

Postdoctoral position, IGBMC Strasbourg, France

Targeting mitotic ubiquitin receptor protein UBASH3B for cancer therapies

A postdoctoral position is available in the laboratory of Izabela Sumara at the IGBMC in Strasbourg, France: <u>http://www.igbmc.fr/sumara/</u>

The interest of the lab is to understand molecular mechanisms of cell cycle and maintenance of genome integrity. Our research aims to dissect the role of the ubiquitin code during mammalian cell division and tumorigenesis. The funded project specifically aims at studying the anti-tumor activity of the small molecule inhibitor targeting ubiquitin receptor protein UBASH3B using animal cancer models and dissecting the molecular mechanisms underlying its inhibitory action by various biochemical approaches combined with high-end microscopy.

The IGBMC is one of the best European research institutes focused on understanding human disease and basic biological mechanisms at the molecular, cellular and animal level and offers state-of-the-art core facilities and a vibrant, international scientific community.

Applicants should hold a PhD in biology, biochemistry or related areas. Experience in cancer animal models, cell culture and live cell imaging would be an advantage. Motivated, curious and independent individuals interested in joining us in Strasbourg should send a single pdf document with a cover letter stating the past and future research interests, CV and a publication list to Izabela Sumara: sumara@igbmc.fr

<u>Selected publications:</u> Beck J., Maerki S., Posch M., Metzger T., Persaud A., Scheel H., Hofmann K., Rotin D., Pedrioli P., Swedlow J., Peter M. and Sumara I. (2013) Ubiquitylation-dependent localization of Polo-like kinase 1 in mitosis. Nature Cell Biology. Apr 15 (4): 430-9.

Genschik P. Sumara I., and Lechner E. (2013) The emerging family of CULLIN3-RING ligases (CRL3s): cellular functions and disease. EMBO Journal. Aug 28; 32 (17): 2307-20

Krupina K., Kleiss C., Metzger T., Fournane S., Schmucker S., Hofmann K., Fischer B., Paul N., Porter I.M., Raffelsberger W., Poch O., Swedlow J.R., Brino L. and Sumara I. (2016) Ubiquitin receptor protein UBASH3B drives Aurora B recruitment to mitotic microtubules. Developmental Cell. Jan 11, 36 (1): 63–78.

Krupina K., Kleiss C., Awal S., Rodriguez-Hernandez I., Sanz-Moreno V. and Sumara I. (2018) UBASH3B-mediated silencing of the mitotic checkpoint: therapeutic perspectives in cancer. Molecular and Cellular Oncology. Nov. 2017 30;5 (2): e1271494, eCollection 2018.

> Dr. Izabela Sumara, Group Leader, CNRS Research Director Institut de Génétique et de Biologie Moléculaire et Cellulaire (IGBMC) 1, rue Laurent Fries, F-67404, ILLKIRCH, France Email: sumara@igbmc.fr, Tel: +33 3 88 65 35 21, Fax: + 33 3 88 65 32 01