

Mini-Symposium

“Cellular and molecular basis of vascular diseases”

Centre Hospitalier Universitaire Vaudois (CHUV) Lausanne, July 3, 2015

[Auditorium of the Maternity Hospital](#), Avenue Pierre Decker 2

Organiser: Prof. Jacques-Antoine Haefliger

PROGRAM

- 8:00 – 8:30 Welcome coffee
- 8:30-8:40** **Welcome: Prof. Jacques-Antoine Haefliger, Service of Vascular Surgery, Department of Medicine and Department of Physiology, CHUV/UNIL, Lausanne, Switzerland**
- 8:40 -9:25** **Prof. C. Keith Ozaki (Harvard Medical School, Boston, USA)**
BALANCING NEW DIMENSIONS AND YOUR CORE RESEARCH BUSINESS
- 9:25-10:10** **Prof. James R. Mitchell (Harvard School of Public Health, Boston, USA)**
HYDROGEN SULFIDE METABOLISM IN DIETARY RESTRICTION-MEDIATED LONGEVITY AND STRESS RESISTANCE
- 10:10 – 10:30 Coffee Break
- 10.30-11.15** **Prof. Paul Quax (Leiden University Medical Center, The Netherlands)**
INFLAMMATION AND IMMUNE MODULATION IN VEIN GRAFT DISEASE
- 11.15-12.00** **Dr. Xavier Berard (Bordeaux University Hospital, Bordeaux, France)**
MODELLING THE REMODELLING, FROM BENCH TO BEDSIDE
- 12.15 – 14.00 Lunch
- 14:00 – 16:00** **Afternoon workshops for PhD students with symposium speakers**

This mini-symposium will be accredited by the Association of Cantonal Veterinarians (SCAV), section Lausanne, as a half day of continuing education.

This meeting is free of charge but for organization purposes we would like participants (limited to a maximum number of 120) to register by filling the form [here](#) prior to June 15, 2015.

The UNIL doctoral school attributes 1.0 ECTS for PhD students who present a signed participation form for the mini-symposium (0.25 ECTS morning session, 0.75 ECTS afternoon session).

For additional information, please contact Dr. Ulrike Toepel (ulrike.toepel@unil.ch).

Talk abstracts

BALANCING NEW DIMENSIONS AND YOUR CORE RESEARCH BUSINESS

C. Keith Ozaki, M.D.
The John A. Mannick Professor of Surgery
Brigham and Women's Hospital
Harvard Medical School

Extending research training exposures from the early 1990's, since 1997 the Ozaki Vascular Research Team has focused on the core business of understanding vascular wall adaptations to physical forces. While such continuity offers many positives, over times research concepts and approaches can become stale. Pulling examples from recent personal experiences, Dr. Ozaki acknowledges the value of keeping to a research core theme, but herein highlights the risks and rewards of diversification. Examples of new dimensions include a physical move into a new research environment, exploration of novel signaling networks into vascular wall adaptations (adipose based), a move toward expansion of understanding to beyond the blood vessel wall, and shifts from primarily rodent and rabbit models to increased use of human tissues. The research team has also diversified, as have sources of funding. While not all investigative initiatives have been successful, overall the balance of honoring the lab's core business yet embracing and balancing selected new research strategies has maintained productivity and discovery.

HYDROGEN SULFIDE METABOLISM IN DIETARY RESTRICTION-MEDIATED LONGEVITY AND STRESS RESISTANCE

Prof. James R. Mitchell
Department of Genetics and Complex Diseases
Harvard School of Public Health
Boston, USA

INFLAMMATION AND IMMUNE MODULATION IN VEIN GRAFT DISEASE

Prof. PHA Quax
Einthoven Laboratory for Experimental Vascular Medicine
Department of Surgery
LUMC
Leiden
The Netherlands

MODELLING THE REMODELLING, FROM BENCH TO BEDSIDE

*Dr. Xavier Berard
Vascular Surgery Department
Bordeaux University Hospital
Bordeaux, France*

Aneurysm and intimal hyperplasia promoting stenosis are both aspects of the vascular wall remodelling. From bedside situation such as aneurysmal evolution of arterio-venous fistula in hemodialyzed patients, we will study the use of external reinforcement of aneurysmal arterialized veins by a synthetic mesh. Transposing the surgical intervention in an ex vivo vein perfusion bench system, the impact of the same device in relation with the modulation of hemodynamic forces will then be explored at the molecular level. Other approaches such as animal models, pathologic human vein collection analysis will also be discussed to determine their respective limits and benefits to complete our understanding of the remodelling process.