Seznam publikací laboratoří v ústavu v roce 2021:

Laboratoř biomolekulárního rozpoznávání – Bohdan Schneider

1. **Andrikopoulos, P. C., Chaudhari, A. S., Liu, Y.**, Konold, P. E., Kennis, J. T. M., **Schneider, B., & Fuertes, G.** (2021, Jun 30). QM calculations predict the energetics and infrared spectra of transient glutamine isomers in LOV photoreceptors. Phys Chem Chem Phys, 23(25), 13934-13950. https://doi.org/10.1039/d1cp00447f
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4. Dedecek, J., Tabor, E., **Andrikopoulos, P. C.,** & Sklenak, S. (2021, May 15). Splitting dioxygen over distant binuclear transition metal cationic sites in zeolites. Effect of the transition metal cation. International Journal of Quantum Chemistry, 121(10). https://doi.org/ARTN e2661110.1002/qua.26611
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Laboratoř inženýrství vazebných proteinů - Petr Malý

1. Dostal, J., Brynda, J., **Vankova, L.,** Zia, S. R., Pichova, I., Heidingsfeld, O., & Lepsik, M. (2021, Dec). Structural determinants for subnanomolar inhibition of the secreted aspartic protease Sapp1p from Candida parapsilosis. J Enzyme Inhib Med Chem, 36(1), 914-921. https://doi.org/10.1080/14756366.2021.1906664
2. **Kuchar, M.,** Kosztyu, P., **Daniel Liskova, V.,** Cerny, J., **Petrokova, H.,** Vroblova, E., **Maly, M., Vankova, L.,** Krupka, M., Raskova Kafkova, L., Turanek Knotigova, P., Duskova, J., Dohnalek, J., Masek, J., Turanek, J., Raska, M., & **Maly, P.** (2021, Dec). Myomedin scaffold variants targeted to 10E8 HIV-1 broadly neutralizing antibody mimic gp41 epitope and elicit HIV-1 virus-neutralizing sera in mice. Virulence, 12(1), 1271-1287. https://doi.org/10.1080/21505594.2021.1920251
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Laboratoř strukturní biologie – Cyril Bařinka

1. Awad, M., **Nedvedova, J.,** & Nedved, O. (2021, Mar). Thermal plasticity of antioxidative activity in fresh adults of Harmonia axyridis (Coleoptera: Coccinellidae). African Entomology, 29(1), 125-132. https://doi.org/10.4001/003.029.0125
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1. **Dohnalek, J., Duskova, J.,** Tishchenko, G., **Kolenko, P., Skalova, T.,** Novak, P., Fejfarova, K., & Simunek, J. (2021, Oct 2). Chitinase Chit62J4 Essential for Chitin Processing by Human Microbiome Bacterium Clostridium paraputrificum J4. Molecules, 26(19). https://doi.org/10.3390/molecules26195978
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Laboratoř strukturních proteinů – Zdeněk Lánský

1. Bujak, L., K. Holanova, A. Garcia Marin, **V. Henrichs,** I. Barvik, **M. Braun, Z. Lansky,** and M. Piliarik. "Fast Leaps between Millisecond Confinements Govern Ase1 Diffusion Along Microtubules." Small Methods 5, no. 10 (Oct 2021): e2100370. https://dx.doi.org/10.1002/smtd.202100370
2. Kucera, O., **V. Siahaan**, D. Janda, S. H. Dijkstra, E. Pilatova, **E. Zatecka,** S. Diez, **M. Braun, and Z. Lansky.** "Anillin Propels Myosin-Independent Constriction of Actin Rings." Nature Communications 12, no. 1 (Jul 28 2021): 4595. https://dx.doi.org/10.1038/s41467-021-24474-1
3. Robert, H. M. L., K. Holanova, L. Bujak, M. Vala, **V. Henrichs, Z. Lansky,** and M. Piliarik. "Fast Photothermal Spatial Light Modulation for Quantitative Phase Imaging at the Nanoscale." Nature Communications 12, no. 1 (May 19 2021): 2921. https://dx.doi.org/10.1038/s41467-021-23252-3
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Laboratoř strukturní bioinformatiky proteinů - Jiří Černý

1. Filandrova, R., Valis, K., **Cermy, J**., Chmelik, J., Slavata, L., Fiala, J., Rosulek, M., Kavan, D., Man, P., Chum, T., Cebecauer, M., Fabris, D., & Novak, P. (2021, Apr 1). Motif orientation matters: Structural characterization of TEAD1 recognition of genomic DNA. Structure, 29(4), 345-+. https://doi.org/10.1016/j.str.2020.11.018
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Laboratoř molekularní terapie – Jiří Neužil

1. **Boukalova, S., Ezrova, Z., & Neuzil, J.** (2021, Aug 3). Mechanisms of resistance to mitochondria-targeted therapy in pancreatic cancer. Oncotarget, 12(16), 1627-1628. https://doi.org/10.18632/oncotarget.27976
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4. **Hadrava Vanova, K.,** Pang, Y., Krobova, L., Kraus, M., **Nahacka, Z., Boukalova, S.,** Pack, S. D., **Zobalova, R.,** Zhu, J., Huynh, T. T., Jochmanova, I., Uher, O., **Hubackova, S.,** Dvorakova, S., Garrett, T. J., Ghayee, H. K., Wu, X., Schuster, B., Knapp, P. E., Frysak, Z., Hartmann, I., Nilubol, N., Cerny, J., Taieb, D., Rohlena, J., **Neuzil, J.,** Yang, C., & Pacak, K. (2021, Aug 20). Germline SUCLG2 Variants in Patients with Pheochromocytoma and Paraganglioma. J Natl Cancer Inst. https://doi.org/10.1093/jnci/djab158
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Laboratoř reprodukční biologie – Kateřina Komrsková

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4. **Merc, V., Frolikova, M., & Komrskova, K.** (2021, Oct 30). Role of Integrins in Sperm Activation and Fertilization. Int J Mol Sci, 22(21). https://doi.org/10.3390/ijms222111809.
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Laboratoř molekularní patogenetiky – Gabriela Pavlínková

1. **Bohuslavova, R., Smolik, O., Malfatti, J.,** Berkova, Z., **Novakova, Z.,** Saudek, F., & **Pavlinkova, G.** (2021, Jun 23). NEUROD1 Is Required for the Early alpha and beta Endocrine Differentiation in the Pancreas. Int J Mol Sci, 22(13). https://doi.org/10.3390/ijms22136713
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3. Elliott, K. L., **Pavlinkova, G.,** Chizhikov, V. V., Yamoah, E. N., & Fritzsch, B. (2021a, Apr 18). Development in the Mammalian Auditory System Depends on Transcription Factors. Int J Mol Sci, 22(8). https://doi.org/10.3390/ijms22084189
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Laboratoř nádorové rezistence – Jaroslav Truksa

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