Tentative Outline

Special Thematic Issue for the journal *Current Molecular Medicine*

Recent Advances of Bioseparations in Molecular Medicine (Special issue to celebrate Prof. Andras Guttman's 65th birthday)

Guest Editor: Laszlo Hajba

- **Scope of the Thematic Issue:**

Bioseparation techniques are gaining high importance in molecular medicine and the biopharmaceutical industry. Molecular markers can be good indicators of malignant transformation and cancer progression helping clinicians to make better therapeutic decisions. On the other hand, in the biopharmaceutical industry the Quality by Design (QbD) concept requires the continuous monitoring of the therapeutic proteins and gene therapy products at multiple omics levels (genomics, proteomics and glycomics) during all stages of the development process. In this Special Thematic Issue bioseparations in molecular medicine will be covered, including their applications in diagnostic molecular markers discovery and in the biopharmaceutical industry.

Keywords: proteomics, glycomics, biomarker, biotherapeutics gene therapy, bioseparation, capillary electrophoresis

Sub-topics:

The sub-topics to be covered within the issue should be provided:

- Glycomics in molecular medicine
- Proteomics in molecular medicine
- Transcriptomics in molecular medicine
- Cancer biomarkers

Tentative titles of the articles and list of contributors:

Tentative titles of the articles and list of contributors with their names, designations, addresses and email addresses should be provided.

T. Li (Sciex, Brea, CA, United States; E-mail: tingting.li@sciex.com): Evaluation of Full and Empty Capsid Ratios for gene therapy products by Capillary Electrophoresis and Electron Microscopy

Z. Ronai (Semmelweis University, Budapest, Hungary; E-mail: ronai.zsolt@med.semmelweis-univ.hu): Diabetes-specific modulation of peripheral blood gene expression signatures in colorectal cancer

A. Farkas (University of Debrecen, Debrecen, Hungary; E-mail: f.anna907@gmail.com): Modeling of the desialylated human serum N-glycome for molecular diagnostic applications in malignant and inflammatory lung diseases.

B. Reider (University of Pannonia, Veszprem, Hungary; E-mail: bala0413@gmail.com): Methods for instrumental analysis of prostate specific antigen glycosylation.

E. Gebri (University of Debrecen, Debrecen, Hungary; E-mail: gebri.eniko@dental.unideb.hu): N-glycomic analysis of Z(IgA1) partitioned serum and salivary immunoglobulin A by capillary electrophoresis

J. Luo (Sciex, Brea, CA, United States; E-mail: jane.luo@sciex.com): Genome Integrity Analysis of Adeno-Associated Viruses (AAV) by CE-LIF.

B. Borza (University of Debrecen, Debrecen, Hungary, E-mail: borza.bea1990@gmail.com): N-glycan analysis of innovator and biosimilar biotherapeutics.

T. Szarvas (Semmelweis University, Budapest, Hungary; E-mail: sztibusz@gmail.com): Serum and tissue syndecan-1 levels in renal cell cancer.

B. Meszaros (University of Debrecen, Debrecen, Hungary; E-mail: brigi.meszi@gmail.com): Capillary electrophoresis analysis of glycosylation changes in lung cancer and COPD

Schedule:

- ✧ Thematic issue submission deadline: April 30, 2020.

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