

# PROGRAM

## Monday, November 25

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-model of ribosomal alterations in cancer  
**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, November 26

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, November 26

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 cellular senescence and epithelial biomarkers  
**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, November 27

Madrid Hall

### Cancer biomarkers and personalized medicine

*Chairs: Jiri Drabek, Vladimira Koudelakova*

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

### Cancer therapeutics II: Small molecules

*Chairs: Petr Dzubak, Milan Urban*

- |       |       |  |
|-------|-------|--|
| 11:15 | 11:45 | Disulfiram anti-cancer activity reflects targeting NPL4, not inhibition of aldehyde dehydrogenase<br><b>Zdenek Skrott</b>    |
| 11:45 | 12:00 | The impact of disulfiram on DNA replication dynamics in cancer cells<br><b>Dusana Majera</b>                                 |
| 12:00 | 12:15 | Transformations of lupane triterpenes in the position C-30: synthesis, cytotoxic activity, SAR<br><b>Milan Urban</b>         |
| 12:15 | 12:30 | Triterpenoid thiazoles: from design and synthesis to in vitro biological evaluation<br><b>Lucie Borkova</b>                  |
| 12:30 | 12:45 | Cytotoxic triterpenoid thiazoles induce apoptosis in CCRF-CEM cells via disruption of mitochondria<br><b>Ivo Frydrych</b>    |
| 12:45 | 13:00 | Functional screening of adenosine receptors: from model validation to active compound identification<br><b>Jana Kotulova</b> |
| 13:00 | 13:15 | <b>Closing remarks</b>   |
| 13:15 | 14:15 | <b>LUNCH</b>   |