UniversityHospital Zurich

imcr Institute of Molecular Cancer Research

University of Zurich[UZH]

Postdoctoral position on "Tumorigenesis driven by Replication-associated DNA damage"

DNA replication stress plays a pivotal early role in cancer onset, especially in the context of highly regenerative and proliferative tissues. However, the underlying molecular mechanisms linking hyperproliferation to genome instability and tumorigenesis are still largely elusive. The Lopes lab (Institute of Molecular Cancer Research, University of Zurich) has established a unique technological platform to investigate the molecular determinants of replication stress, ranging from standard molecular and cell biology methods to specialized single-molecule analysis of replication intermediates *in vivo* (www.imcr.uzh.ch/en/research/Lopes). The Weber lab (Institute of Pathology and Molecular Pathology, University Hospital Zurich) has long-standing interest and expertise in characterizing cancer-associated chronic inflammation and hyperproliferation in mouse models and clinical samples, with a focus on liver and intestinal tissues (www.pathologie.usz.ch/forschung/weber-lab/seiten/projects.aspx).

The available postdoctoral position is financed for two years by the Cancer Research Center of the UZH (https://www.crc.uzh.ch/en.html), supporting novel interdisciplinary approaches that link basic molecular studies and clinical approaches. The project - co-supervised by the two PIs - will characterize mechanisms of replication stress associated with liver hyperproliferation, applying specialized cell and molecular biology methods to mouse models and human samples of chronic liver disease and hepatocellular carcinoma.

Candidates should preferentially have a solid background in molecular and cellular biology, tissue culture and animal experiments. Previous experience in the field of DNA replication/genome stability and/or in molecular investigations on liver/gastrointestinal tracts is highly valued. Preference will be given to candidates that have successfully finalized a previous project as first author, already published or in advanced consideration in a high-profile peer reviewed journal.

The selected candidate will be embedded in the Institute of Molecular Cancer Research of the University of Zurich, a vibrant scientific community focusing on genome stability mechanisms and their impact on cancer (www.imcr.uzh.ch). The salary is approximately 90'000 SFr./year.

Application: the position should be preferentially filled by January 2019. Send ASAP your application by e-mail to both addresses (lopes@imcr.uzh.ch , Achim.Weber@usz.ch), including a motivation letter, CV, Publication list and the contact details of at least two referees. Please include "**CRC**" in the Subject of your application e-mail.