



Medical University in Lodz  
invite for on-line short course:

## INTRODUCTION TO SYSTEMS BIOLOGY AND METABOLOMICS OF AGEING

23<sup>th</sup> - 27<sup>th</sup> of November 2020

### KEY TOPICS:

- Introduction into systems biology (lecture)
- Metabolomic insight into ageing and neurodegenerative diseases (lecture)
- Free Radicals (lecture)
- Lipidomics and Nutrition (lecture)
- Transcriptomics of aging and cancer (seminar/webinar)
- From a basic research to successful spin-off company (seminar/webinar)

**REGISTRATION:** [kinga.zel@umed.lodz.pl](mailto:kinga.zel@umed.lodz.pl) | **DEADLINE for registration:** 16<sup>th</sup> November 2020

**LIMIT:** 20 people - the order of applications decides

[doctoralschool.umed.pl](http://doctoralschool.umed.pl) ● [studymed.umed.pl](http://studymed.umed.pl) ● [en.umed.pl](http://en.umed.pl)

### LECTURERS:

**Dr. Carla Ferreri**



Dr. Carla Ferreri is a Senior Researcher and leads a multidisciplinary research group at the CNR that is interested in molecular mechanisms related to cellular stress, free radicals and aging, as well as to the onset of degenerative phenomena and diseases such as cancer, obesity, autism. In 2004 she designed and directed for 4 years the CNR program for high school "The Language of Research", now recognized at EU level, as a successful example of a transfer from science to society, involving students in the dissemination of the research achievements to the public. In 2019 she founded and is a Director of the Academy of Molecular Mechanisms (AMM) with the support of a Scientific Committee of leading personalities from Italian and foreign universities and research institutions, to ensure the modern training of healthcare professionals. She gave birth to several innovation companies in Italy and abroad and in 2010 he won the ITWIIN Award for Best Italian Innovative Woman. She is co-founder and Scientific Director of the Lipinutragen company, born as a spin-off of the CNR, which spreads a new approach on fats, based on the execution of a molecular analysis for the "lipidomic profile of cell membrane". She is the author of 200 works in international scientific journals, 3 books and 3 patents.



**Professor Lucyna Woźniak, PhD, DSc**

Professor Lucyna Woźniak, PhD, DSc, is the Professor at the Medical University of Lodz (<https://en.umed.pl/>) working in the field of medicinal chemistry and molecular biology. Research: diabetes in context of gestational diabetes (GDM) as an early predictor of T2M in women population, metabolomics, lipidomics. Vice Rector for Science and International Affairs, Head of Chair of Medicinal Biology & Department of Structural Biology at MUL, chairwoman of EIT HEALTH INNOSTARS ([www.eithealth.eu/innostars](http://www.eithealth.eu/innostars)) Supervisory Board, and Member of Supervisory Board of EIT HEALTH ([www.eithealth.eu](http://www.eithealth.eu)). Member of High Level Group on maximizing impact of EU Research and Innovation Programmes (Pascal Lamy Group), and Strategic Innovation Board of EIT HEALTH.

**Professor Andrzej K. Bednarek**



Andrzej K. Bednarek currently works at the Department of Molecular Carcinogenesis, Medical University in Lodz. Andrzej K. Bednarek does research in Functional Genomics focused on Molecular Carcinogenesis and Cancer Biology. Currently working on the differentiation of signaling pathways in cancers. Identification of cancer specific gene expression profiles associated with signaling pathways leads to deep understanding of cancer biology. These studies will lead to the identification of novel therapy targets and biomarkers. The latest published achievements of the Bednarek laboratory are: the identification of gene signature associated with cancer recurrence in breast cancer which is independent of disease clinical/molecular subtypes; the detailed description of epithelial to mesenchymal transition of prostate cancer which is associated with differentiation of cancer progression and response to therapy between young and older patients.