

## SUMMER SCHOOL June 10-12, 2019, Warsaw

### LIFE SCIENCE IMAGING – WORKSHOP ON VISUALIZATION OF MOLECULES, INTERACTIONS AND BIOLOGICAL PROCESSES

The organizers: Postgraduate School of Molecular Medicine, Nencki Institute of Experimental Biology PAS; **Venue: Nencki Institute of Experimental Biology, Pasteur 3 str., Warsaw**

#### June 10<sup>th</sup>, 2019

##### Tumor immunology and immunotherapy

- 9.30-10.05 **Cezary Szczylik** (European Health Centre, Otwock, PL) – Personalized treatment in oncology
- 10.05-10.40 **Salem Chouaib** (Institute Gustave Roussy, Villejuif, France) – Immunotherapy: concepts, challenges and drawbacks
- 10.40-11.10 Coffee break
- 11.10-11.45 **Radosław Zagożdżon** (Medical University of Warsaw, PL) – Checkpoint blockade and CAR - combining two mainstream cancer immunotherapy approaches into one

##### Visualizing the genome

- 11.45-12.20 **Magda Bienko** (Karolinska Institutet, Stockholm, Sweden) – Illuminating genome organization through integrated Microscopy and Sequencing.
- 12.20-12.55 **Nicola Crosetto** (Karolinska Institutet, Stockholm, Sweden) – Mapping genome fragility in normal and cancer cells
- 12.55-13.30 **Alicja Józkowicz** (Jagiellonian University, Krakow, PL) – Reporter animals- how to analyze a hematopoietic niche?
- 13.30-14.10 Lunch break
- 14.10 -16.30 Practicals in neuronal cell cultures/myeloid cell subset isolation**  
(Magdalena Dziembowska-CENT University of Warsaw, PL / Natalia Ochocka, Kacper Walentynowicz-Nencki Institute, Warsaw, PL)

#### June 11<sup>th</sup>, 2019

##### Stem cells, their biology and interactions with the immune system

- 9.00-9.35 **Dominika Nowis** (CENT- UW/ Medical University of Warsaw, PL) – The role of arginase-1 in the development of antitumor immune response
- 9.35-10.10 **Bożena Kamińska** (Nencki Institute, Warsaw, PL) – Heterogeneity of tumor microenvironment: lessons from animal models and single cell RNA-sequencing
- 10.10-10.45 **Agnieszka Kobiela** (CENT- University of Warsaw, PL) – Cancer stem cells heterogeneity due to origin and high plasticity
- 10.45-11.10 coffee break
- 11.10-11.45 **Matthew Guille** (University of Portsmouth, UK) – *Xenopus* as tools for understanding gene regulation and function
- 11.45-12.20 **Ewa Zuba-Surma** (Jagiellonian University, Krakow, PL) – Extracellular vesicles - biological significance and perspectives in applications in biomedical sciences
- 12.20-12.55 **Maciej Wiznerowicz** (International Institute of Molecular Oncology, Poznan, PL) – Cancer Stemness as Hallmark of Oncogenic Progression
- 12.55-13.30 **Jan Lubiński** ( International Hereditary Cancer Center, Pomeranian Medical University, Szczecin, PL) – NGS and diagnostic progress in clinical genetics of cancer
- 13.30-14.10 Lunch break

**14.10-16.30 Tomasz Stokowy** (University of Bergen, Norway) – The signatures of mutational processes in cancer.

**Practicals: Tomasz Stokowy** (University of Bergen, Norway) Identifying mutational signatures in R: From cancer genome to personalized therapy.

**June 12<sup>th</sup>, 2019**

Visualization of organelles, cellular interactions and processes

9.00-9.35 **Jakub Włodarczyk** (Nencki Institute, Warsaw, PL) – Visualisation of synaptic remodeling in stress related disorders

9.35-10.10 **Jacek Jaworski** (International Institute of Molecular and Cellular Biology, Warsaw, PL) – Intracellular trafficking in neurons

10.10-10.45 **Claudine Kieda** (Military Institute of Medicine, Warsaw, PL) – Mechanisms of angiogenesis and the role of angiogenesis in pathologies

10.45- 11.15 coffee break

11.15-11.50 **Katarzyna Piwocka** (Nencki Institute, Warsaw, PL) – Not only gene mutations matter; Stress response, translation and personalized therapies in leukemia

11.50-12.25 **Mariusz Więckowski** (Nencki Institute, Warsaw, PL) – What can we foretell from mitochondrial parameters?

12.25-13.00 **Halina Waś** (Military Institute of Medicine, Warsaw, PL) – Autophagy modulation restores proliferative potential of senescent cancer cells

13.00-13.40 Lunch break

**13.40 -16.00 Practical in flow cytometry** (Katarzyna Piwocka, Nencki Institute, Warsaw, PL)