



1st Polish Yeast Conference, Rzeszów

June 22-24, 2022 (Wednesday - Friday)

Day 1 (June 22)

- 9.00 – 16.00 **Registration**
- 13.00 – 13.15 **Opening Ceremony**
Andriy Sibirny – Chair of the Conference
Idalia Kasprzyk – Vice-Rector of the University of Rzeszów
Roza Kucharczyk – Deputy Director of General Affairs of Institute of Biochemistry and Biophysics, Polish Academy of Sciences
Hiroshi Takagi – Vice-Chair of International Commission on Yeasts
Terrance G. Cooper – Secretary of the Financial and Policy Committee of the International Yeast Research Community
Grzegorz Wegrzyn – Scientific Excellence Council
- 13.15 – 14.00 **Keynote Lecture 1**
Terrance G. Cooper, University of Tennessee Health Science Center, Memphis, Tennessee, USA
Multivariant global control of the major nitrogen-responsive transcription activator, Gln3
- 14.00 – 15.30 **Session 1 Yeast cell biology and transport**
Chairs: Renata Zadrag-Tecza, University of Rzeszow, Rzeszow
Ewa Maciaszczyk-Dziubinska, University of Wroclaw , Wroclaw

- 14.00 – 14.15 **Michal Malecki**, University of Warsaw, Warsaw
Role of uridylation in cytoplasmic mRNA Decay
- 14.15 – 14.30 **Marek Skoneczny**, Institute of Biochemistry and Biophysics, Polish Academy of Sciences, Warsaw
New import pathway to peroxisomes: some answers, more questions
- 14.30 – 14.45 **Renata Zadrag-Tecza**, University of Rzeszow, Rzeszow
Cell size implications for the reproductive capacity of yeast cells
- 14.45 – 15.00 **Zbigniew Lazar**, Wroclaw University of Environmental and Life Sciences, Wroclaw
Identification and characterization of sugar transporters in *Yarrowia* yeast
- 15.00 – 15.15 **Aneta Urbanek**, University of Wroclaw, Wroclaw
Interplay between *Candida albicans* transporters, plasma membrane and cell wall
- 15.15 – 15.30 **Marta Semkiv**, Institute of Cell Biology, NAS of Ukraine, Lviv,
Autophagic degradation of cytosolic proteins in the methylotrophic yeast *Komagataealla phaffii*
- 15.30 – 16.00 **Coffee break**
- 16.00 – 17.30 **Session 2 Sensing, signalling and stress response**
Chairs: Maciej Wnuk, University of Rzeszow, Rzeszow
Marek Skoneczny, Institute of Biochemistry and Biophysics,
Polish Academy of Sciences, Warsaw
- 16.00 – 16.30 **Oleh Stasyk**, Institute of Cell Biology, NAS of Ukraine, Lviv
Glucose sensing and signaling in the methylotrophic yeast *Ogataea polymorpha*
- 16.30 – 16.45 **Jennifer Tate**, Tennessee Health Science Center, Memphis, Tennessee, USA
N-terminal Gln3 phosphorylation/dephosphorylation in the control of Gln3 localization
- 16.45 – 17.00 **Kamilla Grzywacz**, Institute of Bioorganic Chemistry,
Polish Academy of Sciences, Poznan
Emerging functions of ribosome-associated noncoding RNAs during stress response in *Saccharomyces cerevisiae*
- 17.00 – 17.15 **Krzysztof Liberek**, University of Gdansk, Gdansk
Yeast chaperones in refolding of proteins from aggregates
- 17.15 – 17.30 **Malgorzata Adamczyk**, Warsaw University of Technology, Warsaw

New role of RNA polymerase III in shaping metabolic network activity and stress response in *Saccharomyces cerevisiae*

17.30 – 19.00 **Session 3 Genetic Control of Cellular Processes**

Chairs: Marek Tchorzewski, Maria Curie-Skłodowska University in Lublin, Lublin

Kamilla Grzywacz, Institute of Bioorganic Chemistry, Polish Academy of Sciences, Poznan

17.30 – 17.50 **Marek Tchorzewski**, Maria Curie-Skłodowska University in Lublin, Lublin
The influence of ricin-mediated rRNA depurination on the translational machinery using *Saccharomyces cerevisiae* as experimental model

17.50 – 18.05 **Małgorzata Ciesła**, Institute of Biochemistry and Biophysics, Polish Academy of Sciences, Warsaw
RNA polymerase III transcription, novel layers of regulation

18.05 – 18.20 **Ulrike Topf**, Institute of Biochemistry and Biophysics, Polish Academy of Sciences, Warsaw
Crosstalk between mitochondria and cytosolic translation machinery

18.20 – 18.35 **Pawel Golik**, Institute of Genetics and Biotechnology, Faculty of Biology, University of Warsaw, Warsaw
Mitochondrial RNA degradation and stability in *Candida albicans* and the evolution of yeast nucleo-mitochondrial interactions

18.35 – 18.50 **Dorota Rzechonek**, Wrocław University of Environmental and Life Sciences, Wrocław
Regulation of erythritol utilisation in *Yarrowia lipolytica*

19.00 **Subcarpathian Accordion Quintet "Ambitus V" Concert in the University of Rzeszów Senate Room**

Day 2 (June 23)

9.00 – 10.30 **Session 4 Genome maintenance**

Chairs: Adrianna Skoneczna, Institute of Biochemistry and Biophysics, Polish Academy of Sciences, Warsaw

Robert Wysocki, University of Wrocław, Wrocław

9:00 – 9:20 **Adrianna Skoneczna**, Institute of Biochemistry and Biophysics, Polish Academy of Sciences, Warsaw

Post-translational regulation of Rad51 recombinase in yeast *S. cerevisiae*

- 9:20 – 9:40 **Dorota Dziadkowiec**, Faculty of Biotechnology, University of Wrocław, Wrocław
The role of yeast SWI2/SNF2 DNA dependent translocases in genome stability maintenance
- 9:40 – 10:00 **Michał Dmowski**, Institute of Biochemistry and Biophysics, Polish Academy of Sciences, Warsaw
Contribution of non-catalytic subunits of the helicase-polymerase complex to the maintenance of genome stability in yeast
- 10:00 – 10:15 **Ireneusz Litwin**, Scientific Excellence Hub - Centre for DNA Repair and Replication, University of Wrocław, Wrocław
Identification of new cohesin interactors in yeast
- 10:15 – 10:30 **Karol Kramarz**, Scientific Excellence Hub - Centre for DNA Repair and Replication, University of Wrocław, Wrocław
Impact of SUMOylation at replication stress sites in fission yeast
- 10:30 – 11:00 **Coffee break**
- 11:00 – 12:30 **Session 5 Yeast as a model of human diseases and drug testing**
Chairs: Teresa Zoladek, Institute of Biochemistry and Biophysics, Polish Academy of Sciences, Warsaw
Roza Kucharczyk, Institute of Biochemistry and Biophysics, Polish Academy of Sciences, Warsaw
- 11:00 – 11:30 **Sylvie Friant**, University of Strasbourg, Strasbourg, France
Humanization of yeast cells to study human proteins and patient mutations in rare diseases
- 11:30 – 11:45 **Roza Kucharczyk**, Institute of Biochemistry and Biophysics, Polish Academy of Sciences, Warsaw
Mechanisms of ATP synthase defects due to mutations in mitochondrial *ATP6* gene - yeast studies
- 11:45 – 12:00 **Joanna Kaminska**, Institute of Biochemistry and Biophysics, Polish Academy of Sciences, Warsaw
Helpful yeasts - how to find therapy for patients with Vps13 proteins deficit?
- 12:00 – 12:15 **Andrzej Kochanski**, Mossakowski Medical Research Institute, Polish Academy of Sciences, Warsaw

Pathogenic effect of *GDAP1* mutations causative for CMT4A disease in a yeast model

12.15 – 12.30 **Monika Staniszewska**, Warsaw University of Technology, Warsaw
New trends in search for antifungal therapies

12.30 – 13.30 **Lunch**

13.30 – 15.00 **Session 6 Yeast biodiversity and evolution**

Chairs: Ryszard Korona, Jagiellonian University, Cracow

Jaroslav Marszalek, University of Gdansk, Gdansk

13.30 – 13.45 **Lubomir Tomaska**, Comenius University in Bratislava, Slovakia
A runaway evolution of telomeres in ascomycetous yeasts

13.45 – 14.00 **Jaroslav Marszalek**, Intercollegiate Faculty of Biotechnology, University of Gdansk and Medical University of Gdansk
Evolutionary Biochemistry of yeast Hsp70/J-protein chaperones substrate binding cycle

14.00 – 14.15 **Szymon Kaczanowski**, Institute of Biochemistry and Biophysics, Polish Academy of Sciences, Warsaw
Yeast as a model of evolution of apoptosis

14.15 – 14.30 **Chiranjit Panja**, Institute of Biochemistry and Biophysics, Polish Academy of Sciences, Warsaw
YOR020W-A (*MCO10*): characterizing the unknown “subunit L” of mitochondrial ATP synthase of *Saccharomyces cerevisiae*

14.30 – 14.45 **Monika Opalek**, Institute of Environmental Sciences, Jagiellonian University, Cracow
Fitness advantage of phenotypic heterogeneity in *Saccharomyces cerevisiae* populations

14.45 – 15.00 **Marcin Plech**, University of Edinburgh, Edinburgh, United Kingdom
Deep mutational scanning of human mendelian disease genes in yeast

15.30 – 18.00 **Poster Session with coffee and cakes**

18.00 – 23.00 **Banquet**

Day 3 (June 24)

- 8.30 – 9.15 **Keynote Lecture 2**
Volkmar Passoth, Swedish University of Agricultural Sciences, Uppsala, Sweden
Oleaginous yeasts for biochemicals, feed and food from lignocellulose
- 9.15 – 10.45 **Session 7 Yeast Biotechnology**
Chairs: Ewelina Celinska, Poznan University of Life Sciences, Poznan
Zbigniew Lazar, Wroclaw University of Environmental and Life Sciences,
Wroclaw
- 9.15 – 9.45 **Hiroshi Takagi**, Nara Institute of Science and Technology, Japan
Proline new science and technology in yeast
- 9.45 – 10.00 **Olena Dmytruk**, University of Rzeszow, Rzeszow
Production of the bacterial antibiotics roseoflavin and aminoriboflavin by recombinant strains of the yeasts *Candida famata* and *Komagataella phaffii*
- 10.00 – 10.15 **Katarzyna Kosiorowska**, Wroclaw University of Environmental and Life Sciences, Wroclaw
Metabolic engineering of *Yarrowia lipolytica* yeast for poly(ethylene terephthalate) degradation
- 10.15 – 10.30 **Aksyniia Tsaruk**, Institute of Cell Biology, NAS of Ukraine, Lviv
The effect of carbon source, aeration and pH control on *L*-lactic acid production by methylotrophic yeast *Ogataea polymorpha*
- 10.30 – 10.45 **Andriy Sibirny**, University of Rzeszow, Rzeszow
Construction of the humanized strains of *Komagataella phaffii* producing intracellular, secreted and surface displayed SARS-CoV-2 antigens as potential vaccines against COVID-19
- 10.45 – 11.15 **Coffee break**
- 11.15 – 12.45 **Session 7 Yeast Biotechnology (continued)**
Chairs: Aleksandra Mironczuk, Wroclaw University of Environmental and Life Sciences, Wroclaw
Justyna Ruchala, University of Rzeszow, Rzeszow
- 11.15 – 11.30 **Ewelina Celinska**, Poznan University of Life Sciences, Poznan
Omics-guided engineering of a secretory pathway for enhanced synthesis of secretory proteins in *Yarrowia lipolytica*

- 11.30 – 11.45 **Patrick Fickers**, Liege University, Liege, Belgium
Erythritol metabolism: from fundamental research to biotech application
- 11.45 – 12.00 **Milan Certik**, Slovak University of Technology, Bratislava, Slovakia
Yarrowia lipolytica as a platform for production of tailor-made lipids
- 12.00 – 12.15 **Mateusz Szczepanczyk**, Wroclaw University of Environmental and Life Sciences, Wroclaw
Molecular mechanism of polyols assimilation by yeast *Yarrowia lipolytica*
- 12.15 – 12.25 **Justyna Ruchala**, University of Rzeszow, Rzeszow
Thermotolerant yeast *Ogataea polymorpha* as promising producer of the second generation ethanol
- 12.25 – 12.35 **Maria Gorczyca**, Poznan University of Life Sciences, Poznan
Co-expression of selected transcription factors modulates synthesis of heterologous proteins in *Yarrowia lipolytica* under stress conditions
- 12.35 – 12.45 **Marcin Syпка**, Lodz University of Technology, Lodz
Cold-adapted yeasts - the source of valuable biomolecules
- 12.45 – 13.45 **Lunch**
- 13.45 – 15.15 **Session 8 Pathogenic and probiotic yeasts**
Chairs: Monika Staniszewska, Warsaw University of Technology, Warsaw
Maria Rapala-Kozik, Jagiellonian University, Cracow
- 13.45 – 14.00 **Maria Rapala-Kozik**, Jagiellonian University, Cracow
Living together - the role of *Candida albicans* in the formation of polymicrobial biofilm
- 14.00 – 14.15 **Justyna Karkowska-Kuleta**, Jagiellonian University, Cracow
The host put up against the pathogen's wall - the function of surface-exposed *Candida* molecules
- 14.15 – 14.25 **Marcin Zawrotniak**, Jagiellonian University, Cracow
Neutrophil responses to fungal infections
- 14.25 – 14.35 **Maciej Maslyk**, The John Paul II Catholic University of Lublin, Lublin
In search of effective anti-*Candida albicans* agents
- 14.35 – 14.45 **Monika Kordowska-Wiater**, University of Life Sciences, Lublin
Application of *Saccharomyces cerevisiae var. boulardii* in probiotic food - study on legume sprouts

- 14.45 – 15.00 **Malgorzata Cytrynska**, Maria Curie-Sklodowska University in Lublin, Lublin
Close encounters of *Candida albicans* with different antimicrobial peptides and proteins
- 15.00 – 15.15 **Dorota Kregiel**, Lodz University of Technology, Lodz
Production and biological activity of pulcherrimin from *Metschnikowia pulcherrima* clade
- 15.15 – 15.45 **Oral presentations of the best poster presenting authors (young scientists PhD/postdocs < 35yo.)**
- 15.45 – 16.00 **Best Poster Awards. Closing Ceremony**