

**DIES ACADEMICUS OF SEMMELWEIS UNIVERSITY  
KAROLINSKA UNIVERSITY – SEMMELWEIS UNIVERSITY  
2nd BILATERAL PATHOLOGY SYMPOSIUM**

11-12 November 2022

Semmelweis University, Department of Pathology and Experimental Cancer Research,  
Budapest

**Friday, 11 November 2022**

08.00-08.30    **Registration**

08.30-09.00    **Opening of the Symposium**

Béla Merkely, rector of Semmelweis University

Mathias Axelsson, head of Medical Diagnostics Karolinska, Karolinska University Hospital

09.00-09.20    **Keynote lecture**

**Elimination of cervical cancer and the role of Human Papillomavirus genotyping.** Joakim Dillner, *Clinical Pathology and Cancerdiagnostics, Medical Diagnostics Karolinska, Karolinska University Hospital*

09.20-10.10    **Section A: Pathology aspect of COVID**

**Chair: András Kiss, Attila Szakos**

- 1) **Nanobiophysics of the coronavirus.** Miklós Kellermayer, *Department of Biophysics and Radiation Biology, Semmelweis University*
- 2) **Covid-19 and post-COVID associated pathologies.** Laszlo Szekely, *Clinical Pathology and Cancerdiagnostics, Medical Diagnostics Karolinska, Karolinska University Hospital*
- 3) **COVID-19 associated cause of death and liver pathology in autopsy cases.** András Kiss, *Department of Pathology, Forensic and Insurance Medicine, Semmelweis University*
- 4) **Detection of SARS-COV2 and covid associated pathology in autopsy cases.** Tibor Várkonyi, *Department of Pathology, Forensic and Insurance Medicine, Semmelweis University*
- 5) **Placental pathology in maternal SARS-COV2 infection.** Nikos Papadogiannakis, *Clinical Pathology and Cancerdiagnostics, Medical Diagnostics Karolinska, Karolinska University Hospital*

10.10-11.00    **Section B: Recent achievements in cancer biology**

**Chair: Anna Sebestyén, Catharina Larsson**

- 1) **Cell Plasticity as a diagnostic tool and therapeutic target in cancer.** Jonas Fuxe, *Department of Laboratory Medicine, Division of Pathology, Karolinska Institutet*

- 2) **Modelling metabolic heterogeneity in cancer.** Anna Sebestyén, *Department of Pathology and Experimental Cancer Research, Semmelweis University*
- 3) **Cancer proteogenomics for precision medicine diagnostics.** Janne Lehtiö, *Clinical Pathology and Cancerdiagnostics, Medical Diagnostics Karolinska, Karolinska University Hospital*
- 4) **The role of extracellular matrix in cancer progression.** Kornélia Baghy, *Department of Pathology and Experimental Cancer Research, Semmelweis University*
- 5) **Sex dimorphism in the immune tumor microenvironment – Towards “Genderized immunotherapy”.** Dhifaf Sarhan, *Department of Laboratory Medicine, Division of Pathology, Karolinska Institutet*
- 6) **Phenotypic drug screening to target invasive cancer.** Lars Holmgren, *Department of Oncology – Pathology, Karolinska Institutet*

11.10-11.30 **Coffee break**

11.30-13.00 **Section C: Recent achievements in liver pathology**

**Chair: András Kiss, Attila Szakos**

- 1) **Tumor-specific enzyme assisted chemotherapy – a novel approach to treat liver cancer.** Arun Selvam, *Department of Laboratory Medicine, Division of Pathology, Karolinska Institutet*
- 2) **Cellular Energetics in liver regeneration.** Budai András, *Department of Pathology, Forensic and Insurance Medicine, Semmelweis University*
- 3) **30 years of clinical liver cell treatments: from hepatocyte transplantation to new perinatal stem cell.** Roberto Gramignoli, *Clinical Pathology and Cancerdiagnostics, Medical Diagnostics Karolinska, Karolinska University Hospital*
- 4) **Tumor spread and “cross-talk” in the liver.** Bela Bozóky, *Clinical Pathology and Cancerdiagnostics, Medical Diagnostics Karolinska, Karolinska University Hospital*

13.00-14.00 **Lunch**

14.00-15.30 **Section D: Recent achievements in GI pathology**

**Chair: Gábor Lotz, Peter Zickert**

- 1) **Human papillomavirus (HPV) in oropharyngeal cancer – approaching individualized treatment.** Anders Näsman, *Clinical Pathology and Cancerdiagnostics, Medical Diagnostics Karolinska, Karolinska University Hospital*
- 2) **Digital image analysis in colorectal cancer.** Anna Jakab, *Department of Pathology and Experimental Cancer Research, Semmelweis University*
- 3) **Detection of *H. pylori* and its claritromycin resistance in routine pathological diagnostics.** Gábor Lotz, *Department of Pathology, Forensic and Insurance Medicine, Semmelweis University*

- 4) **AI-based colorectal cancer screening decision support.** Endre Kontsek, *Department of Pathology, Forensic and Insurance Medicine, Semmelweis University*
- 5) **Sodium selenite-induced tumor-specific cytotoxicity in a tissue slice model of human pancreatic ductal adenocarcinoma.** Carlos Fernandez Moro, *Clinical Pathology and Cancerdiagnostics, Medical Diagnostics Karolinska, Karolinska University Hospital*
- 6) **Analysis of pancreatic cancer at the molecular level for developing selenium-based therapy.** Timea Szekerczes, *Department of Laboratory Medicine, Division of Pathology, Karolinska Institutet*
- 7) **Molecular Diagnosis of Malignant Mesothelioma.** Katalin Dobra, *Clinical Pathology and Cancerdiagnostics, Medical Diagnostics Karolinska, Karolinska University Hospital*

15.30-16.00 **Coffee break**

16.00-17.30 **Section E: Recent achievements in renal and female genital tract pathology**

**Chair: Attila Fintha, Jonas Fuxe**

- 1) **Validation of multiple IHC based digital pathodiagnosics method in renal biopsy samples.** Deján Dobi *Department of Pathology, Forensic and Insurance Medicine, Semmelweis University*
- 2) **Klotho in kidney disease and aging.** Hannes Olauson, *Clinical Pathology and Cancerdiagnostics, Medical Diagnostics Karolinska, Karolinska University Hospital*
- 3) **Molecular monitoring of the transplanted kidney and heart.** Attila Fintha, *Department of Pathology and Experimental Cancer Research, Semmelweis University*
- 4) **High throughput RNA profiling of renal glomerular tissue in health and disease.** Jaakko Patrakka, *Clinical Pathology and Cancerdiagnostics, Medical Diagnostics Karolinska, Karolinska University Hospital*
- 5) **Multiplexed mapping of the immune cell landscape in advanced bladder cancer.** David Krantz, *Clinical Pathology and Cancerdiagnostics, Medical Diagnostics Karolinska, Karolinska University Hospital*
- 6) **AI-based precision diagnostics in breast pathology.** Johan Hartman, *Clinical Pathology and Cancerdiagnostics, Medical Diagnostics Karolinska, Karolinska University Hospital*
- 7) **HPV status and prognosis in invasive cervical cancer – prospects for improved prediction?** Karin Sundström, *Department of Laboratory Medicine, Division of Pathology, Karolinska Institutet*

19.00 **Welcome Reception**

**Saturday, 12 November 2022**

08.30-08.50 **Keynote lecture**

**Immunogenic mimicry of melanoma and other cancers.** Jozsef Tímár, Department of Pathology, Forensic and Insurance Medicine, Semmelweis University

08.50-09.50 **Section F: Genomics and proteomics in diagnostic pathology**

**Chair: Csaba Bödör, Janne Lehtiö**

- 1) **Cutting-edge precision medicine in public health care at Karolinska University Hospital.** Maria Johansson Soller, *Clinical Pathology and Cancerdiagnostics, Medical Diagnostics Karolinska, Karolinska University Hospital*
- 2) **Molecular oncogenomic facilities at Semmelweis University.** Csaba Bödör, *Department of Pathology and Experimental Cancer Research, Semmelweis University*
- 3) **Comprehensive oncogenomic profiling in pediatric malignancies.** Gábor Bedics, *Department of Pathology and Experimental Cancer Research, Semmelweis University*
- 4) **Precision medicine in cancer – the role of our microbiome.** Lars Engstrand, *Clinical Pathology and Cancerdiagnostics, Medical Diagnostics Karolinska, Karolinska University Hospital*
- 5) **Comprehensive genomic profiling of adult-type diffuse high-grade gliomas.** Bálint Scheich, *Department of Pathology and Experimental Cancer Research, Semmelweis University*
- 6) **Next-generation sequencing in inherited cardiovascular diseases.** Beáta Nagy, Katalin Csonka, *Department of Pathology and Experimental Cancer Research, Semmelweis University*

09.50-10.40 **Section G: Recent achievements in hematopathology**

**Chair: András Matolcsy, Monika Klimkowska**

- 1) **The Hungarian Pediatric Leukemia Genomic Program.** Borbála Péterffy, *Department of Pathology and Experimental Cancer Research, Semmelweis University*
- 2) **Human myeloid cells in tissue: from inflammation to cancer.** Egle Kvedaraitė, *Clinical Pathology and Cancerdiagnostics, Medical Diagnostics Karolinska, Karolinska University Hospital*
- 3) **Germline GATA2 mutations in familial MDS/AML: a manually curated online registry from the ERAPERMED GATA2-HuMo international consortium.** Lili Kotmayer, *Department of Pathology and Experimental Cancer Research, Semmelweis University*
- 4) **Activation of telomerase in aggressive thyroid tumors.** Catharina Larsson, *Department of Oncology – Pathology, Karolinska Institutet*
- 5) **Spatial and temporal profiling in B-cell lymphomas using integrative tissue- and liquid biopsies.** Bence Bártai, *Department of Pathology and Experimental Cancer Research, Semmelweis University*

10.40-11.00 **Coffee break**

11.00-12.10 **Section H: Education and organization at Karolinska and Semmelweis Universities**

**Chair: Mikael Björnstedt, András Matolcsy**

- 1) **Challenges of medical training in the 21th century.** Miklós Kellermayer, *Dean of Faculty of Medicine, Semmelweis University*
- 2) **Undergraduate training in pathology at Karolinska Institute.** Monika Klimkowska/ Katalin Dobra, *Clinical Pathology and Cancerdiagnostics, Medical Diagnostics Karolinska, Karolinska University Hospital.*
- 3) **Pathology Core Facility Karolinska.** Meriana Findakly, *Clinical Pathology and Cancerdiagnostics, Medical Diagnostics Karolinska, Karolinska University Hospital*
- 4) **Digital pathology: a tool of integration.** Attila Szakos, *Clinical Pathology and Cancerdiagnostics, Medical Diagnostics Karolinska, Karolinska University Hospital*
- 5) **Specialist training at Karolinska,** Sulaf Abd Own, *Clinical Pathology and Cancerdiagnostics, Medical Diagnostics Karolinska, Karolinska University Hospital.*
- 6) **Residence training of pathology in Semmelweis University.** Zoltán Sápi, *Program director of the residence training, Department of Pathology and Experimental Cancer Research, Semmelweis University*
- 7) **Doctoral School of pathological sciences in Semmelweis University.** András Matolcsy, *Doctoral School of Pathology Science, Semmelweis University*

12.10-12.20 **Closing the Symposium**

12.20-13.20 **Lunch**