

DBMR Research Conference

Langhans Hörsaal Pathologie
Murtenstrasse 31, 3008 Bern

Date July 2, 2018, 5 pm – 6 pm

Title **Uncovering the function of prostate cancer driver mutations**

Speaker Prof. Dr. Jean-Philippe Theurillat,
Institute of Oncology Research, USI, Bellinzona

Biosketch

Jean-Philippe Theurillat is SNSF professor at the University of Southern Switzerland (USI) and group leader at the Institute of Oncology Research (IOR) in Bellinzona. He studied medicine at the University of Zurich, where he obtained his federal diploma in 1999. He specialized first in internal medicine and then in surgical pathology at the University Hospital in Zurich and at the CHUV in Lausanne, followed by the board certificate in pathology in 2007. In 2008, he worked as a postdoctoral fellow in the group of Prof. Wilhelm Krek at ETH. He discovered the molecular mechanisms of a novel oncogene involved in ovarian and liver cancer that favors the survival of cancer cells, and mediates resistance against current pharmacological therapies. In 2011, the researcher joined the group of Prof. Levi Garraway (Boston) to train in next-generation DNA technologies and translational oncology. He worked most notably on the functional characterization of new identified oncogenes and tumor suppressors in prostate cancer. In 2014 he received a professorship grant from the Swiss National Science Foundation, which enabled him to pursue his studies at IOR, where he continues his work on a new genetically defined subtype of prostate cancer. His investigational aim is to elucidate the biological function of new mutations, in order to establish innovative therapeutic avenues. His work has been recognized by various prizes, including the Pfizer Research Prize in Oncology in 2012 and the Astellas Award in 2017.

Abstract

Cancer is driven by cardinal genetic alterations that activate driver genes. Driver mutations are not only essential to initiate tumorigenesis but are also required for tumor growth and maintenance. This raises the possibility to target these mutations, opening more specific, therapeutic opportunities to treat cancer patients. The seminar talk will cover our recent advances on the understanding and targeting of new drivers of prostate cancer with emphasis on the recurrently mutated ubiquitin ligase adaptor SPOP and advanced, castration-resistant disease. We have recently identified with TRIM24 a new transcriptional regulator involved in SPOP mutant and advanced, castration-resistant disease that sustains the activity of the androgen receptor – a key lineage-specific oncogene in this setting. Currently, we are developing and testing small molecule-based degraders of TRIM24 in preclinical models of castration-resistant disease. In addition, we are dissecting the genetic basis of the vulnerability of prostate cancer cells to low and high levels of androgens, to improve patient treatment in the clinic on the long term.

Prof. Dr. Jean-Philippe Theurillat has been invited by Prof. Dr. Mark Rubin, Precision Oncology Research Group, DBMR, University of Bern.

September 3, 2018

Next DBMR Research Conference

“Targeting Cancer Stem Cells”

Prof. Joerg Huelsken, PhD, Cancer Stem Cell Laboratory,
Swiss Institute for Experimental Cancer Research, EPFL Lausanne

The DBMR Research Conference takes place from 5 pm – 6 pm and will be followed by an apéro.

Everybody is welcome!



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