



DEBRECEN COLLOQUIUM ON CARBOHYDRATES 2020 IN 2022

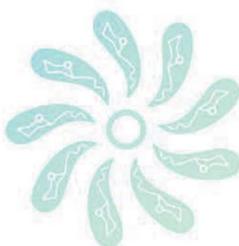
Rezső Bognár Memorial Conference on Glycomimetics

August 24-27, 2022



UNIVERSITY of
DEBRECEN

COST
ACTION
18132



GLYCO
NANO
PROBES

**Functional Glyconanomaterials for the Development
of Diagnostics and Targeted Therapeutic Probes**

2nd Meeting, August 25-26, 2022, Debrecen, Hungary

PROGRAM AND ABSTRACTS

**Debrecen Colloquium
on Carbohydrates 2020 in 2022**

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on Glycomimetics*

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Program and abstracts

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**LECTIN-BASED GLYCOPROTEIN MICROARRAY: HIGH-THROUGHPUT
GLYCOMICS TOOL**

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Changes in glycan structures of proteins and cell surfaces are in relationship with many biological functions (pathogen-host interactions, immune system, stem cells, fertilization, etc.) as well as with various diseases (cancer, inflammatory diseases, neurological diseases, psychiatric diseases, congenital diseases of glycosylation and others). We are focused on development and application of affinity bioanalytical techniques analysing glycans based on biochips for biomedicine, biology and biotechnology applications. As biorecognition elements are used lectins, proteins recognizing glycan structures enabling glycoprofiling of proteins, cells and tissues. Lectin-based glycoprotein microarrays provide effective high-throughput glyco-profiling of samples and screening/analysis of glyco-biomarkers. We applied our microarray platform for the study of glycan changes in number of various cases, as eg cancers, gestational diabetes mellitus, congenital disorder of glycosylation (CDG), attention-deficit hyperactivity disorder (ADHD), age-related glycosylation changes, or glycostructure of therapeutic proteins.

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