

Zbigniew Lazar

PERSONAL INFORMATION

- **Date and place of birth:** April 18, 1982, Jastrzębie-Zdrój
- **Nationality:** Polish
- **Marital status:** Single

EDUCATION

- **PhD Studies** *specialization in biotechnology* **01.10.2006 – 17.02.2011**
Department of Biotechnology and Food Microbiology, Wrocław University of Environmental and Life Sciences, Wrocław, Poland
Scientific advisor: Prof. Malgorzata Robak
PhD thesis: Characterization of invertase as foreign protein produced by *Yarrowia lipolytica* SUC⁺ transformants during citric acid biosynthesis
- **PhD Studies** *specialization in glycobiology* **15.09.2008 – 16.06.2009**
Institute of Microbiology, Swiss Federal Institute of Technology Zurich, Switzerland; Unit head: Prof. Markus Aebi – studies supported by Swiss Federal Scholarship
- **03.2005 – 06.2006**
Agricultural University of Wrocław, Poland
MSc at the Faculty of Food Science
Scientific advisor: Prof. Ewelina Dziuba
Specialization: *Fermentation Technology and Food Microbiology*
Diploma thesis: Kinetic of ethanol fermentation and activity of yeast cells immobilized on porous ceramic sinter
- **10.2001 – 02.2005**
Agricultural University of Wrocław, Poland
BSc at the Faculty of Food Science

WORK EXPERIENCE

- **01.02.2013 – present**
Biologie Intégrative du Métabolisme Lipidique Microbien, INRA, Micalis, AgroParisTech, Jouy-en-Josas, France
Post Doc
- **15.09.2011 – present**
Department of Biotechnology and Food Microbiology, Wrocław University of Environmental and Life Sciences
Assistant Professor
- **01.08.2011 – 31.01.2013**
Wrocław University of Environmental and Life Sciences
Coordinator of biotechnology study
- **01.10.2010-14.09.2011**
Department of Food Biotechnology, Wrocław University of Economics
Senior technician
- **February 15-21, 2010**
ETH Zürich, Switzerland
Research training at the Institute of Microbiology
- **Septmeber, 2005**
Bielmar Ltd. in Bielsko Biala, Poland – three-week apprenticeship in the microbiology laboratory
- **August, 2005**
Namyslow Brewery Ltd. in Namysłów, Poland – one month apprenticeship
- **July, 2004**
Prymat Ltd. in Jastrzębie-Zdrój, Poland – one month apprenticeship

- **July, 2003**
Dairy in Pawlowice Śląskie, Poland – two-week apprenticeship

COURSES

- **October, 2009 – February, 2010**
“Business Academy for Scientists, how to apply knowledge in own company” – TAW Polska Ltd., Wrocław, Poland
- **05.2007**
Socrates Intensive Programme “Renewable biomaterials” Institut National Polytechnique de Toulouse, Ecole Nationale Supérieure des Ingénieurs en Arts Chimiques Et Technologiques, Toulouse, France

PEER REVIEWED PUBLICATIONS

- Rywińska A, Juszczyk P, Wojtatowicz M, Robak M, **Lazar Z**, Tomaszewska L, Rymowicz W, Glycerol as a promising substrate for *Yarrowia lipolytica* biotechnological applications, review, *Biomass and Bioenergy*, 2013, 48, 148-166
- Śnieżewski Ł, Walczak E, **Lazar Z**, Robak M, Low peptone dose as inductor of alkaline protease promoter used for invertase gene expression in *Yarrowia lipolytica*, *Journal of Life Sciences*, 2012, 6, 1100-1108
- **Lazar Z**, Walczak E, Robak M, Simultaneous production of citric acid and invertase by *Yarrowia lipolytica* SUC⁺ transformants, *Bioresource Technology*, 2011, 102, 6982-6989
- Robak M, Boruczkowski T, Drożdż W, **Lazar Z**, Baranowska M, Prządło D, Steininger M, Charczuk Z, Application of the Yeasts *Yarrowia lipolytica* for in-situ Bioremediation of Soil Contaminated with Creosote Oil – A Case Study, *Ochrona Środowiska*, 2011, 33, 2
- Buser R*, **Lazar Z***, Kaser S, Kunzler M, Aebi M: Identification, characterization and biosynthesis of a novel N-glycan modification in the fruiting body of the basidiomycete *Coprinopsis cinerea*, *Journal of Biological Chemistry*, 2010, 285(14), 10715-10723 (*equal contribution)
- Walczak E, **Lazar Z**, Mauesberger S, Robak M., Evaluation of *Yarrowia lipolytica* transformants growth on lactose, *Acta Scientiarum Polonorum Biotechnologia*, 2007, 4, 21-29

MANUSCRIPTS ACCEPTED FOR PUBLICATION

- **Lazar Z***, Rossignol T*, Verbeke J, Crutz-Le Coq AM, Nicaud JM, Robak M, Optimized invertase expression and secretion cassette for improving *Yarrowia lipolytica* growth on sucrose for industrial application, *Journal of Industrial Microbiology and Biotechnology*, 2013 (*equal contribution)

MANUSCRIPT IN CONFERENCE MATERIALS

- Barszczewski W, Walczak E, Polomska X, Piegza M, **Lazar Z**, Wojtatowicz M, Robak M: Identification and differentiation of yeasts occurring in food by PCR – based techniques, *Bezpečnost a Kvalita Surovin a Potraavin*, 2008, 31-37

CONFERENCES

- **Lazar Z**, Robak M, “Influence of N-glycosylation on heterologous invertase properties”, Non-Conventional Yeast in Post Genomic Era, Lviv, Ukraine, 11-14.09.2011 - lecture
- **Lazar Z**, Robak M, “Heterologous invertase expressed by SUC⁺ transformants of *Yarrowia lipolytica*”, Yeast genetics and molecular biology, Olsztyn, Poland, 11-16.07.2011 - poster
- **Lazar Z**, Robak M, “N-glycans occurring in glycoproteins expressed by *Yarrowia lipolytica*”, Yeast genetics and molecular biology, Olsztyn, Poland, 11-16.07.2011 - poster
- **Lazar Z**, Walczak E, Robak M, “Simultaneous production of sodium citrate and invertase by *Yarrowia lipolytica* SUC⁺ transformant”, EuroBiotech, Krakow, Poland, 20-22.09.2010 – poster
- **Lazar Z**, Mituła P, Robak M, „Characterization of oligosaccharides occurring in glycoproteins produced by *Yarrowia lipolytica*”, EuroBiotech, Krakow, Poland, 20-22.09.2010 – poster
- Barszczewski W, **Lazar Z**, Walczak E, Piegza M, Robak M, „Molecular identification and

differentiation of yeasts occurring in fermented food”, 4th International Conference on “Quality and Safety in Food Production Chain”, Wrocław, Poland, 24-25.09.2009 – poster

- **Lazar Z**, Buser R, Käser S, Künzler M, Aebi M, “Identification, characterization and biosynthesis of a N-glycan modification in the fruiting body of the mushroom *Coprinopsis cinerea*”, Molecular Mechanisms of Fungal Cell Wall Biogenesis, Warszawa, Poland, 30.08-03.09.2009 – oral presentation
- Walczak E, **Lazar Z**, Robak M, “Citric acid production from sucrose by *Yarrowia lipolytica* recombinant strains”, 4th Swiss-Czech Symposium – BioTech 2008, „Biopharmaceuticals: Why use yeasts?”, Wädenswil, Switzerland, 22-23.05.2008 – poster
- Barszczewski W, Walczak E, Polomska X, Piegza M, **Lazar Z**, Wojtatowicz M, Robak M, „Identification and differentiation of yeasts occurring in food by PCR – based techniques”, „Bespečnosť a Kvalita Surovin a Potravín”, Nitra, Slovakia, 31.01-01.02.2008 – oral presentation
- **Lazar Z**, Janiszyn Z, Dziuba E, Rauza U, „The usefulness of porous ceramic sinter for immobilization of yeast cells during ethanol fermentation”, 3rd National Congress of Biotechnology, Poznań, Poland, 09.09-12.09.2007 – poster

PATENTS

- Robak M, **Lazar Z**, Walczak E, The method of bioproducts obtaining using yeast *Yarrowia lipolytica*, Patent Application No. P391223, 19.05.2010

TEACHING EXPERIENCE

- Laboratory classes in: Biochemistry, Microbiology, Molecular biology, Genetic engineering, Industrial biotechnologies, Enzymology

PROFESIONAL MEMBERSHIP

- Polish Biochemical Society
- Polish and European Federation of Biotechnology

LANGUAGES

- English – intermediate
- German - intermediate

REFERENCES

- **Prof. Małgorzata Robak**
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