

# 16

 Nov  
2023

 Thursday  
LECTURE\*

MEET &amp; EAT

Light lunch provided

11.00am - 12.00pm

12.15pm - 2.00pm



## Towards a healthy heart - cell by cell, and nucleotide by nucleotide

### ABSTRACT

My laboratories at EMBL and Stanford University aim to uncover the molecular mechanisms of dilated cardiomyopathy (DCM), a severe disease of the heart for which no effective treatment exists. To this end, we develop novel experimental approaches to read, edit, and write entire genomes across scales. This provides unique insights into the genetic basis of complex phenotypes, the mechanisms of gene regulation, and the molecular systems underpinning disease. For example, use novel single-cell technologies, such as single-cell transcriptomics and single-cell phenotyping to dissect the genetic networks underlying DCM and identify targets for developing new therapies. We now begin to assign functions to every nucleotide in our genome, an approach that will transform the way we do biomedical research. This will eventually lead us to an era in which we can reliably predict disease risk from genetic and environmental information alone, and develop new strategies for preventive medicine. [steinmetzlab.embl.de](mailto:steinmetzlab.embl.de)  
[steinmetzlab.stanford.edu](mailto:steinmetzlab.stanford.edu)



### SPEAKER

## Prof. Dr Lars Steinmetz

Associated Group Leader and Director of Life Science Alliance, EMBL Heidelberg, Germany  
Dieter Schwarz Foundation Professor of Genetics, Stanford University, USA  
Co-Director, Stanford Genome Technology Center, Stanford, USA

### HOST:

Department of Life Science and Medicine (UL)

### RESPONSIBLE SCIENTIST:

Prof. Dr Stephanie Kreis / ([stephanie.kreis@uni.lu](mailto:stephanie.kreis@uni.lu))

\*Please note that registration is mandatory by sending an email to [siu-thinh.ho@lih.lu](mailto:suu-thinh.ho@lih.lu)

### Locations:

#### Lecture:

CHL - Centre  
Room Amphitheatre

4, rue Nicolas Ernest Barblé,  
L-1210 Luxembourg (Belair)

#### Meet & eat\*:

DoCR  
Room McClintock (2nd floor)

6A, rue Nicolas-Ernest Barblé,  
L-1210 Luxembourg