

M.Sc. Anastasiya Klebanovych

Ph.D. thesis

REGULATORY MECHANISMS OF CENTROSOMAL MICROTUBULE NUCLEATION

Education

2021 - 2015

Ph.D. studies • Developmental and Cell Biology (D-VYBB) • Faculty of Science, Charles University, Prague, Czech Republic

2015 - 2013

M.Sc. Molecular Genetics • Department of General and Molecular Genetics • Educational and Scientific Centre “Institute of Biology”, Taras Shevchenko National University of Kyiv, Ukraine

2013 - 2009

B.Sc. Biology • Department of General and Molecular Genetics • Educational and Scientific Centre “Institute of Biology”, Taras Shevchenko National University of Kyiv, Ukraine

Employment

2015 - 2021

Ph.D. candidate • Laboratory of biology of cytoskeleton • Institute of Molecular Genetics, Czech Academy of Sciences, Prague, Czech Republic

2015 - 2013

M.Sc. Molecular Genetics • Department of General and Molecular Genetics • Educational and Scientific Centre “Institute of Biology”, Taras Shevchenko National University of Kyiv, Ukraine

2015 - 2012

Technician/engineer • Department of Genetic engineering • Institute of Cell Biology and Genetic Engineering, the National Academy of Sciences of Ukraine, Kyiv, Ukraine

Courses

2017

Super-resolution STED and Lightsheet workshop • Czech-Bioimaging, IMG CAS, Prague, Czech Republic

2017

Single molecule microscopy and manipulation – practical course • BIOCEV, Vestec, Czech Republic

2016

Processing and analysis of microscopic images in biomedicine • Czech-Bioimaging, IMG CAS, Prague, Czech Republic

Publication list

1 Regulation of microtubule nucleation mediated by γ -tubulin complexes (Review)

Sulimenko, V., Hájková, Z., **Klebanovych, A.**, Dráber, P. (2017). Regulation of microtubule nucleation mediated by γ -tubulin complexes. *Protoplasma* 254 (3), 1187-1199.

2 γ -Tubulin has a conserved intrinsic property of self-polymerization into double stranded filaments and fibrillar networks

Chumová, J., Trögelová, L., Kourová, H., Volc, J., Sulimenko, V., Halada, P., Kučera, O., Benada, O., Kuchařová, A., **Klebanovych, A.**, Dráber, P., Daniel, G., Binarová, P. (2018) γ -Tubulin has a conserved intrinsic property of self-polymerization into double stranded filaments and fibrillar networks. *Biochim Biophys Acta Mol Cell Res* 1865(5):734-748.

3 Regulation of microtubule nucleation in mouse bone marrow-derived mast cells by protein tyrosine phosphatase SHP-1

Klebanovych, A., Sládková, V., Sulimenko, T., Vosecká, V., Rubíková, Z., Čapek, M., Dráberová, E., Dráber, P., Sulimenko, V. (2019) Regulation of microtubule nucleation in mouse bone marrow-derived mast cells by protein tyrosine phosphatase SHP-1. *Cells* 8(4): e345

4 The actin regulator profilin 1 is functionally associated with the mammalian centrosome

Klebanovych, A., Sulimenko, V., Sulimenko, T., Dráberová, E., Dráber, P., Karlsson, R. (2021) The actin regulator profilin 1 is functionally associated with the mammalian centrosome. *Life Sci Alliance* 4(1): e202000655

5 C53 interacting with UFM1-protein ligase 1 regulates microtubule nucleation in response to ER stress

Klebanovych, A., Vinopal, S., Dráberová, E., Sládková, V., Sulimenko, T., Sulimenko, V., Vosecká, V., Macůrek, L., Legido, A., Dráber, P. (2021) C53 interacting with UFM1-protein ligase 1 regulates microtubule nucleation in response to ER stress (bioRxiv 10.1101/2020.12.23.424116)

6 Nanosecond pulsed electric field lab-on-chip integrated in super-resolution microscope for cytoskeleton imaging

Havelka, D., Chafai, D.E., Krivosudský, O., **Klebanovych, A.**, Vostárek, F., Kubínová, L., Dráber, P., Cifra, M. (2020) Nanosecond pulsed electric field lab-on-chip integrated in super-resolution microscope for cytoskeleton imaging. *Adv. Mater. Technol.* 5: e1900669.