



PROGRAM

Featured Lecture — Jay Dean, PhD

- ◆ Professor, University of South Florida, Department of Molecular Pharmacology & Physiology, College of Medicine
- ◆ Adjunct Professor, Department of Military and Emergency Medicine

Keynote Lecture — Cynthia Beall, PhD

- ◆ Distinguished University Professor, Case Western Reserve University
- ◆ Sarah Idell Pyle Professor of Anthropology

Additional Lectures

- ◆ **Ozan Akkus, PhD** — CWRU, Associate Professor, Leonard Case Jr. Professor of Engineering, Tissue Fabrication and Mechanobiology Lab
- ◆ **Richard D. Arnold, PhD** — Director, Naval Aerospace Medical Research Laboratory (NAMRU), Dayton, OH
- ◆ **Walter F. Boron, MD, PhD** — CWRU, Myers/Scarpa Professor & Chairman, Department of Physiology & Biophysics
- ◆ **Ryan S. Mayes, PhD** — United States Air Force, 711th Human Performance Wing, USAF School of Aerospace Medicine



We are pleased to announce the Inaugural Symposium for the Center for Aerospace Physiology to be held at Case Western Reserve University on April 29-30, 2019. **The Center for Aerospace Physiology** is housed within the Department of Physiology & Biophysics, at the School of Medicine. Our team of multidisciplinary scientists collaborate closely with flight surgeons and aerospace physiologists from NASA, the USAF and USN to develop new strategies enabling humans to live and thrive within austere environments on earth, the upper atmosphere, and beyond.

Our partnership with scientists at Naval Medical Research Unit-Dayton (NAMRU-D), and those within the 711th wing of the United States Air Force, will also provide new opportunities for students seeking research experience in Aerospace Physiology. Opportunities may include CWRU-based laboratory rotations, on-base internships and the option to take courses at the United States Air Force School of Aerospace Medicine (USAFSAM).



Center for Aerospace Physiology

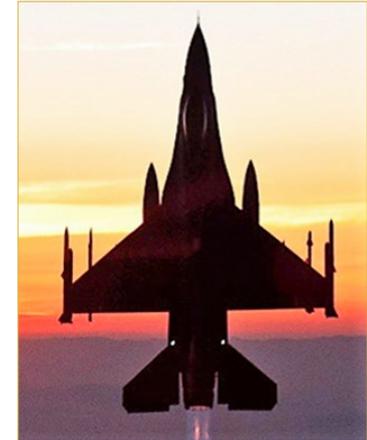
Director: Michael J. Decker, PhD
mjd6@case.edu

Co-Hosts: Elizabeth G. Damato, PhD
egd@case.edu

Joseph C. LaManna, PhD
JCL4@case.edu

Kui Xu, MD, PhD
kxx@case.edu

For further information, please email us at:
dpb_aero@case.edu



Inaugural Symposium for the Center for Aerospace Physiology

Monday-Tuesday, April 29-30, 2019
Case Western Reserve University
Thwing Center — Excelsior Ballroom
11111 Euclid Ave
Cleveland, OH 44106

For more information:
dpb_aero@case.edu

Host: Walter F. Boron, MD, PhD
Myers/Scarpa Professor and Chairman,
Department of Physiology & Biophysics



SCHOOL OF MEDICINE
**CASE WESTERN RESERVE
UNIVERSITY**



Inaugural Symposium
Center for Aerospace Physiology
Case Western Reserve University
Director: Michael J. Decker, PhD

Monday, April 29

Tuesday, April 30, 2019

Host: Walter Boron, MD, PhD

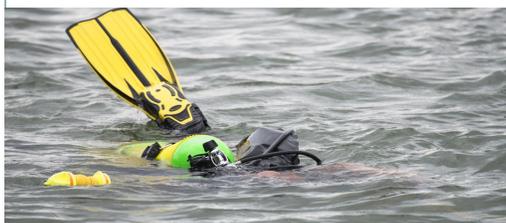
Monday, April 29, 2019
Thwing Center — Excelsior Ballroom

AGENDA

- 8:00 a.m. Registration/Continental Breakfast
- 9:00 a.m. **Welcome & Overview**
◆ Michael Decker, PhD
- 9:05 a.m. **Lecture: "Current USN Aerospace Research"**
◆ Richard D. Arnold, PhD
- 9:30 a.m. Q&A

Monday, April 29, 2019 — Con't.

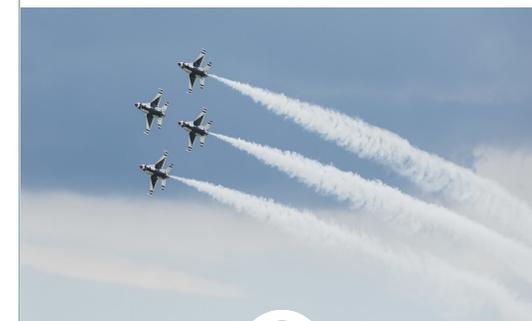
- 9:40 a.m. **Lecture: "Future Aerospace Research Priorities"**
◆ Ryan S. Mayes, USAF
- 10:05 a.m. Q&A
- 10:15 a.m. Coffee Break
- 10:30 a.m. **Lecture: "CNS oxygen toxicity in undersea medicine: mechanisms and mitigation strategies"**
◆ Jay Dean, PhD
- 11:15 a.m. Q&A
- 11:30 a.m. Lunch
◆ Posters Presented
- 12:45 p.m. **Keynote Lecture: "Past and ongoing natural selection among Tibetan highlanders"**
◆ Cynthia Beall, PhD
- 1:30 p.m. Q&A
- 1:40 p.m. Break
- 1:45 p.m. **Lecture: "Functional Repair of Musculoskeletal Tissues"**
◆ Ozan Akkus, PhD
- 2:30 p.m. Q&A
- 2:40 p.m. **Lecture: "Gas Channels"**
◆ Walter Boron, MD, PhD
- 3:25 p.m. Q&A
- 3:35 p.m. Closing Remarks



Tuesday, April 30, 2019

SOM — Robbins E-501

- 12:00 p.m. **Lecture: "Winning the Physiological Air War of 1939-1945: the history of aero medical research and practices in America during WWII"**
◆ Jay Dean, PhD
- 12:45 p.m. Q&A
- 12:55 p.m. **Closing Remarks**
- 1:00 p.m. Lunch



Center for Aerospace Physiology

For further information, please email us at:
dpb_aero@case.edu



SCHOOL OF MEDICINE
CASE WESTERN RESERVE
UNIVERSITY