

# **25th Anniversary of Gliwice Scientific Meetings**



**November 18-20, 2021**



Satellite Event for the jubilee

## XXV Gliwice Scientific Meetings

Joint online seminar of the *Polish Proteomics Society* and the *Finnish Proteomics Society*:

# Proteomics of Extracellular Vesicles

November 18, 2021, 14:00 – 20:00 CET

Chairpersons: **Tuula Nyman** (*Oslo*) & **Piotr Widłak** (*Gliwice*)

14.00 – 16.00 Part 1

**Maija Puhka** (*Finnish Institute of Molecular Medicine, HiLIFE, University of Helsinki, Helsinki*): Considerations of factors affecting proteomes in extracellular vesicle isolates: preanalytics and beyond.

**Harry Holthöfer** (*Finnish Institute of Molecular Medicine, University of Helsinki, Helsinki and University Medical Center Hamburg-Eppendorf, Hamburg*): Urinary extracellular vesicles: from process optimization to applications.

**Marit Inngjerdengen** (*Institute of Clinical Medicine, Oslo University Hospital, Oslo*): Dissection of functionally distinct EV subset released from NK cells guided by proteomics.

**Raghu Kalluri** (*The University of Texas MD Anderson Cancer Center, Houston*): The biology and function of exosomes in cancer.

16.00 – 16.15 Break

16.15 – 18.15 Part 2

**Mari Palviainen** (*EV-group, University of Helsinki, Helsinki*): Ins and outs of extracellular vesicles.

**Susana Garcia-Silva** (*Microenvironment and Metastasis Group, Spanish National Cancer Research Center – CNIO, Madrid*): Extracellular vesicles cargo on melanoma's service and against it.

**Beate Vestad** (*Research Institute of Internal Medicine, Oslo University Hospital, Oslo*): Plasma extracellular vesicles in people living with HIV and type 2 diabetes are related to microbial translocation and cardiovascular risk.

**Anna Wojakowska** (*Institute of Bioorganic Chemistry, Poznań*): Small extracellular vesicles represent different proteomic pattern in response to neoadjuvant radiotherapy in rectal cancer patients.

18.15 – 18.30 Break

18.30 – 20:00 Part 3

**Mayank Saraswat** (*Mayo Clinic, Rochester*): Extracellular vesicle composition and biology: What can we learn from quantitative proteomics?

**Dmitry Ter-Ovanesyan** (*Wyss Institute for Biologically Inspired Engineering, Harvard University, Boston*): Separating EVs from free proteins in biofluids.

**Monika Pietrowska** (*MSC National Research Institute of Oncology, Gliwice*): Analysis of exosome-shuttled proteins using immunocapture approaches followed by high resolution mass spectrometry.

**Registration.**

The seminar participants should register by November 17, 2021. The request for registration should be sent by e-mail via Polish Proteomics Society <[proteom@man.poznan.pl](mailto:proteom@man.poznan.pl)> or Finnish Proteomics Society <[maciej.lalowski@helsinki.fi](mailto:maciej.lalowski@helsinki.fi)>.

The relevant link to the **ZOOM platform** meeting will be sent to registered participants only.

The seminar has no registration fee.

***The seminar organizing committee:***

**Maciej Lalowski** (*University of Helsinki, Helsinki, Finland*)

**Magdalena Łuczak** (*Institute of Bioorganic Chemistry, Poznań, Poland*)

**Tuula Nyman** (*Institute of Clinical Medicine, Oslo University Hospital, Oslo, Norway*)

**Monika Pietrowska** (*Maria Skłodowska-Curie National Research Institute of Oncology, Gliwice, Poland*)

**Theresa Whiteside** (*Hillman Cancer Center, University of Pittsburgh, Pittsburgh, USA*)

**Piotr Widlak** (*Maria Skłodowska-Curie National Research Institute of Oncology, Gliwice, Poland*)



# XXV Gliwice Scientific Meetings

## *Scientific Program*

Friday, 19<sup>th</sup> November 2021

- 9.00 – 9.15                      Opening of the conference
- Welcome address: **Krzysztof Skłodowski** (*MSC-NRIO, Gliwice*)
- 9.15 – 10.15                      Special session:
- “**Professor Mieczysław Choraży – 70 years of research in tumor biology**”
- Remembrance of Prof. Mieczysław Choraży
- Announcement of the Laureate of the Prof. Mieczysław Choraży Scholarship
- The Mieczysław Choraży Lecture 2021 –
- Kari Hemminki** (*Charles University, Pilsen & DKFZ, Heidelberg*):  
                                        Science and society.
- 10.15 – 10.30                      Coffee Break
- 10.30 – 13.00                      Session: “**Cancer Moonshot – Early Detection of Lung Cancer**”
- Chairpersons – Piotr Widlak & Witold Rzyman
- Witold Rzyman** (*Medical University of Gdańsk, Gdańsk*): Lung cancer screening -  
                                        where we are?
- Luis Montuenga** (*University of Navarra, Pamplona*): The role of molecular markers  
                                        in the lung cancer screening route [online].
- Fabrizio Bianchi** (*Fondazione IRCCS Casa Sollievo della Sofferenza, San Giovanni*  
                                        *Rotondo*): The small world of microRNAs and their big role in lung cancer [online].
- Piotr Widlak** (*MSC-NRIO, Gliwice*): Serum metabolome profiling in early detection  
                                        of lung cancer.
- Joanna Polańska** (*Silesian University of Technology, Gliwice*): Radiomics of lung  
                                        cancer.
- Marek Kimmel** (*Rice University, Houston*): Modeling risk of lung cancer:  
                                        Coordination of molecular events and growth characteristics of tumors.
- 13.00 – 14.00                      Lunch Break / poster viewing

14.00 – 18.00

Session: “**Regulation of Gene Expression and Chromatin**”

Chairpersons – Joanna Rzeszowska & Sergey Razin

**Sergey V. Razin** (*Lomonosov Moscow State University, Moscow*): Order and stochasticity in the 3D organization of individual genomes [online].

**Aleksandra Pękowska** (*Nencki Institute of Experimental Biology, Warszawa*): Interplay between chromatin architecture and gene expression.

**Michał Gdula** (*Adam Mickiewicz University, Poznań*): How to shut down a whole chromosome? - SmcHD1, epigenetics and 4D genome in X inactivation.

**Gracjan Michlewski** (*International Institute of Molecular and Cell Biology, Warszawa*): Regulation of miRNA biogenesis - mechanisms and future therapies.

**Agnieszka Ciesielska** (*10x Genomics, Stockholm*): Scale and resolution. Single-cell and spatial transcriptomics - more than marriage from convenience.

16.00 – 16.15      Coffee Break

**Martin Simard** (*Université Laval, Quebec*): Regulation and modulation of the microRNA silencing pathway [online].

**Victor Ambros** (*University of Massachusetts Medical School, Worcester*): Argonaute mutations that broadly disrupt microRNA activity in worms and human disease [online].

**Grant McFadden** (*Arizona State University, Phoenix*): *Ex vivo* oncolytic virotherapy with myxoma virus [online].

*Dinner & Social event*

Saturday, 20<sup>th</sup> November 2021

9.00 – 10.00

**Virtual Poster Session** (part 1)/coffee

Short presentations of selected posters (5 minutes allocated to each presentation)

10.00 – 11.45

Session: “**Radiation Biology and Medicine**”

Chairpersons – Dorota Słonina & Nicolas Foray

**Nicolas Foray** (*INSERM, Lyon*): The radiation-induced nucleoshuttling of the ATM protein and its medical applications in radiotherapy and radiology.

**Carmel Mothersill** (*McMaster University, Hamilton*): New non-targeted mechanisms identified after low dose radiation exposure.

**Ludwik Dobrzyński** (*National Centre for Nuclear Research, Świerk*): Yonezawa effect and its modelling.

**Marek Janiak** (*Military Institute of Hygiene & Epidemiology, Warszawa*): Antineoplastic effects of low-dose whole-body exposures to X-rays combined with inactivation of two immune checkpoints in mice.

- 11.45 – 12.00 Coffee Break
- 12.00 – 14.00 Session: “**Targeted Drug Delivery and Experimental Therapies**”  
Chairpersons – Wiesław Szeja & Anna Kasprzycka
- Grzegorz Gryniewicz** (*Pharmaceutical Research Institute, Warszawa*): Sustainable chemistry for circular economy [online].
- Andrzej Gamian/Beata Orzechowska** (*Institute of Immunology and Experimental Therapy, Wrocław*): Viral vaccine - new challenges.
- Tomasz Sarnowski** (*Institute of Biochemistry and Biophysics, Warszawa*): M13 bacteriophage and anti-SARS-CoV-2 VHH as a potential therapy against COVID-19.
- Ilona Wandzik** (*Silesian University of Technology, Gliwice*): Micro- and nanosized hydrogels for biomedical applications.
- Katarzyna Jelonek** (*Centre of Polymer and Carbon Materials, Zabrze*): Biodegradable micelles for targeted delivery of anticancer drugs.
- Wiesław Szeja** (*Silesian University of Technology, Gliwice*): Glut-targeting improves the properties of drug glycoconjugates in relations to neoplastic cells.
- 14.00 – 15.00 **Virtual Poster Session** (part 2)/coffee  
Short presentations of selected posters (5 minutes allocated to each presentation)
- 15.00 – 15.15 Presentation of awarded posters and closing remarks
- 15.15 – Lunch

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Conference venue:

*Maria Skłodowska-Curie National Research Institute of Oncology, Gliwice Branch,  
Wybrzeże Armii Krajowej 15, 44-102 Gliwice, Jeremi Świącki Lecture Room.*

Given the ongoing and expected effects of COVID-19, we plan to hold a hybrid type meeting with a limited number of participants in person and with online access to a wider audience.

More information at the conference web page: <http://gsn.io.gliwice.pl>

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