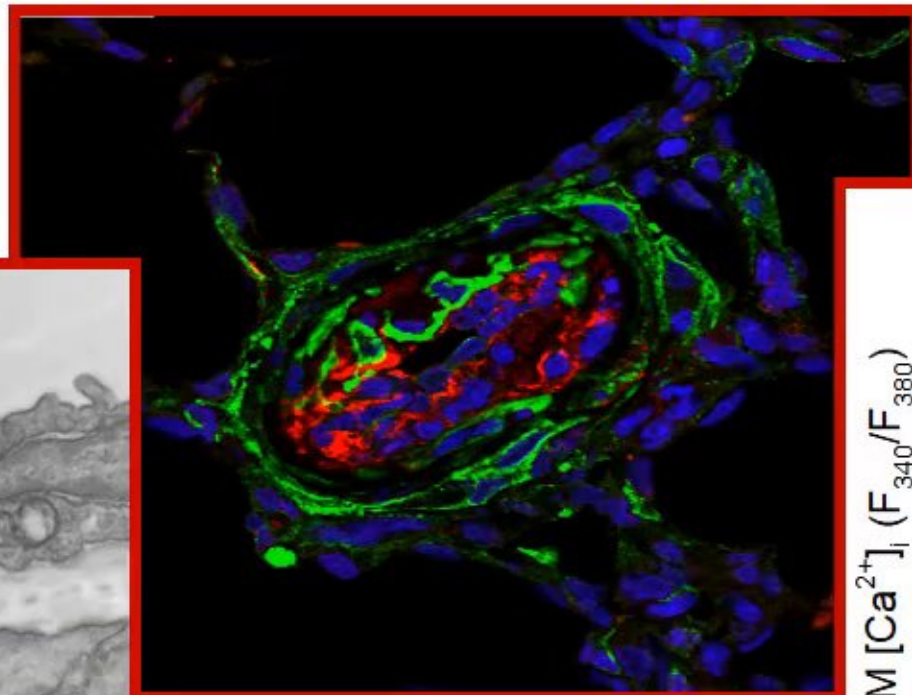
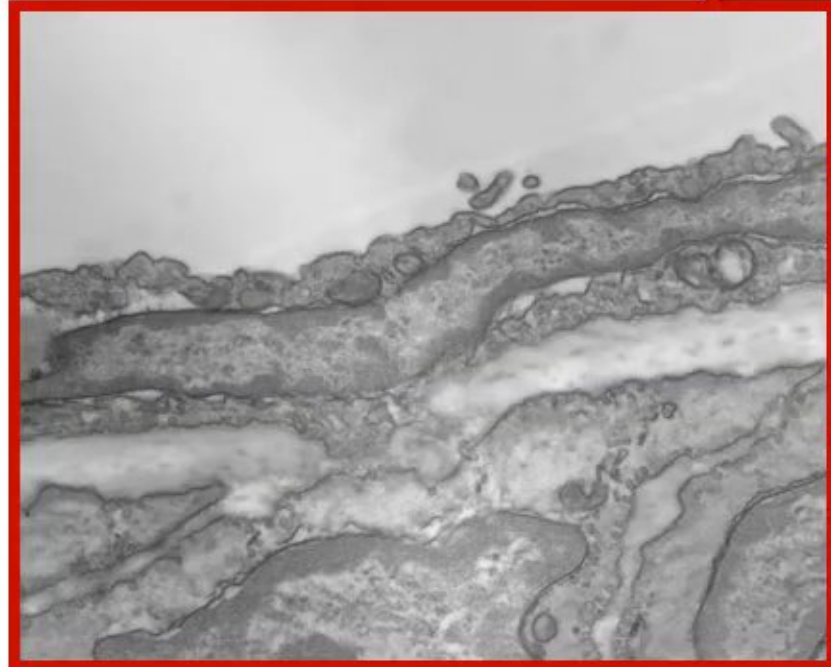
Research Programs

Integrative approach to understanding mechanisms of cardiovascular disease

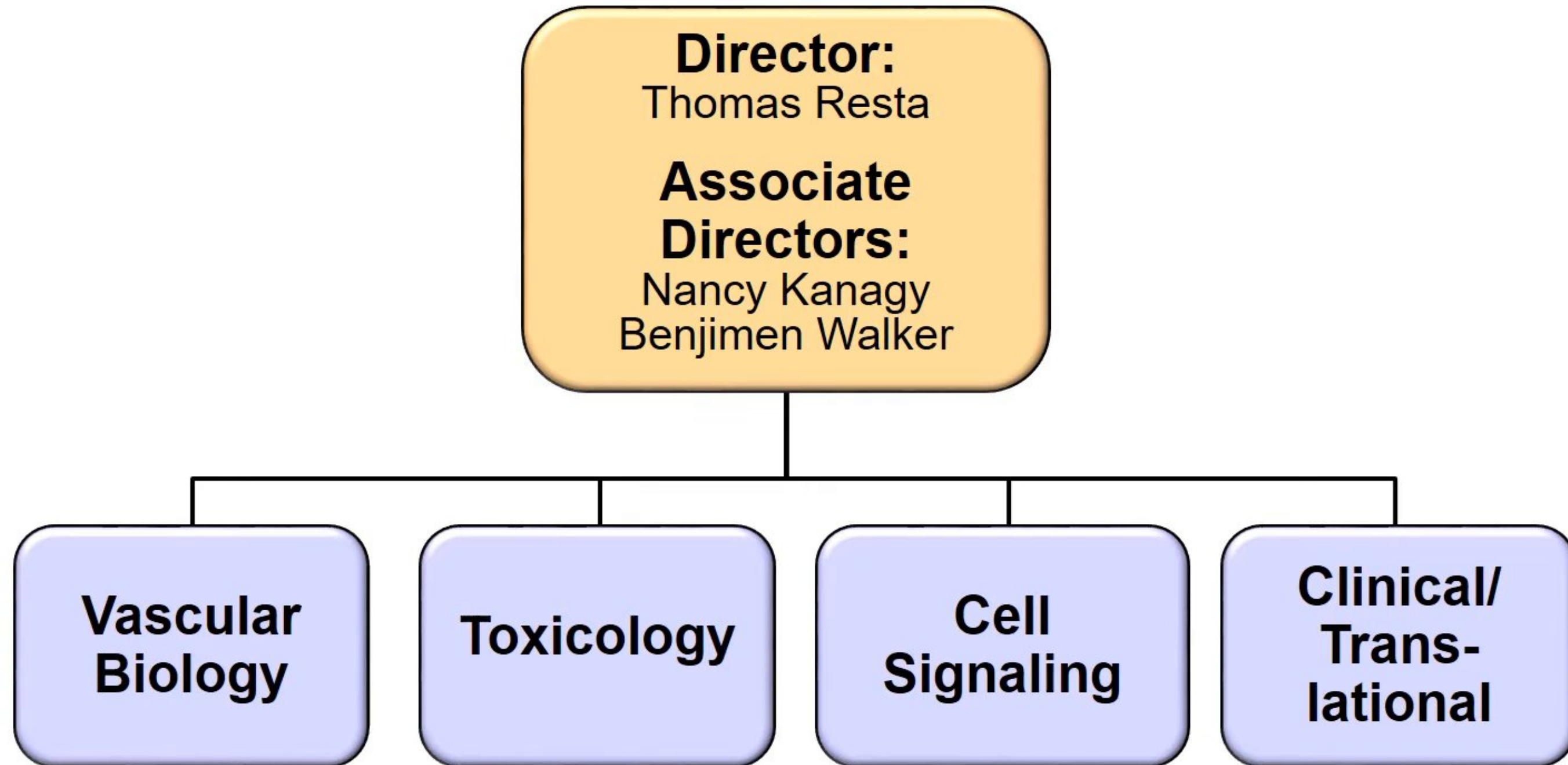


Technical Approaches

- *In vivo* studies
- Ratiometric calcium imaging
- High spatial/temporal resolution microscopy
- Molecular biological approaches
- Translational/clinical/population studies



C RTP Organizational Structure



Vascular Biology



Nikki Jernigan
Ion channels & metabolic
reprogramming in
pulmonary hypertension



Tom Resta
Oxidant and Ca^{2+} signaling in
pulmonary hypertension



Laura Gonzalez Bosc
Adaptive immunity and
inflammation in pulmonary
hypertension



Nancy Kanagy
Endothelial H_2S signaling and
systemic hypertension



Amy Gardiner
Small RNA-regulation of
angiogenesis

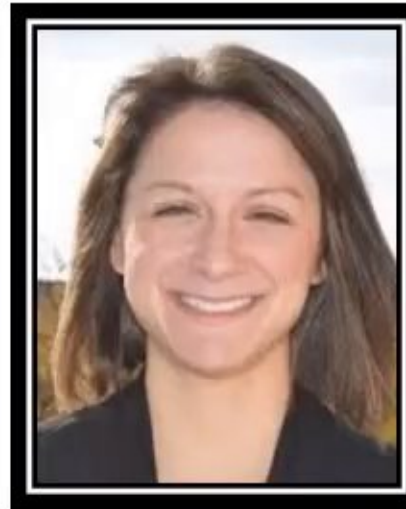


Jay Naik
Endothelial H_2S , CO , and
 Ca^{2+} signaling in CV disease

Toxicology



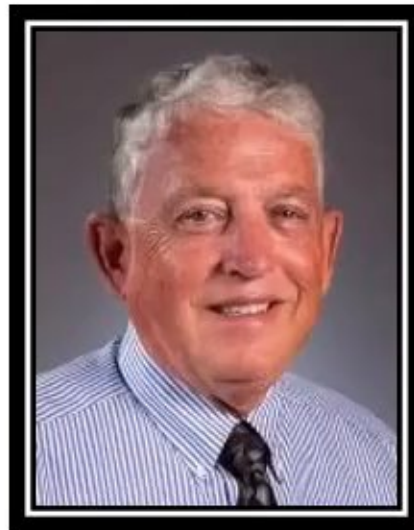
Matt Campen
Air pollutants and
vascular injury



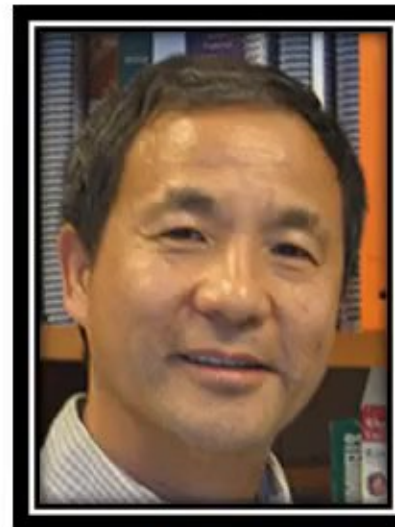
Katie Zychowski
Neurovascular consequences of
inhaled toxins



Manoocher Soleimani
Kidney injury, hypertension
and heart failure



Scott Burchiel
Hematopoietic effects of
heavy metals



Jim Liu
Brain injury after stroke/
heavy metal toxicology



Akshay Sood
Coronary artery disease in
uranium miners

Cell Signaling



Jennifer Gillette
Stem cells & tissue repair



Eric Prossnitz
Estrogen receptor signaling in
cardiovascular disease



Judy Cannon
T cell migration in
immune responses



Ksenia Matlawska-
Wasowska
Cytokine signaling in
leukemia



Meilian Liu
Therapeutic targets
for obesity



Bill Shuttleworth
Ischemic brain injury



Surojit Paul
Neuroprotection in
Ischemic stroke

Clinical and Translational



Tracie Collins
Peripheral artery disease in
diabetes and obesity



Dawn Delfin
Stem cells & heart disease



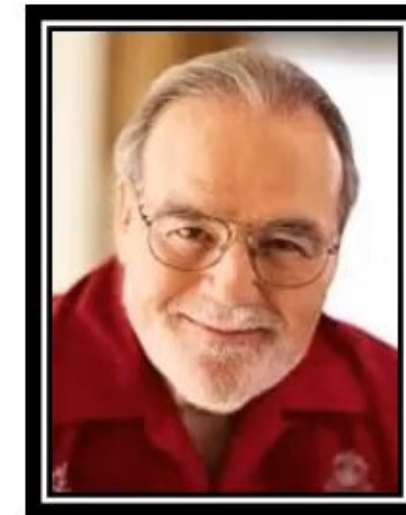
Andrew Carlson
Stroke and Brain Injury



Michel Torbey
Neuroinflammation in
ischemic stroke



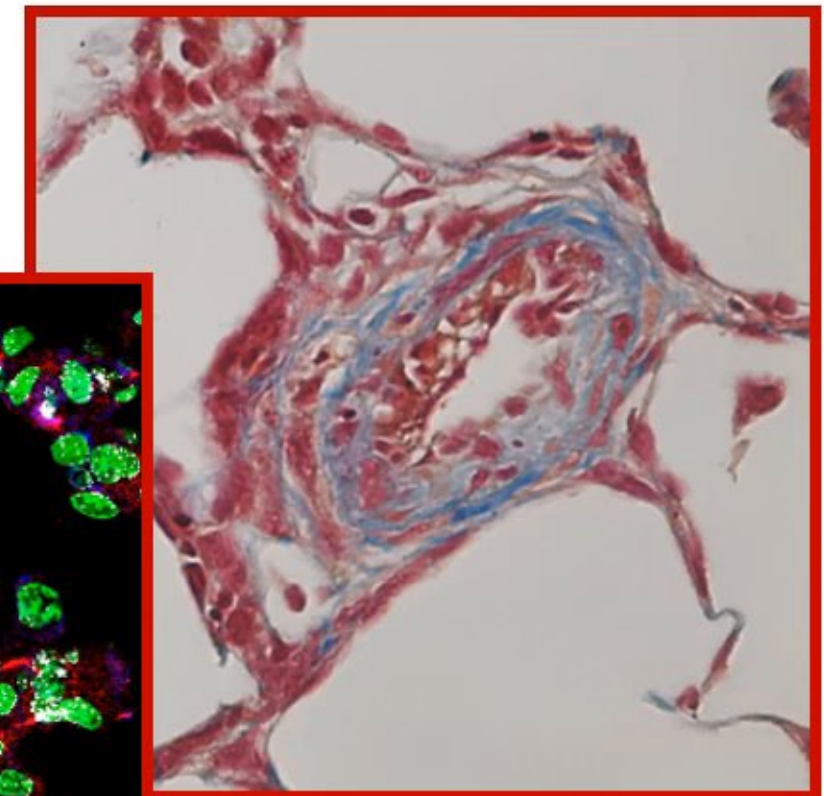
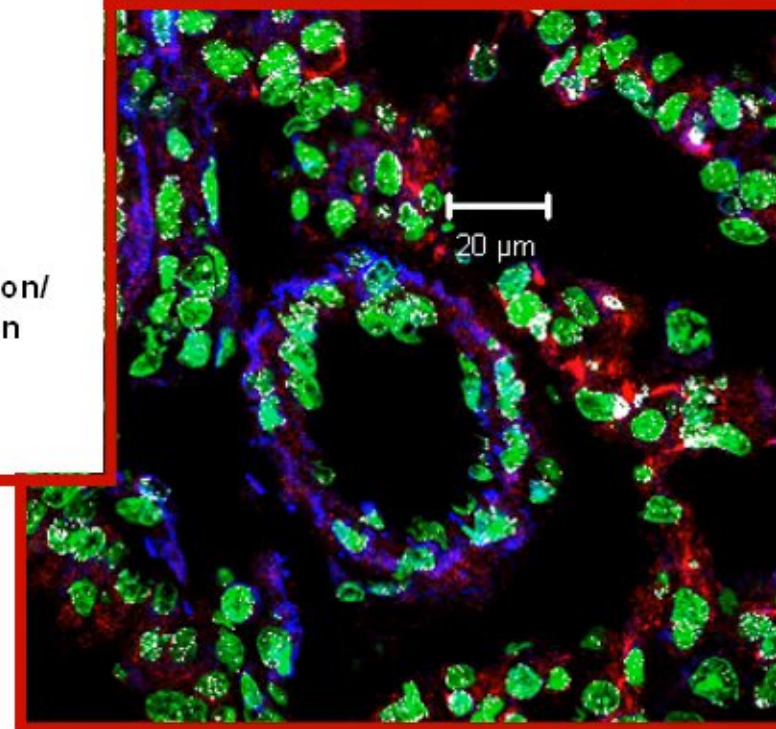
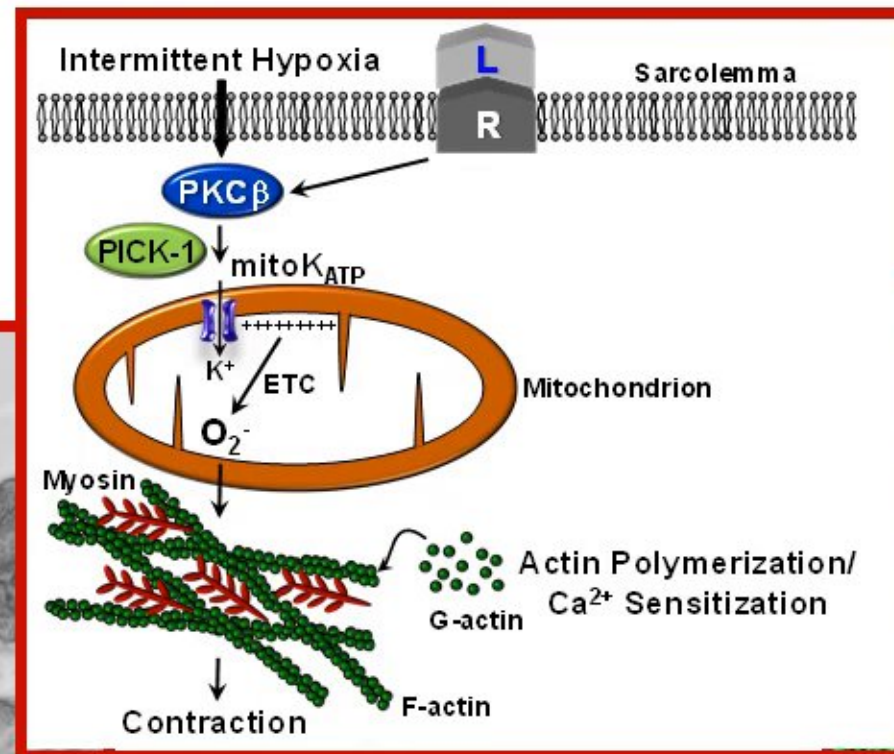
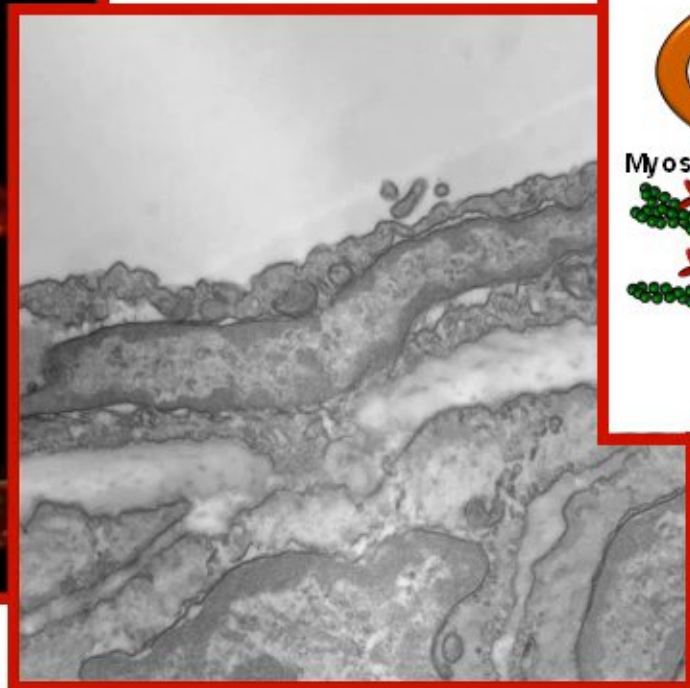
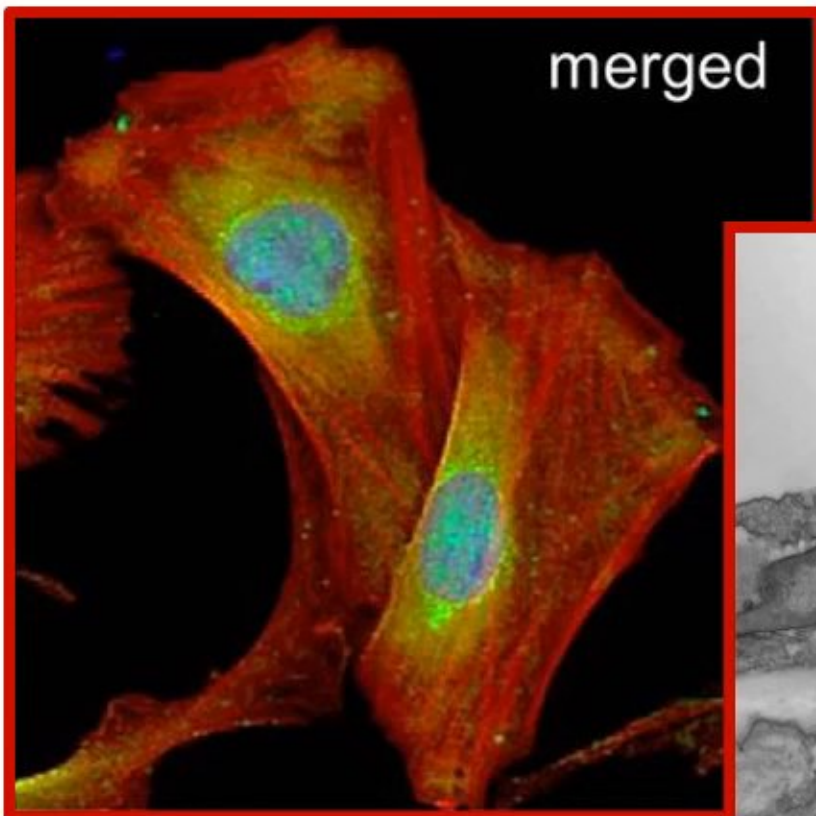
Mark Unruh
Sleep apnea & kidney
disease



Larry Sklar
Drug discovery

Concentration in CV Physiology

The Concentration in CV Physiology is a program of coursework designed to ensure broad training in physiology with major research interests in vascular biology, hypoxia, hypertension, sleep apnea, pulmonary hypertension, heart disease, chronic kidney disease, and stroke.



More Information

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