Coordinated regulation of gut microbiota and anti-tumor immunity by the UPR controls melanoma growth

Thursday, October 30th 2018, 15:45 -16:45h
Kleiner Hörsaal PATH C22
University Hospital Zurich, Raemistrasse 100, 8091 Zurich

Guest Speaker  Prof. Dr. med. Ze’ev A. Ronai
Technion Integrated Cancer Center, Technion, Haifa, Israel & Sanford Burnham Prebys Medical Discovery Institute, La Jolla, CA, USA

15:45  Welcome
Prof. Dr. med. Adriano Aguzzi, Institute of Neuropathology, University Hospital Zurich

15:50  Coordinated regulation of gut microbiota and anti-tumor immunity by the UPR controls melanoma growth

The unfolded protein response (UPR) serves to maintain protein homeostasis under physiological and stress conditions. The ubiquitin ligase RNF5 plays a key role in the UPR as a component of the endoplasmic reticulum-association degradation pathway, which promotes the ubiquitination-dependent degradation of misfolded proteins. Our recent studies identified the role of RNF5 in the control of gut microbiota and the immune response, and the key role of UPR components in this regulation. Our findings suggest that altered UPR coordinates the regulation of gut microbiota composition, which augments immune system activity, determining the rate of tumor growth. Data from genetic models and human tumor samples will be discussed.

16:40  Q&A

Registration not required