

PROGRAM

Monday, 25 November

Madrid Hall

13:00 13:15 **Ceremonial opening**

Pathophysiology of cancer and molecular targets I

Chairs: Maddalena Fratelli, Marian Hajduch

- 13:15 13:45 Retinoic-acid promotes viral mimicry and antigen presentation in immunologically-silent breast-cancer cells
Maddalena Fratelli
- 13:45 14:15 Low-sensitivity and drug-resistance to DNA-demethylating epi-drug decitabine in solid tumors: A challenge yet to overcome
Khushboo Agrawal
- 14:15 14:45 Role of CDK12 in the regulation of DNMT1 activity by altering expression of miR-152
Jiri Kohoutek
- 14:45 15:15 Pan-cancer analysis of single nucleotide variants affecting N-glycosylation sequence motifs
Miroslav Hruska
- 15:15 15:45 **COFFEE BREAK**

Pathophysiology of cancer and molecular targets II

Chairs: Pavel Moudry, Josef Srovnal

- 15:45 16:15 Ribosomal biogenesis factors in p53-dependent stress response
Pavel Moudry
- 16:15 16:45 Bystin regulates c-myc on protein level
Zuzana Maceckova
- 16:45 17:05 Stroma-cancer interaction in PDAC
Pavol Szabo
- 17:05 17:25 Biological role of novel SNV of RPS7 in Diamond Blackfan anemia
Agata Kubickova
- 17:25 17:45 The microenvironment of melanoma cells
Barbora Dvorankova
- 17:45 18:00 Omega 3 fatty acid supplementation on NK cell cytotoxic activity and tumor reduction in rat Walker carcinoma model.
Juan Bautista De Sanctis

Tuesday, 26 November

Madrid Hall

Cancer therapeutics I: Nanomedicine and imaging

Chairs: Milos Petrik, Petr Cigler

- 9:00 9:30 PSMA-based Cancer Theranostics
Martina Benesova
- 9:30 10:00 Towards optimal nanobiointerface: molecular aspects of cellular targeting with nanoparticles
Petr Cigler
- 10:00 10:30 Bimodal immunoradiotherapy using thermoresponsive polysaccharide-based polymers
Martin Hruby

PROGRAM

Tuesday, 26 November

Madrid Hall

10:30 10:45 99mTc-labeled hydroxyapatite nanoparticles as potential tracers for solid tumors
Zbynek Novy

10:45 11:15 COFFEE BREAK

New technologies in cancer research I

Chairs: Khushboo Agrawal, Karel Koberna

11:15 11:30 New sensitive method for the detection of mycoplasmas using fluorescence microscopy
Karel Koberna

11:30 11:45 Hair follicles as a promising biological material and their use in basic research
Natalie Kudlova

11:45 12:00 Can be human tears used as a source of brain proteins?
Tomas Ozdian

12:00 12:15 A high-throughput, whole cell-based assay for cytotoxicity profiling of new chemical compounds
Sona Gurska

12:15 12:30 Exhaled Breath Condensates proteomics as a tool to monitor condition of human lungs
Jana Vaclavkova

12:30 13:30 LUNCH

Pathophysiology of cancer and molecular targets III

Chairs: Juan DeSanctis, Viswanath Das

13:30 14:00 MIDKINE as a novel tumor-secreted protein driving resistance to immune checkpoint blockade
Daniela Carolina Cerezo-Wallis

14:00 14:30 3D cell cultures are more predictive in vitro tumor models for cancer drug discovery and development
Viswanath Das

14:30 14:45 Influencing Radiosensitizing Properties in Cancer Cells
Miroslav Vetric

14:45 15:15 COFFEE BREAK

New technologies in cancer research II

Chairs: Marian Hajduch, Martin Mistrík

15:15 15:45 Morphology-Driven High-Plex Spatial Analysis of Tissue Microenvironments with the GeoMx™ Digital Spatial Profiling
Stephan McGoldrick

15:45 16:15 Microsatellite Instability (MSI) – Biomarker for Immuno – Oncology Research and Lynch Syndrome Screening
Mónica Sevillano

16:15 16:45 Introduction to single molecule counting for ultrasensitive detection of protein biomarkers
Stanislav Kukla

16:45 17:15 Multimodal Nuclear Hybrid Imaging in Translational Research
Sebastian Eigner

17:15 17:45 Making Genius Simpler: Orbitrap Exploris 480, A New Quadrupole Orbitrap Mass Spectrometer
Maciej Bromirski

19:00 23:00 SOCIAL EVENING (DINNER INCLUDED)

PROGRAM

Wednesday, 27 November

Madrid Hall

Cancer biomarkers and personalized medicine

Chairs: Jiri Drabek, Vladimira Koudelakova

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| 9:00 | 9:20 | Identification of circulating tumor cells (CTCs) in advanced breast cancer patients by EpCAM independent system CytoTrack.
Małgorzata Szostakowska-Rodzoń |
| 9:20 | 9:40 | Determination of lung tumor mutation burden to predict the effects of immunotherapy with checkpoint inhibitors
Rastislav Slavkovsky |
| 9:40 | 10:00 | HPVPro study: Comparison of HPV detection in cervical and cervicovaginal swabs
Vladimira Koudelakova |
| 10:00 | 10:20 | Minimal Residual Disease Monitoring in Mantle Cell Lymphoma—from diagnosis to treatment
Anna Fabisiewicz |
| 10:20 | 10:40 | In search for potential biomarkers: deregulation of microRNAs in oropharyngeal carcinoma
Helena Kovarikova |
| 10:40 | 11:00 | Transcriptomic profiling in meningiomas for biomarker and molecular principles discovery
Hanus Slavik |
| 11:00 | 11:15 | COFFEE BREAK |

Cancer therapeutics II: Small molecules

Chairs: Petr Dzubak, Milan Urban

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| 11:15 | 11:45 | Disulfiram's anti-cancer activity reflects targeting NPL4, not inhibition of aldehyde dehydrogenase
Zdenek Skrott |
| 11:45 | 12:00 | The impact of disulfiram on DNA replication dynamics in cancer cells
Dusana Majera |
| 12:00 | 12:15 | Transformations of lupane triterpenes in the position C-30: synthesis, cytotoxic activity, SAR
Milan Urban |
| 12:15 | 12:30 | Triterpenoid Thiazoles: From Design and Synthesis to in vitro Biological Evaluation
Lucie Borkova |
| 12:30 | 12:45 | Cytotoxic triterpenoid thiazoles induce apoptosis in CCRF-CEM cells via disruption of mitochondria
Ivo Frydrych |
| 12:45 | 13:00 | Functional Screening of Adenosine Receptors: From Model Validation to Active Compound Identification
Jana Kotulova |
| 13:00 | 13:15 | CLOSING REMARKS |
| 13:15 | 14:15 | LUNCH |