

Postdoctoral Position: Glycomic Characterization of Tumor-derived Extracellular Vesicles

Short Description:

A postdoctoral position is available at the Glycan Biomarker Research Group of the HUN-REN Research Centre for Natural Sciences, Budapest, Hungary. The newly founded group is currently composed of several enthusiastic PhD students and the PI (Lilla Turiák, PhD). The research group is interested in developing sensitive analytical methods, like immune capture, chromatography and mass spectrometry for characterizing the extracellular vesicle glycome. These workflows will be developed/optimized using lung cancer cell lines and transferred to plasma analysis. Interpretation of the obtained data heavily relies on the use of proteomic and glycomic software and biostatistics/informatics.

Recent Publications:

Pál, D. et al (2023). [Compositional Analysis of Glycosaminoglycans in Different Lung Cancer Types-A Pilot Study](#). International Journal of Molecular Sciences

Balbisi, M. et al (2023). [Inter- and intratumoral proteomics and glycosaminoglycan characterization of ALK rearranged lung adenocarcinoma tissues: a pilot study](#). Scientific Reports

Tóth, G. et al (2022). [Glycosaminoglycan Analysis of FFPE Tissues from Prostate Cancer and Benign Prostate Hyperplasia Patients Reveals Altered Regulatory Functions and Independent Markers for Survival](#). Cancers (Basel)

Sugár, S. et al (2022). [Proteomic Analysis of Lung Cancer Types-A Pilot Study](#). Cancers (Basel)

Tóth, G. et al (2022). [Expression of glycosaminoglycans in cirrhotic liver and hepatocellular carcinoma-a pilot study including etiology](#). Analytical Bioanalytical Chemistry

Sugár, S. et al (2021). [Alterations in protein expression and site-specific N-glycosylation of prostate cancer tissues](#). Scientific Reports

More Information about the Research Group:

<https://www.ttk.hu/szki/en/glycan-biomarker-research-group/>

Requirements:

Required Qualifications:

- PhD degree in chemistry, biochemistry, proteomics, or related fields

- Experience in MS instrument handling
- Experience in bottom-up proteomics using HPLC-MS/MS
- Experience with software used for analysing data
- Excellent verbal and written communication skills in English

Preferred Qualifications:

- Experience in glycoproteomics or glycomics using HPLC-MS/MS
- Advanced bioinformatics expertise in multiomics data analysis
- Experience in cell culturing
- Experience with extracellular vesicle isolation and characterization

Tasks:

- Planning and scheduling experiments for extracellular vesicle glycomics
- Optimization of mass spectrometry conditions for glycoproteomics
- Data analysis and visualization
- Contribution to mentoring PhD and undergraduate students
- Drafting publications
- Participation and reporting at group meetings

Salary and other benefits

- according to individual agreement

Nature and duration of the job:

Full-time, 40 hours per week. Legal status, remuneration and other benefits are governed by the provisions of Act I of 2012 on the Labour Code.

2 year employment status, 3 month trial period

May be extended for additional years.

Place of work:

HUN-REN Research Centre for Natural Sciences, Institute of Organic Chemistry, 1117 Budapest, Magyar tudósok körútja 2.

Documents and certificates to be submitted as part of the application:

- Applicant's professional curriculum vitae, a motivation letter, copies of diplomas and language certificates

-Declaration that those participating in the evaluation process can access the application documents

Deadline of application: **2024.04.01**

Deadline for evaluation: 1 month

Position may be filled by: Following evaluation, at earliest 2024.05.01.

The procedure for the evaluation of applications:

Once the application has been evaluated, feedback will be given only to candidates invited for interview. The interview will include a professional presentation in addition to an interview. For further information on the job vacancy, please contact the email address below (turiak.lilla@ttk.hu).