



## XIII. DNY DIAGNOSTICKÉ, PREDIKTIVNÍ A EXPERIMENTÁLNÍ ONKOLOGIE / XIII. DIAGNOSTIC, PREDICTIVE AND EXPERIMENTAL ONCOLOGY DAYS

ÚTERÝ / TUESDAY - 28. listopadu 2017 / November 28<sup>th</sup>, 2017

12:30 - 12:45 WELCOME & INTRODUCTION

### Cancer therapeutics I.

Chairs: Petr Dzubak, Marian Hajduch

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|---------------|---|
| 12:45 - 13:30 | 5-ene-thiazolidinone based design of drug-like molecules<br><b>Roman Lesyk</b>  |
| 13:30 - 14:00 | Challenges and best-practices in academic cancer drug development<br><b>Marian Hajduch</b>  |
| 14:00 - 14:15 | Semisynthetic triterpenoid heterocycles - synthesis, cytotoxicity, and studies of their mechanism of action<br><b>Milan Urban</b> |
| 14:15 - 14:30 | Design of HTS libraries using novel 3D pharmacophore signatures<br><b>Pavlo Polishchuk</b>  |
| 14:30 - 14:45 | Fluoroquinolones as perspective anti-cancer drugs<br><b>Natalie Taborska</b>  |
| 14:45 - 15:15 | COFFEE BREAK  |



### Cancer therapeutics II.

Chairs: Milos Petrik, Milan Urban

- |               |   |
|---------------|---|
| 15:15 - 15:45 | Phytohormones cytokinin ribosides as anticancer agents<br><b>Jiri Voller</b>  |
| 15:45 - 16:00 | 99mTc-labelled hydroxyapatite nanoparticles and their <i>in vitro</i> / <i>in vivo</i> characterisation<br><b>Zbynek Novy</b>                                 |
| 16:00 - 16:15 | Repurposing of anti-cancer drugs as potential inhibitors of toxic Tau aggregates<br><b>Narendran Annadurai</b>  |
| 16:15 - 16:35 | CRISPR-mediated gene tagging with the bioluminescent HiBiT technology<br><b>Oleksii Ivanov</b>  |
| 16:35 - 16:50 | How we do high content/throughput screening of anti-cancer molecules<br><b>Pawel Znojek</b>   |
| 16:50 - 17:05 | Proteomic profiling reveals DNA damage, nucleolar and ribosomal stress are the main responses to oxaliplatin treatment in cancer cells<br><b>Tomas Ozdian</b> |

STŘEDA / WEDNESDAY - 29. listopadu 2017 / November 29<sup>th</sup>, 2017

### Translational cancer research I.

Chairs: Ondrej Slaby, Jiri Drabek

- |               |  |
|---------------|--|
| 9:00 - 9:45   | Unconventional transcripts, fusion genes and neocentromeres: the hidden face of genomic amplifications in cancer.<br><b>Clelia Tiziana Storlazzi</b> |
| 9:45 - 10:30  | How can we target the CXCL12-CXCR4 axis in oncology patients<br><b>Stefania Scala</b>  |
| 10:30 - 11:00 | Genomic data as the basis for personalized therapeutic planning in pediatric oncology<br><b>Ondrej Slaby</b>   |
| 11:00 - 11:15 | COFFEE BREAK   |



## Molecular targets & biomarkers I.

Chairs: Jiri Sana, Josef Srovnal

- 11:15 - 11:30 Immunotherapy prediction in cancer patients using microsatellite instability  
**Josef Srovnal**
- 11:30 - 11:45 MiRNA profiling in recurrent and non-recurrent meningiomas  
**Hanus Slavik**
- 11:45 - 12:00 Cytogenetic analysis of recurrent glioblastomas  
**Magdalena Megova**
- 12:00 - 12:15 The opioid and cannabinoid receptors expression affects survival of colorectal cancer patients  
**Monika Vidlarova**
- 12:15 - 12:30 Identification of candidate genes underlying soft tissue sarcoma progression using a progression series of murine fibrosarcoma cell lines  
**Jiri Hatina**
- 12:30 - 13:30 **LUNCH AND POSTER PRESENTATION (Note: the authors are kindly requested to present posters in between 13:00-13:30)**

## Translational cancer research I.

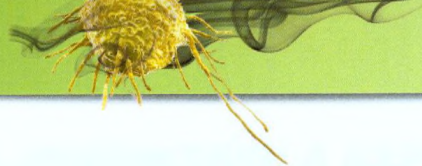
Chairs: Ondrej Slaby, Jiri Drabek

- 13:30 - 14:15 Optimized design and analysis of preclinical intervention studies *in vivo*  
**Andreas Scherer**
- 14:15 - 14:45 Epigenetic and paracrine control of hepatic cancer stemness  
**Manilo Vinciguerra**
- 14:45 - 15:00 Life is never flat: The rational use of 3D cell cultures as more predictive preclinical tumor models  
**Viswanath Das**
- 15:00 - 15:15 MicroRNA analysis in cerebrospinal fluid of glioblastoma patients  
**Alena Kopkova**
- 15:15 - 15:30 Global microRNA expression analysis of Sox-2 positive and negative glioblastoma cells  
**Jiri Sana**
- 15:30 - 15:45 **COFFEE BREAK**

## New technologies & bioinformatics

Chairs: Petr Dzubak, Martin Mistrík

- 15:45 - 16:15 Strategies for molecular target identification  
**Petr Dzubak**
- 16:15 - 16:30 Bioinformatic analysis of massive parallel sequencing data for cancer research  
**Petr Vojta**
- 16:30 - 16:45 Variants in shotgun proteomics  
**Miro Hruska**
- 16:45 - 17:00 Chronic lymphocytic leukemia cases with stereotyped B-cell receptors: knowledgebase, bioinformatics tools, data management and reporting towards personalised biomedical and clinical applications  
**Tomas Reigl**
- 17:00 - 17:15 A novelty role of CDK12 in regulation of DNA damage response by altering methylation of miR-152 and targeting downstream regulatory genes  
**Marta Dzimkova**
- 19:00 **CONFERENCE DINNER (NH hotel restaurant, for dinner-registered participants only)**



ČTVRTEK / THURSDAY - 30. listopadu 2017 / November 30<sup>th</sup>, 2017

### ***Molecular targets & biomarkers II.***

*Chairs: Marian Hajduch, Jiri Drabek*

- 9:00 - 9:45      New biomarkers – host methylation for management of women with a screen positive test  
**Chris Meijer**
- 9:45 - 10:00      Pitfalls in HPV68a detection  
**Hana Jaworek**
- 10:00 - 10:15      Molecular cytogenetics of „double/triple hit“ - high-grade B-cell lymphoma: a new entity of mature B-cell neoplasms  
**Helena Urbankova**
- 10:15 - 10:30      Human papillomavirus infection in non-small cell lung cancer  
**Vladimira Koudelakova**
- 10:30 - 10:45      **COFFEE BREAK**

### ***Molecular targets & biomarkers III.***

*Chairs: Milan Reinis, Pavel Moudry*

- 10:45 - 11:00      Comparative analysis of senescent tumour cells induced by docetaxel or immunomodulatory cytokines  
**Milan Reinis**
- 11:00 - 11:15      Downregulation of uncharacterized human HEATR1 protein activates p53 and induces ribosomal stress  
**Zsofia Turi**
- 11:15 - 11:30      Prostate cancer cell lines and patient-derived tissues as a model for therapy decision on inhibition of PARP1 or HDAC in combination with gamma irradiation  
**Dusana Majera**
- 11:30 - 11:45      Prognostic and predictive value of loss of nuclear RAD51 immunoreactivity in resected non-small cell lung cancer patients  
**Marjam Gachechiladze**
- 11:45 - 12:00      **CLOSING CEREMONY**
- 12:00              **LUNCH**





## Postery / Posters

- 1 Steps for improving reproducibility in biomedical research  
**Jiri Drabek**
- 2 Automatic cytogenetic system Metafer®: optimization and comparison with manual method  
**Oliver Pesat**
- 3 Gene aberrations in IDH-wild type glioblastoma  
**Zuzana Sporikova**
- 4 OncoScan analysis of good and bad responders to bevacizumab among mCRC patients  
**Karolína Bartakova**
- 5 Investigation of biocompatibility and cytotoxic effects of TiO<sub>2</sub> nanoparticles with organic surface modifications  
**Zuzana Skubalova**
- 6 Study on influence of surface modifications of apoferritin on intracellular delivery of ellipticine  
**Barbora Tesarova**
- 7 Stability of apoferritin modified with ANTI-hNET peptides for active targeting of neuroblastoma cells  
**Marketa Charousova**
- 8 Trisubstituted purine inhibitors of PDGFR $\alpha$  with high selectivity toward human eosinophilic cell line EOL-1  
**Veronika Malinkova**
- 9 Search for new anticancer agents among 4-thiazolidinones  
**Danylo Kaminsky**
- 10 Non-invasive lung cancer diagnostics using proteomic biomarkers in exhaled breath condensate.  
**Jana Vaclavkova**
- 11 Finding molecular patterns relevant for toxicity end-points  
**Mariia Matveieva**
- 12 Impact of hypoxia on sensitivity of colorectal carcinoma cells towards microtubule-targeting agents  
**Jiri Rehulka**
- 13 Folic acid conjugates with purine cyclin-dependent kinase inhibitors  
**Denisa Hendrychova**
- 14 Mass spectrometry-based proteomic analysis for subtyping of amyloid deposits from FFPE and SFA  
**Dusan Holub**
- 15 Cytotoxic Triterpenes and Study of their Mechanism of Action  
**Jiri Hodon**
- 16 GLASS: assisted mutation detection in Sanger data  
**Karol Pal**
- 17 Antiparasitic activity of anticancer drugs against kinetoplastid parasite *Leishmania major*  
**Ermin Schadich**
- 18 Pilotní studie molekulárního testování HPV infekce u nádorů z různých oblastí hlavy a krku  
**Kristyna Glendova**
- 19 Cytotoxicity profiling of new chemical compounds with chelating activities using high-throughput screening  
**Sona Gurska**