



## The program of the International Conference

**Non-conventional Yeasts: from Basic Research to Application**

**Rzeszow, Poland, May 15-18, 2018**

<http://nonconventionalyeasts2018.pl>

### May 15

09.00 – 16.00 Registration

13.30 – 13.50 **Opening Ceremony**

Polish Ministry for Science and High Education; Rector of Rzeszow University,  
Rzeszow city Mayor, Head of the International Commission on Yeasts; Head of the  
Organizing Committee

13.50 – 14.45 Welcome Concert

15.00 – 16.30 Plenary Session:

**Chairs: A. Sibirny (Poland/Ukraine), H. Takagi (Japan)**

15.00 – 15.45 **Diethard Mattanovich**, University of Natural Resources and Life Sciences Vienna,  
Austria

**Biotechnology of *Pichia pastoris*: Taming a wild yeast**

15.45 – 16.30 **Julian Naglik**, King's College London, UK

**Candidalysin is a fungal peptide toxin critical for infection**

17.30 – 20.00 Get-together

## May 16

### 08.30 – 09.30 Poster session

09.30 – 11.00 **Session: Genomics, Transcriptomics, Proteomics, and Systems Biology**

Chairs: H.A. Kang (S. Korea), J. Wendland (Belgium),

09.30 – 09.50 **Hyun Ah Kang**, Chung-Ang University, Seoul, S. Korea

**Reference genome analysis of amylolytic yeast species in the microbiome of fermented foods**

09.50 – 10.10 **Jurgen Wendland**, Vrije Universiteit Brussel, Belgium

**Genomics, transcriptomics and proteomics of predator yeasts**

10.10 – 10.30 **Karin Breunig**, Uni Halle, serYmun Yeast GmbH, Germany

**The response of *K. lactis* upon shifting to starvation conditions with a particular emphasis on *Snf1* signalling**

10.30 - 10.40 **Patrick Fickers**, Liege University, Belgium

**New inducible promoter for gene expression and synthetic biology in *Yarrowia lipolytica***

10.40 – 10.50 **Tomoyuki Nakagawa**, Gifu University, Japan

**Regulation of methanol metabolism in the methylotrophic yeast *Pichia methanolica***

10.50 – 11.00 **Rodrigo Ledesma Amaro**, Imperial College London, UK

**Systems and synthetic biology of non-conventional yeasts for the bioproduction of chemicals**

11.00 – 11.30 Coffee break

11.30 – 13.00 **Session: Taxonomy, Evolution and Ecology**

Chairs: P. Buzzini (Italy), K. Wolfe (Ireland)

11.30 – 12.00 **Gabor Peter**, National Collection of Agricultural and Industrial Microorganisms, Szent Istvan University, Budapest, Hungary

**Cletus Kurzman Memorial Lecture: Systematics, diversity and ecology of some non-conventional yeasts: the *Yarrowia* clade and the methanol-assimilating yeasts**

- 12.00 – 12.20 **Pietro Buzzini**, Perugia University, Italy  
**Biodiversity of yeasts and fungi in Antarctic ecosystems via next generation sequencing**
- 12.20 – 12.40 **Kenneth Wolfe**, University College Dublin, Ireland  
**Evolutionary instability of CUG in the genetic code of budding yeasts**
- 12.40 - 12.50 **Neza Cadez**, Ljubljana University, Slovenia  
**Phenotypic and genetic complexity of natural yeasts in artisanal cider fermentations**
- 12.50 – 13.00 **Marizeth Groenewald**, Westerdijk Fungal Biodiversity Institute, Utrecht, The Netherlands  
**A Citizen Science project: yeast diversity in Dutch garden soil samples**
- 13.00 – 14.30 Lunch
- 14.30 – 16.00 **Session: Sensing, Signaling, Stress Response and Membrane Transport**  
**Chairs: I. Sa-Correia (Portugal), J. Thevelein (Belgium)**
- 14.30 – 14.50 **Isabel Sa-Correia**, Institute for Bioengineering and Biosciences, Lisbon University, Portugal  
**Global adaptive responses to acetic acid stress in the highly weak acid resistant spoilage yeast *Zygosaccharomyces bailii***
- 14.50 – 15.10 **Johan Thevelein**, Leuven University, Belgium  
**Can we use the high stress tolerance of certain non-conventional yeast species to improve stress tolerance in industrial yeast strains?**
- 15.10 – 15.20 **Alexander Rapoport**, University of Latvia, Latvia  
**Anhydrobiosis in non-conventional yeasts**
- 15.20 – 15.30 **Changbin Chen**, Institute Pasteur of Shanghai, Chinese Academy of Sciences, China  
**Characterization of pH-regulatory circuit in modulating *Candida albicans* commensalism**

- 15.30 – 15.40 **Michael Agaphonov**, Federal Research Centre «Fundamentals of Biotechnology» of the Russian Academy of Sciences, Moscow, Russia  
**Role of protein glycosylation in the regulation of phosphate uptake in *Ogataea polymorpha* and *O. parapolymorpha***
- 15.40 – 15.50 **Hiroya Yurimoto**, Kyoto University, Japan  
**Methanol-sensing machinery and signaling pathway in the methylotrophic yeast**
- 15.50 – 16.00 **Rimantas Daugelavicius**, Vytautas Magnus University, Kaunas, Lithuania  
**Role of efflux in *Candida albicans* resistance to antimicrobials**
- 16.00 – 16.30 Coffee break
- 16.30 – 18.00 **Session: Yeast Cell Biology**  
**Chairs: R. Erdmann (Germany), J. Naglik (UK)**
- 16.30 – 16.50 **Ralf Erdmann**, Ruhr-University, Bochum, Germany  
**Biogenesis of peroxisomes: from yeast to man**
- 16.50 – 17.10 **Hiromi Maekawa**, Kyushu University, Fukuoka, Japan  
**Regulation of spindle orientation and mitosis in *Ogataea polymorpha***
- 17.10 – 17.30 **Andriy Sibirny**, University of Rzeszow, Poland, Institute of Cell Biology, National Academy of Sciences of Ukraine, Lviv, Ukraine  
**Catabolite inactivation of cytosolic enzymes of methanol metabolism in *Komagataella phaffii* (*Pichia pastoris*) occurs in autophagy pathway**
- 17.30 – 17.40 **Oleh Stasyk**, Institute of Cell Biology, National Academy of Sciences of Ukraine, Lviv, Ukraine  
**Glucose signaling in the methylotrophic yeast *Ogataea polymorpha***
- 17.40 – 17.50 **Uri Weill**, Weizmann Institute of Science, Rehovot, Israel  
**Exploring the yeast proteome using a whole genome SWAP-TAG (SWAT) library**
- 17.50 – 18.00 **Lina Heistinger**, University of Natural Resources and Life Sciences Vienna, Austria  
**Mating regulation and identification of MFa in *Pichia pastoris***
- 18.00 – 18.30 Presentations of sponsoring companies

18.30 – 19.00 **Round Table “Teaching in Microbiology”**

Chairs: M. Sauer (Austria), A. Rapoport (Latvia)

18.30 – 20.00 Poster session

## May 17

**08.30 – 09.30 Poster session**

09.30 – 11.00 **Session: Yeast Biochemistry, Physiology and Genetics**

Chairs: P. Fickers (Belgium), V. Passoth (Sweden)

09.30 – 09.50 **Hiroshi Takagi**, Nara Research Institute for Science and Technology, Japan

**Cysteine and sulfur metabolism found in *Saccharomyces cerevisiae* and *Ogataea polymorpha***

09.50 – 10.10 **Tomas Linder**, Swedish University of Agricultural Sciences, Uppsala, Sweden

**Strength in numbers - comparative genomics as a tool for the characterization of yeast metabolic pathways**

10.10 – 10.20 **Tiina Alamae**, University of Tartu, Institute of Molecular and Cell Biology, Estonia

***MAL* loci of nonconventional yeasts**

10.20 – 10.30 **Elena Naumova**, State Institute for Genetics and Selection of Industrial

Microorganisms, Moscow, Russia

**Comparative phylogenetics of alpha-glucosidases *MAL* and *IMA* of yeast genera *Lachancea*, *Kluyveromyces* and *Saccharomyces***

10.30 – 10.40 **Justyna Ruchala**, University of Rzeszow, Poland

**Peroxisomes are important for xylose alcoholic fermentation in *Ogataea polymorpha***

10.40 – 10.50 **Olena Kurylenko**, Institute of Cell Biology, National Academy of Sciences of

Ukraine, Lviv, Ukraine

**Role of oxidative and non-oxidative parts of pentose phosphate pathway in xylose alcoholic fermentation in *Ogataea polymorpha***

10.50 – 11.00 **Teresa Zoladek**, Institute of Biochemistry and Biophysics, Polish Academy of Sciences, Warsaw, Poland

**Genetic and chemical suppressors of *vps13A* mutation**

11.00 – 11.30 Coffee break

11.30 – 13.00 **Session: Yeasts for Food, Chemicals and Heterologous Proteins**

**Chairs: I. Borodina (Denmark), D. Mattanovich (Austria)**

11.30 – 11.50 **Irina Borodina**, Technical University of Denmark, Lyngby, Denmark

**Engineering oleaginous yeast *Yarrowia lipolytica* for production of fine chemicals**

11.50 – 12.00 **Kostyantyn Dmytruk**, Institute of Cell Biology, National Academy of Sciences of Ukraine, Lviv, Ukraine

**Riboflavin oversynthesis in the flavinogenic yeast *Candida famata***

12.00 – 12.10 **Marta Semkiv**, Institute of Cell Biology, Lviv, National Academy of Sciences of Ukraine, Lviv, Ukraine

**Glycerol synthesis and bioconversion in conventional versus non-conventional yeasts**

12.10 – 12.20 **Adam Dobrowolski**, Wroclaw University of Environmental and Life Sciences, Poland

**Production of lipids by *Yarrowia lipolytica* from waste materials**

12.20 – 12.30 **Aleksandra Mironczuk**, Wroclaw University of Environmental and Life Sciences, Poland

**Erythritol metabolism in yeast *Yarrowia lipolytica***

12.30 – 12.40 **Azusa Saika**, National Institute of Advanced Industrial Science and Technology, Tsukuba, Japan

**Characterization of acyltransferase involved in mannosylerythritol lipid production of *Pseudozyma tsukubaensis***

12.40 – 12.50 **Ewelina Celinska**, Poznan Univeristy of Life Sciences, Poland

**New secretory tags for protein secretion in *Yarrowia lipolytica***

12.50 – 13.00 **Sonakshi De**, University of Natural Resources and Life Sciences Vienna, Austria

**Regulation of pseudohyphal growth and flocculation in the protein production host *Pichia pastoris***

13.00 - 14.30 Lunch; meeting of the International Commission on Yeasts

15.00 – 18.00 Rzeszow city tour

19.00 – 23.00 Banquet at Dubiecko Palace (50 km from Rzeszow)

## May 18

09.00 – 10.30 **Session: Non-conventional Yeasts for Biofuels**

Chairs: C. Abbas (USA), A. Kondo (Japan)

09.00 – 09.20 **Charles Abbas**, University of Illinois, Urbana-Champaign, USA

**High value-added yeast products from biorefining**

09.20 – 09.40 **Akihiko Kondo**, Kobe University, Japan

**Metabolic engineering of conventional and non-conventional yeasts for the production of biofuels**

09.40 – 09.55 **César Fonseca**, Aalborg University, Denmark

***Saccharomyces cerevisiae* for 2G bioethanol production: lessons from NCY**

09.55 – 10.10 **Volkmar Passoth**, Swedish University of Agricultural Sciences, Uppsala, Sweden

**Yeast lipids from lignocellulose and crude glycerol for biodiesel and animal feed**

10.10 – 10.20 **Joao R.M. de Almeida**, Embrapa Agroenergia, Brasília, Brazil

**Genome, physiology and genetic improvement of new yeast strains for fuels and chemicals production**

10.20 – 10.30 **Fábio Faria-Oliveira**, Chalmers University of Technology, Goeteborg, Sweden

**Genomic and transcriptomic analysis of *Candida intermedia* reveals important genes for xylose utilization**

10.30 – 11.00 Coffee break

11.00 – 12.30 **Session: Tools, Host Design, Analytical and Other Applications**

Chairs: M. Gonchar (Ukraine), D. Rauhut (Germany)

11.00 – 11.20 **Rinji Akada**, Yamaguchi University, Ube, Japan

**Red fluorescent protein as a marker for protein production and genetic engineering in yeasts**

11.20 – 11.40 **Doris Rauhut**, Hochschule Geisenheim University, Germany

**Formation of volatile sulfur-compounds by non-*Saccharomyces* yeasts during wine production**

11.40 – 11.50 **Huseyin Erten**, Cukurova University, Adana, Turkey

**Single cell oil and citric acid production using *Yarrowia lipolytica* strain K57**

- 11.50 – 12.00 **Cecilia Geijer** Chalmers University of Technology, Goeteborg, Sweden  
**Split-marker recombination for efficient targeted gene deletions in *Candida intermedia***
- 12.00 – 12.10 **Nitnipa Soontorngun**, King Mongkut's University of Technology, Thonbury, Thailand  
**Antifungal property and inhibitory mechanism of 19,20-epoxycytochalasin Q isolated from *Xylaria* sp. extract**
- 12.10 – 12.20 **Mykhailo Gonchar**, Insitute of Cell Biology, National Academy of Sciences of Ukraine, Lviv, Ukraine  
**Alcohol oxidase from the yeast *Ogataea polymorpha* coupled with an artificial peroxidase, Pt/Ru nanoparticles, as a biosensing element**
- 12.20 – 12.30 **Maria Angelica Ganga**, Universidad De Santiago De Chile, Chile  
**Use of non-*Saccharomyces* yeasts as biocontrollers in the food industry**
- 12.30 – 14.00 Lunch
- 14.00 – 15.45 Plenary Session
- Chairs: A. Sibirny (Poland/Ukraine), H. Takagi (Japan)**
- 14.00 – 14.45 **Jean-Marc Nicaud**, INRA, Micalis Institut, Jouy-en-Josas, France  
**Engineering usual and unusual lipid production in *Yarrowia lipolytica* and new tools for system biology approach for genetic engineering in this yeast**
- 14.45 – 15.15 Best poster presentations
- 15.15 – 15.30 Best poster awards
- 15.30 – 15.45 **Conference closing ceremony**