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Professional curriculum vitae:

Education

- 2015 - 2018 BSc., Medical Biology, Faculty of Natural Sciences, Comenius University, Bratislava, Slovakia,
(Bachelor thesis: *Extracellular DNA as a Therapeutic Target*)
- 2018 - 2020 MSc., Molecular Biology, Faculty of Natural Sciences, Comenius University, Bratislava, Slovakia, (Diploma
thesis: *New Therapeutic Targets For The Study Of Gastrointestinal Disorders*)
- 2020 - PhD, Institute of Molecular Biomedicine, Faculty of Medicine, Comenius University, Bratislava, Slovakia,
(Dissertation thesis: *Signalling pathways activated by extracellular nucleic acids in the pathology of the
gastrointestinal tract*)

Research stays

- 06/2019 – 11/2019 Division of Anesthesia, Beth Israel Deaconess Medical Center, Harvard Medical School,
Boston, Massachusetts, USA
- 02/2022 – 02/2022 1st PlasTHER Training School 2022, Lisbon, Portugal
- 10/2022 – 12/2022 Charles University, Faculty of Medicine in Hradec Králové, Department of Physiology, Hradec
Králové, Czech republic
- 01/2023 – 11/2023 Division of Anesthesia, Beth Israel Deaconess Medical Center, Harvard Medical School,
Boston, Massachusetts, USA

Conferences

- 11/2017 - 5th Ružinov Gastroenterological Day, Bratislava, Slovakia
- 02/2018 - 94th Physiological Days in Plzeň, Plzeň, Czech republic
- 05/2018 - Student Scientific Conference of Faculty of National Sciences, Comenius University, Bratislava, Slovakia
- 11/2018 - 6th Ružinov Gastroenterological Day, Bratislava, Slovakia
- 05/2021 - 16th Student Scientific Conference of Faculty of Medicine, Comenius University Bratislava, Slovakia
- 11/2021 - 8th Ružinov Gastroenterological Day, Bratislava, Slovakia
- 02/2022 - 97th Physiological Days in Prague, Prague, Czech republic
- 04/2022 - 5th Annual Spring School of the European Society for Gene and Cell Therapy (ESGCT) in Athens (3 days),
Athens, Greece
- 05/2022 - 17th Student Scientific Conference of Faculty of Medicine, Comenius University Bratislava, Slovakia
- 05/2022 - 49th May hepatologic days, Donovaly, Slovakia
- 10/2022 - 29th Annual Meeting of the European Society of Gene & Cell Therapy (ESGCT), Edinburgh, Great Britain
- 11/2023 - AASLD The Liver Meeting, Boston, Massachusetts, USA

Grants

- Grant of Comenius University, UK/371/2021 – Immunomodulatory effect of unconjugated bilirubin and 17 β -estradiol
via aryl hydrocarbon signalling in ulcerative colitis
- Grant of Comenius University, UK/364/2023 – Characterization of the extracellular DNA in the pathogenesis of acute
liver injury

Publication records

Publications: according to WoS: 12, SCI citations (without self-citation): 89, h index: 6

1. Gao, L., Zhang, W., Zhang, L., **Gromova, B.**, Chen, G., Csizmadia, E., Cagle, C., Nastasio, S., Ma, Y., Bonder, A., Patwardhan, V., Robson, SC., Jiang, S. and Longhi, MS. Silencing of aryl hydrocarbon receptor repressor restrains Th17 cell immunity in autoimmune hepatitis. *Journal Autoimmunity*. 23;143:103162 (2023)

2. **Gromova, B.**, Janovicova, L. and Gardlik, R.; Low endogenous deoxyribonuclease activity in the colon as a factor contributing to the pathogenesis of ulcerative colitis. *Medical Hypotheses*. 174:111062 (2023)
3. Janovičová, Ľ., Kmeťová, K., Pribulová, N., Janko, J., **Gromová, B.**, Gardlík, R. and Celec, P.; Endogenous DNase Activity in an Animal Model of Acute Liver Failure. *International Journal of Molecular Sciences*. 3;24(3):2984 (2023)
4. **Gromova, B.**, Konecna, B., Suchonova, M., Pasztor, S., Celec, P., Tothova, L., Lichvar, M., Budis, J., Radvanszky, J., Rusnakova, D., Szemes, T., Machala, Z. and Gardlik, R.; The effect of plasma-activated water in a mouse model of inflammatory bowel disease. *Plasma Processes Polymers*. e2300053, (2023)
5. Liptak, R., **Gromova, B.** and Gardlík, R.; Fecal microbiota transplantation as a tool for therapeutic modulation of non-gastrointestinal disorders. *Frontiers in Medicine*, 8:665520 (2021)
6. Janovičová, Ľ., **Gromova, B.**, Drobná, D., Konečná, B., Renczés, E., Borbélyová, V., Hodosy, J. and Celec, P.; Sex Difference in Plasma Deoxyribonuclease Activity in Rats. *Physiological Research*, 30;70(6) (2021)
7. Vuerich, M., Harshe, R., Frank, L. A., Mukherjee, S., **Gromova, B.**, Csizmadia, E., Nasser I., Ma Y., Bonder A., Patwardhan, V., Robson, S. C. and Longhi, M. S.; Altered aryl-hydrocarbon-receptor signalling affects regulatory and effector cell immunity in autoimmune hepatitis. *Journal of Hepatology*, 74(1):48-57 (2021)
8. Maronek, M., **Gromova, B.**, Liptak, R., Konecna, B., Pastorek, M., Cechova, B., Harsanyova, M., Budis, J., Smolak, D., Radvanszky, J., Szemes, T., Harsanyiova, J., Kralova Trancikova, A. and Gardlik, R; Extracellular DNA correlates with intestinal inflammation in chemically induced colitis in mice. *Cells*, 10(1):81 (2021)
9. Vrablicova, Z., Tomova, K., Tothova, L., Babickova, J., **Gromova, B.**, Konecna, B., Liptak, R., Hlavaty, T. and Gardlik, R.; Nuclear and Mitochondrial Circulating Cell-Free DNA Is Increased in Patients With Inflammatory Bowel Disease in Clinical Remission. *Frontiers in Medicine*, 7:593316 (2020)
10. Harshe, R. P., Xie, A., Vuerich, M., Frank, L. A., **Gromova, B.**, Zhang, H., Robles, R. J, Mukherjee, S., Czizmadia, E., Kokkotou, E., Cheifetz, A. S., Moss, A. C., Kota, S. K., Robson, S. C. and Longhi, M. S.; Endogenous antisense RNA curbs CD39 expression in Crohn's disease. *Nature Communications*, 11(1):5894 (2020)
11. Liptak, R., **Gromova, B.**, Maronek, M. and Gardlik, R.; Reverse phenotype transfer via fecal microbial transplantation in inflammatory bowel disease. *Medical Hypotheses* 122, 122:41-44 (2019)
12. Maronek, M., **Gromova, B.**, Liptak, R., Klimova, D., Cechova, B. and Gardlik, R.; Extracellular DNA is increased in dextran sulphate sodium induced colitis in mice. *Folia Biologica (Praha)* 64, 167-172 (2018)