

## Personal details and addresses

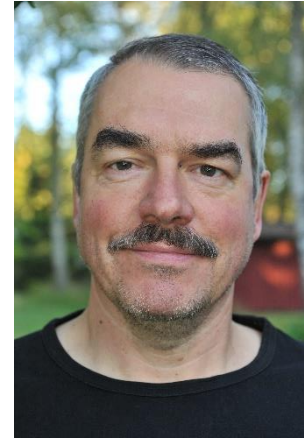
**Date of Birth:** 8 September 1956 in Darmstadt, Germany  
Swedish personal number: 560908-3018

**Nationality:** German and Swedish

**Family:** Married, household of seven persons in three generations. Four children (1992 ♀, 1994 ♂, 1998 ♀, 2000 ♂) and one grand child (2013 ♀)

**Private address:** Norra häcksjöbäcksvägen 46, 44332 Lerum, Sweden.  
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University of Gothenburg, Box 462, 40530 Göteborg, Sweden.  
Tel: 031 3608488. Mail: stefan.hohmann@gu.se



## Professional education

**1978-1983: Study** of Biology and Microbiology at the *Technische Universität Darmstadt*, Germany.

**1984-1987: PhD thesis** on the genetics of sucrose fermentation in yeast in the laboratory of the late Prof. FK Zimmermann at the Institute of Microbiology, *Technische Universität Darmstadt*.

**1987-1990: First post-doc** on the genetic regulation of yeast glycolysis in the laboratory of Prof. FK Zimmermann at the Institute of Microbiology, *Technische Universität Darmstadt*.

**1990-1995: Second post-doc, project leader** on control of yeast metabolism under stress in the laboratory of Prof. JM Thevelein, Department of Botany, *Katholieke Universiteit Leuven*, Belgium.

**Habilitation/Docent** in 1993 in Microbiology at the *Technische Hochschule Darmstadt*.

## Positions, employments

**2015 – present: Professor in Genetics and Head of Department** at the Department of Biology and Biological Engineering, Chalmers University of Technology, Göteborg, Sweden.

**2001 – 2015: Professor in Molecular Microbial Physiology** at the Department of Chemistry and Molecular Biology, University of Gothenburg.

**2000: Offer for the chair in Eukaryotic Microbiology** at Uppsala University; declined.

**1999 – 2005: Research professor** of the Swedish Research Council at the Department of Cell and Molecular Biology / Microbiology, University of Gothenburg.

**1998 – 1999: Associate professor** at the Department of Cell and Molecular Biology / Microbiology, University of Gothenburg (50% part-time) and at the Department of Biochemistry and Biophysics, Chalmers University of Technology, Göteborg (50% part-time).

**1996 – 1998: Visiting professor** at the Department of Cell and Molecular Biology / Microbiology, University of Gothenburg (60% part-time) and **project leader** at the KU Leuven (40% part-time).

**1991 and 1993 (three months each): Visiting professor** at the Institute of Microbiology and Biochemistry, University of the Orange Free State, Bloemfontein, South Africa (head: Prof. BA Prior).

**1990 - 1995: Post-doctoral researcher and project leader** at the Laboratory of Molecular Cell Biology, *Katholieke Universiteit Leuven*, Belgium.

**1986 - 1990: Wissenschaftlicher Mitarbeiter** (scientist, post-doctoral level) at the Institute of Microbiology, *Technische Hochschule Darmstadt*.

**1984 – 1987: PhD student** at the Institute of Microbiology, *Technische Hochschule Darmstadt*.

**1983 – 1986 (certain periods):** Application microbiologist for active dry wine yeast for E. Begerow & Co, Langenslonsheim, Germany.

## Awards

- **1991 - 1992: EMBO (European Molecular Biology Organisation)-fellowship** for two years.
- **1991: Fellowship** from the German Academic Exchange Organisation to teach at the University of Leipzig.
- **1993: Fellowship** from the Research Fund of the *Katholieke Universiteit Leuven* for one year.
- **1999 – 2005: Senior Researcher**, Swedish Research Council.
- **2015: Elected fellow** of the American Association for the Advancement of Science AAAS.

## Administrative, leadership and strategic positions

- **1987 - 1990: Officer for biological security** according to the German law for research using recombinant DNA technologies, Faculty of Biology, *TU Darmstadt*.
- **2005 – 2009: Member of the Faculty Board** of the Science Faculty at University of Gothenburg.
- **2006 – 2009: Chairman** (and initiator) of the research strategy board of the Faculty of Science and member of the research strategy board at the University of Gothenburg.
- **2009 – 2012: Prodean (deputy dean)** with responsibility for research and research infrastructure of the Faculty of Science at the University of Gothenburg.
- **2010 – present: Co-director** of the Gothenburg Centre for Systems Biology (University of Gothenburg and Chalmers University of Technology).
- **2010 – present: Member** of Working Group 2 (Life and Material Sciences) at the Swedish Research Council, Research Infrastructure VR/RFI.
- **2011 – present: Swedish representative** at the European Molecular Biology Laboratory EMBL Council and European Molecular Biology Conference EMBC (EMBO).

## Project coordination

- **1996-1998:** EC framework collaborative RTD project “Yeast Glycerol Metabolism”.
- **1998 – 2000:** EC framework collaborative RTD project “Water and glycerol channels of the MIP family”.
- **2000 - 2004:** Marie Curie Training Site (EC framework) “Interdisciplinary training at the Göteborg Yeast Centre”.
- **2004 – 2007:** EC framework collaborative RTD (STREP) “Quantifying Signal Transduction QUASI”. Publicised by the EC as their first Systems Biology project.
- **2004 – 2007:** Marie Curie Early-Stage Training Project (EST, EC framework) “Systems Biology”.
- **2006 – 2009:** EC framework collaborative RTD (STREP) “Systems Biology of the AMP-activated protein kinase pathway AMPKIN”.
- **2000-2006:** NordForsk/NorFA network “Feast and Famine” (PhD training).
- **2007 – 2011:** Marie Curie Research Training Network (EC framework) AQUAGLYCEROPORINS.
- **2008 – 2013:** EC framework large collaborative RTD project “Eukaryotic unicellular organism biology – systems biology of the control of cell growth and proliferation UNICELLSYS”.
- **2008 – 2012:** EC framework Research Coordination Action “Tackling future challenges in Systems Biology - FutureSysBio”.
- **2012 – 2015:** Research Training Network (Marie Curie ITN, EC framework) “Developing single cell technologies for systems biology ISOLATE”.

## Elected positions

- **2003 – present: Coordinator** of the Nordic Yeast Research Community, an association consisting of about 50 research teams in Scandinavia.
- **2005 – 2011: Chairman** of the Swedish Society for Biochemistry, Biophysics and Molecular Biology SFBBM, the Swedish FEBS constituent society; Swedish representative to the FEBS Council.
- **2009 – present: Chairman** of the Finance and Policy Committee of the International Yeast Community; organises since the 1960:ies the “International Conference of Yeast Genetics and Molecular Biology” every other year.
- **2008 – present: Chairman** of the Conference Working Group of the International Society for Systems Biology; organises since 1999 the yearly “International Conference on Systems Biology”.

## Organisation of scientific events (selection)

- **Chairman** of organising committee for the Conference “**Molecular Biology and Physiology of Water and Solute Transport**” in 2000, Göteborg, Sweden. Number of participants: 200.
- **Chairman** of organising committee for the 21<sup>st</sup> “**International Conference on Yeast Genetics and Molecular Biology**” in 2003, Göteborg, Sweden. Number of participants: 1,100 (biggest ever in series).
- **Chairman** of organising committee for the “**International Conference in Systems Biology ICSB2008**” in Göteborg. Number of participants: 1,050
- **Chairman** of organising committee for the 35<sup>th</sup> **FEBS (Federation of European Biochemical Societies) Congress** 2010 in Göteborg. Number of participants: 1,650. Four Nobel laureates speaking.
- **Main organiser** of the “FEBS International Practical Course in Systems Biology”, which is held in Gothenburg for the 7<sup>th</sup> time in 2015. Top-level 2-3 weeks course with 24 international students.

## Entrepreneurial

From 2004 until 2014 involved as cofounder, chairman and board member with **Gothia Yeast Solutions AB** and later **Cereduce AB**, which attempted to market and develop for different biosectors a yeast that does not produce alcohol. Such a yeast has beneficial properties for producing heterologous proteins for the pharma industry or alcohol-reduced beverages.

Founder, co-owner and chairman of **Häcksjön Science Publishing AB**, which edits scientific publications and organises scientific conferences, workshops and courses.

## Editor and expert (selection)

- **Chief Editor** for Current Genetics (2001-2014) and Molecular Genetics and Genomics (2005 – present), both published by Springer, Heidelberg.
- **Member of the editorial board** for FEMS Yeast Research (2000-2005) and Biochimica et Biophysica Acta (2006-2009)
- **Member of review panels or expert referee for grant proposals** in Finland, Germany, South Africa, USA, Czech Republic, Canada, The Netherlands, the UK, Sweden, EU.
- **2009 – present:** Member of the advanced grant selection panel “Genetics, genomics, bioinformatics and systems biology”, the European Research Council ERC.

## Education and mentoring

**Awarded doctorates** (only significant supervision involvement or \* formal main supervisor), including present position where known:

- 1996** Kattie Luyten, KU Leuven. Researcher, European Patent Office, Munich, Germany.
- 1998** \*Elize Muller, Univ Gothenburg. Researcher, University of the Free State, Bloemfontein, South Africa.
- 1999** Markus Tamás, KU Leuven. Professor, Univ of Gothenburg.
- 2002** Kristina Hedfalk, Chalmers. Associate professor, Univ of Gothenburg.
- 2003** \*Sara Karlgren, Univ of Gothenburg. Patent officer, Volvo, Eskilstuna, Sweden.
- 2005** \*Marcus Krantz, Univ of Gothenburg. Assistant professor, Humboldt Univ, Berlin.
- 2006** \*Bodil Nordlander, Univ of Gothenburg. Research funding advisor, Faculty of Science at Univ of Gothenburg. Started studies in medicine, Univ of Gothenburg.
- 2006** \*Nina Pettersson, Univ of Gothenburg. Maternity leave, searching post-doc in France.
- 2006** Caroline Filipsson, Univ of Gothenburg. Product developer in food industry (Engelhardt&Co AB), Gothenburg.
- 2007** \*Dominik Mojzita, Univ of Gothenburg. Researcher at VTT, Technical Research Centre of Finland.
- 2008** \*Ye Tian, Univ of Gothenburg. Discontinued research, runs a restaurant in Gothenburg.
- 2008** \*Daniel Bosch, Chalmers. Researcher in Life Science Industry (Abcam, Cambridge), UK.
- 2010** \*Elzbieta Petelencz, Univ Gothenburg. Post-doc in marine microbiology at Univ of Bergen, Norway.
- 2012** \*Doryaneh Ahmadpour, Univ of Gothenburg. Post-doc at Physics, Univ of Gothenburg.
- 2012** \*Cecilia Geijer, Univ of Gothenburg. Post-doc in Biotechnology, Chalmers.
- 2014** \*Loubna Bendrioua, Univ of Gothenburg, Post-doc in Medicine, Univ of Gothenburg.
- 2014** \*Roja Babazadeh, Univ of Gothenburg, Post-doc in Molecular Cell Biology, Univ of Gothenburg.

**Supervised post-docs** (\*funded by resources granted to me), including present position where known:

- 1987-1990** Daniel Gozalbo, TU Darmstadt. Professor, Univ of Valencia, Spain.
- 1997-1999** \*Martijn Rep, KU Leuven. Associate professor, Univ of Amsterdam, Netherlands.
- 1998-2000** \*Vincent Laizé, Univ of Gothenburg. Researcher, Univ of the Algarve, Portugal.
- 1998-2001** \*Roslyn Bill, Univ of Gothenburg, Chalmers. Professor, Aston University, Birmingham, UK.
- 1998-2002** \*Burkhard Kaiser, Univ of Gothenburg. Unknown.
- 1999-2001** \*Marie des Jesus Ferreira, Univ of Gothenburg. Researcher, Univ of Montpellier, France.
- 1999-2001** \*Fabienne Remize, Univ of Gothenburg. Professor and head of department, *Université de Réunion*, France.
- 2000** \*Xiao Ming Bao, Univ of Gothenburg. Professor, Shandong Univ, Jinan, China.
- 2000-2003** \*Frederic Sidoux-Walter, Univ of Gothenburg. Unknown.
- 2004-2006** \*Dagmara Medrala, Univ of Gothenburg. Scientist, Thermo Fisher Scientific, UK.
- 2005-2009** \*Karin Lindkvist-Petersson, Univ of Gothenburg. Associate professor, Lund Univ.
- 2005-2009** \*Carl Tiger, Univ of Gothenburg. Application manager, private brewery (Dugges Ale- & Porterbryggeri AB), Gothenburg.

- 2006-2009** \*Gemma Beltran, Univ of Gothenburg. Assistant professor and oenology doctorate coordinator, Univ Rovira i Virgili, Tarragona, Spain.
- 2006-2010** \*Karin Elbing, Univ of Gothenburg and Chalmers. Researcher, Lund Univ.
- 2006-2008** \*Bodil Nordlander, Univ of Gothenburg. Research funding advisor, Faculty of Science at Univ of Gothenburg. Started studies in medicine, Univ of Gothenburg.
- 2007-2011** \*Raul Garcia Salcedo, Univ of Gothenburg. Researcher, Univ of Oviedo, Spain.
- 2007-2010** \*Marcus Krantz, Univ of Gothenburg and Univ Tokyo. Assistant professor, Humboldt Univ, Berlin.
- 2007** \*Domink Mojzita, Univ of Gothenburg. Researcher, VTT Technical Research Centre of Finland.
- 2008-2011** Ye Tian, Univ of Gothenburg. Discontinued research, runs a restaurant in Gothenburg.
- 2006-2015** \*Kentaro Furukawa, Univ of Gothenburg. Researcher. Also supported by own funding. Assistant professor, Univ Niigata, Japan.

## Teaching and Training

### Present

Course leader for “Experimental Systems Biology”, 15 ECTS, within the Master’s Programme “Genomics and Systems Biology”, Faculty of Science, University of Gothenburg.

Course leader for “7<sup>th</sup> International Practical Course in Systems Biology” supported by FEBS and the ERA-Net ERASysAPP in June 2015 at University of Gothenburg, 5 ECTS.

### Previous

**1986 – 1990:** Participation (certain parts independently) in the lecture courses “General Genetics” and “Mycology” and the laboratory course “Microbiology-Genetics” TU Darmstadt. Independent lecture course (15 x 2h) “Regulation of gene expression). In German.

**1991:** Part-time professor in 1991 of the *Deutsche Akademischen Austauschdienstes DAAD*, lecture series “Regulation of gene expression” (9 x 2h) at the University of Leipzig, Germany. In German

**1993:** Visiting professor at the Department of Microbiology and Biochemistry, University of the Orange Free State, South Africa. Lecture series (12 x 1h) on “Regulation of gene expression”.

**1997 – 2005:** Course leader “Molecular Microbiology”; lectures, seminars and laboratory course; 3rd year students, 15 ECTS. University of Gothenburg.

**2000 – 2008 and 2013:** **Course leader** for PhD course “Yeast Genetics” and “Future Challenges in Genetics and Systems Biology”. University of Gothenburg.

**2005-2010:** Programme director for the Master’s Programme “Systems Biology”. The programme was then moved on as “Genomics and Systems Biology”.

**Coordinator** of five PhD training projects funded by the EC and NordForsk (see project coordination), which included development of PhD course curricula and courses, mainly in Systems Biology as well as in “complementary or soft” skills.

### Development of education strategies

Presently heading (together with Marija Cvijovic, Gothenburg, and Thomas Höfer, Heidelberg) activities to **structure Systems Biology Master’s education in Europe**. This includes common criteria, standards and curricula. Under the auspices of ISBE (Infrastructure for Systems Biology in Europe, an ESFR project), ERASysAPP (an ERA-Net of funding organisations) and the Gothenburg Centre for Systems Biology.

## Professional formation

I have undergone two courses during my appointment as deputy dean of the Faculty of Science, University of Gothenburg:

- Leadership development programme (*chefsutvecklingsprogram*), ten full days, in 2011/12
- Economy game (*ekonomispelet*), one full day, 2012

## Research infrastructure

I have been involved over the last six years in various activities aiming at developing strategies for structuring, managing, and financing research infrastructures in Gothenburg, Sweden and Europe.

- **2009: Initiated and headed** a research infrastructure working group at the Faculty of Science, which developed a strategy for managing and financing its research infrastructures.
- **2009 – 2012:** As deputy dean I was **responsible for research infrastructure** at the Faculty of Science, including the Swedish NMR Centre (among others I worked for complete accounting of activities) and the Sven Lovén Centre for Marine Sciences (among others I recruited a full-time director).
- **2010 – present: Member** of Working Group 2 (Life and Material Sciences) at the Swedish Research Council, Research Infrastructure VR/RFI. This group develops strategies for structuring, managing and financing research infrastructure in Sweden.
- **2010 – present: Involved in developing ISBE** (Infrastructure for Systems Biology in Europe, planning phase funded by the EC via ESFRI) **and SILS** (Systems Biology Infrastructure for the Life Sciences, funded by VR/RFI).

## Research interest

My research focuses around the **quantitative mechanisms that control signal transduction pathways**. We employ yeast as experimental model organism and integrate experimental biology with mathematical modelling in **systems biology approaches**. More recently, we have become interested in employing signalling pathways for **cell engineering in synthetic biology**. Some of our research questions:

- What are the systems-level mechanisms that control signalling in the yeast HOG pathway, which displays basal signalling, transient responses, branched pathway architecture and cross talk with other MAPK pathways?
- What are the systems-level mechanisms that control the yeast AMPK/SNF1 pathway, which displays intracellular sensing, sustained responses and stress-specific response characteristics?
- How is metabolic regulation and signalling integrated in the yeast HOG and AMPK/SNF1 pathways?
- What are the mechanisms underlying cell-to-cell variability in signalling and response characteristics?
- Can we make use of the rapid kinetics of signalling pathways to device next generation cell engineering and cell programming, such that cells can perform complex tasks with high predictability and precision?

Over the last 25 years my group has made contributions to the following scientific topics:

- Better understanding of the mechanisms that control HOG pathway signalling dynamics by integrating experimentation with mathematical modelling of multiple scales and testing predictions experimentally.
- Discovering several targets genes and proteins of the yeast osmostress HOG signalling system and elucidating the mechanisms of their control.
- Defining single cells profiles of signalling dynamics in HOG and AMPK/SNF1 signalling.

- Discovering new features of AMPK/SNF1 signalling (two step control, sensing of glucose levels and changes therein)
- Demonstrating conservation of AMPK/SNF1 by expressing mammalian AMPK successfully in yeast.

## Research funding

Since my arrival in Sweden in 1996 my research has continuously been funded from external sources that employ peer-review to assess research quality. This includes the Swedish Research Council, the European Commission framework programmes as well (certain periods) the Human Frontier Science Programme, the Foundation for Strategic Research and others.

### Present funding

<i>Project Title</i>	<i>Funding source</i>	<i>Amount (Euros)</i>	<i>Period</i>	<i>Role of the PI</i>
SILS	Swedish Research Council Infrastructure	260,000 €	2013-2014	Coordinator
Signal transduction at single cell level	Swedish Research Council	300,000 €	2012-2015	Sole applicant
ISOLATE	FP7 ITN research training network	1,021,000 € (my group)	2012-2015	Coordinator
ISBE	FP7 ESFRI infrastructure	80,000 €	2012-2015	Participant
ERASysAPP	FP7 ERA-Net, together with VGR	70,000 €	2012-2015	Participant/ sub-contractor

### Planned applications until June 2015

<i>Project Title</i>	<i>Funding source</i>	<i>Amount (Euros)</i>	<i>Period</i>	<i>Role of the PI</i>
BILS/SILS	Swedish Research Council Infrastructure	Ca 300,000 €	2016-2024	Participant
Signal transduction at single cell level	Swedish Research Council	Ca 700,000 €	2016-2020	Sole applicant
Synthetic biology of MAPK	ERASysAPP research grant	Ca 300,000 €	2015-2018	Participant (submitted, pending)
Synthetic biology of metabolism and signalling	H2020 Marie Curie Training Network	Ca 800,000 €	2015-2019	Coordinator (submitted, pending)

## Research output

**Researcher ID:** <http://www.researcherid.com/rid/K-9895-2013>

**ORCID:** <http://orcid.org/0000-0002-0809-1985>

**Google Scholar:** <http://scholar.google.se/citations?user=skxQMs8AAAAJ&hl=en>

**Key words:** Signal transduction, stress responses, metabolic regulation, systems and synthetic biology, yeast.

**Total publications:** 116 peer-reviewed research articles, 23 reviews (many peer-reviewed), four patents.

**H-index:** 45 (Web of Science) and 51 (Google Scholar)

**Total citations:** 7,600 (Web of Science) with presently ca 500 citations per year.

**Top cited research paper:** Number 23. Cited 415 times (multi-author paper number 14 has been cited 710 times).

**Top-cited review:** Number 9 (of reviews). Cited 760 times.

### 1. Peer-reviewed research Papers

1. **Hohmann S**, Zimmermann FK (1986) Cloning and expression on a multicopy vector of five invertase genes of *Saccharomyces cerevisiae*. *Current Genetics* 11:217-225.
2. **Hohmann S** (1987) A region in the yeast genome which favours multiple integration of DNA via homologous recombination. *Current Genetics* 12:519-526.
3. **Hohmann S**, Gozalbo D (1988) Structural analysis of the 5' regions of yeast *SUC* genes revealed analogous palindromes in *SUC*, *MAL* and *GAL*. *Molecular and General Genetics* 211:446-454.
4. Gozalbo D, **Hohmann S** (1989) The naturally occurring silent invertase structural gene *suc2<sup>0</sup>* contains an amber stop codon that is occasionally read through. *Molecular and General Genetics* 216:511-516.
5. Schaaff I, Green JBA, Gozalbo D, **Hohmann S** (1989) A deletion of the *PDC1* gene for pyruvate decarboxylase of yeast causes a different phenotype than previously isolated point mutations. *Current Genetics* 15:75-81.
6. **Hohmann S**, Gozalbo D (1989) Comparison of the nucleotide sequences of a yeast gene family. I. Distribution and spectrum of spontaneous base substitutions. *Mutation Research* 215:79-87.
7. Gozalbo D, **Hohmann S** (1989) Comparison of the nucleotide sequences of a yeast gene family. II. Analysis of spontaneous deletions and insertions. *Mutation Research* 215:89-94.
8. Gozalbo D, **Hohmann S** (1990) Nonsense suppressors partially revert the decrease of the mRNA level of a nonsense mutant allele in yeast. *Current Genetics* 17:77-79.
9. Schaaff I, **Hohmann S**, Zimmermann FK (1990) Molecular analysis of the structural gene for yeast transaldolase. *European Journal of Biochemistry* 188:567-603.
10. **Hohmann S**, Cederberg H (1990) Autoregulation may control the expression of yeast pyruvate decarboxylase structural genes *PDC1* and *PDC5*. *European Journal of Biochemistry* 188:615-621.
11. Van Aelst L, **Hohmann S**, Zimmermann FK, Jans AWH, Thevelein JM (1991) A yeast homologue of the bovine lens fibre MIP gene family complements the growth defect of a *Saccharomyces*



- cerevisiae* mutant on fermentable sugars but not its defect in glucose-induced RAS-mediated cAMP signalling. EMBO Journal 10:2095-2104.
12. **Hohmann S** (1991) Characterisation of *PDC6*, a third structural gene for pyruvate decarboxylase in yeast. Journal of Bacteriology 173:7963-7969.
  13. **Hohmann S** (1991) *PDC6*, a weakly expressed pyruvate decarboxylase gene from yeast, is activated when placed spontaneously under the control of the *PDC1* promoter. Current Genetics 20:373-378.
  14. Oliver SG et al. (1992) The complete DNA sequence of yeast chromosome III. Nature 357:38-46. (Article with 147 authors including Cederberg H, Hohmann S, Huse K, Schaaff-Gerstenschläger I, Zimmermann FK from the TH Darmstadt. The sequence analysis of chromosome III is the result of a collaboration of 35 European laboratories).
  15. **Hohmann S**, Huse K, Valentin E, Mbonyi K, Thevelein JM, Zimmermann FK (1992) Glucose-induced regulatory defects in the *Saccharomyces cerevisiae* growth initiation mutant *byp1* and identification of *MIG1* as a partial suppresser. Journal of Bacteriology 174:4183-4188.
  16. **Hohmann S**, Thevelein JM (1992) The cell division cycle gene *CDC60* encodes the cytosolic leucyl-tRNA synthetase in *Saccharomyces cerevisiae*. Gene 120:43-49.
  17. **Hohmann S**, Neves MJ, de Koning W, Alijo R, Ramos J, Thevelein JM (1993) The growth and signalling defects of the *ggs1 (fdp1/byp1)* deletion mutant on glucose are suppressed by a deletion of the gene encoding hexokinase PII. Current Genetics 23:281-289.
  18. Zeng X, Farrenkopf B, **Hohmann S**, Dyda F, Furey W, Jordan F (1993) Role of cysteines in the activity and inactivation of brewers's yeast pyruvate decarboxylase investigated with a *PDC1-PDC6* fusion protein. Biochemistry 32:2704-2709.
  19. Van Aelst L, **Hohmann S**, Bulaya B, de Koning W, Sierkstra L, Neves M.J, Luyten K, Alijo R, Ramos J, Cocchetti P, Martegani E, de Magalhães NM, Brandão RL, Van Dijck P, Vanhalewyn M, Durnez P, Jans AWH, Thevelein JM (1993) Molecular cloning of a gene involved in glucose sensing. Molecular Microbiology 8:927-943.
  20. **Hohmann S** (1993) Characterisation of *PDC2*, a gene necessary for high level expression of pyruvate decarboxylase structural genes in *Saccharomyces cerevisiae*. Molecular and General Genetics 241: 657-666.
  21. Luyten K, de Koning W, Tesseur I, Ruiz MC, Ramos J, Cobbaert P, Thevelein JM, **Hohmann S** (1993) Disruption of the *Kluyveromyces GGS1* gene causes inability to grow on glucose and fructose and is suppressed by mutations that reduce sugar uptake. European Journal of Biochemistry 217:701-713.
  22. Albertyn J, **Hohmann S**, Prior BA (1994) Characterization of the osmotic stress response in *Saccharomyces cerevisiae*: osmotic stress and glucose repression regulate glycerol-3-phosphate dehydrogenase independently. Current Genetics 25: 12-18.
  23. Albertyn J, **Hohmann S**, Thevelein JM, Prior BA (1994) *GPD1* encoding glycerol-3-phosphate dehydrogenase is essential for growth under osmotic stress in *Saccharomyces cerevisiae* and its expression is regulated by the HOG-pathway. Molecular and Cellular Biology 14:4135-4144.
  24. Baburina I, Gao Y, Hu Z, Jordan F, **Hohmann S**, Furey W (1994) Substrate activation of brewer's yeast pyruvate decarboxylase is abolished by mutation of cysteine 221 to serine. Biochemistry 33:5630-5635
  25. **Hohmann S**, Van Dijck P, Luyten K, Thevelein JM (1994) The *byp1-3* allele of the *Saccharomyces cerevisiae GGS1/TPS1* gene and its multi copy suppressor tRNA<sup>GLN</sup>(CAG): Ggs1/Tps1 levels restraining growth on fermentable sugars and trehalose accumulation. Current Genetics 26: 295-301.

26. Neves MJ, **Hohmann S**, Bell W, Dumortier F, Luyten K, Ramos J, Cobbaert P, de Koning W, Kaneva Z, Thevelein JM (1995) Control of glucose influx into glycolysis and pleiotropic effects studied in different isogenic sets of *Saccharomyces cerevisiae* mutants in trehalose biosynthesis. *Current Genetics* 27: 110-122.
27. Eberhardt I, **Hohmann S** (1995) Strategy for deletion of complete open reading frames in *Saccharomyces cerevisiae*. *Current Genetics* 27: 306-308.
28. Luyten K, Albertyn J, Skibbe F, Prior BA, Ramos J, Thevelein JM, **Hohmann S** (1995) Fps1, a yeast member of the MIP-family of channel proteins, is a facilitator for glycerol uptake and efflux and it is inactive under osmotic stress. *EMBO Journal* 14: 1360-1371.
29. **Hohmann S**, Bell W, Neves MJ, Valckx D, Thevelein JM (1996) Evidence for trehalose-6-phosphate-dependent and -independent mechanisms in the control of sugar influx into yeast glycolysis. *Molecular Microbiology* 20: 981-991.
30. Winderickx J, de Winde JH, Crauwels M, Hino A, **Hohmann S**, Van Dijck P, Thevelein JM (1996) Expression regulation of genes encoding subunits of the trehalose synthase complex in *Saccharomyces cerevisiae*: novel variations of STRE-mediated transcriptional control. *Molecular and General Genetics*, 252: 470-482.
31. Killenberg-Jabs M, König S, **Hohmann S**, Hübner G (1996) Purification and characterisation of the pyruvate decarboxylase from a haploid strain of *Saccharomyces cerevisiae*. *Biological Chemistry Hoppe-Seyler* 377: 313-317.
32. de Winde JH, Crauwels M, **Hohmann S**, Thevelein JM, Winderickx J (1996) Differential requirement of the yeast sugar kinases for sugar sensing in the establishment of the catabolite repressed state. *European Journal of Biochemistry* 241: 633-643.
33. Killenberg-Jabs M, König S, Eberhardt I, **Hohmann S**, Hübner G (1997) Role of Glu51 for cofactor binding and catalytic activity in pyruvate decarboxylase from yeast studied by site-directed mutagenesis. *Biochemistry* 36:1900-1905.
34. Ansell R, Granath K, **Hohmann S**, Thevelein JM, Adler L (1997) The two isoenzymes for yeast NAD-dependent glycerol-3-phosphate dehydrogenase, Gpd1 and Gpd2, have different roles in osmoregulation and redox-balancing. *EMBO Journal* 16: 2179-2187.
35. Reinders A, de Virgilio C, Bürckert N, **Hohmann S**, Thevelein JM, Wiemken A (1997) Protein interactions in the yeast trehalose synthase complex. *Molecular Microbiology* 24: 687-695.
36. Ferreira JC, Thevelein JM, **Hohmann S**, Paschoalin VMF., Trugo LC, Panek AD (1997) Trehalose accumulation in mutants deleted in the UDPG-dependent trehalose synthase-phosphatase complex. *Biochim. Biophys. Acta* 1335: 40-50.
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## 2. Review articles

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### 3. Books and special issues

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5. **Hohmann S**, Elf J, Ehrenberg M (Eds) (2009) Systems Biology – Nobel Symposium 146. Special issue, *FEBS Letters* 583, issue 24.
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#### 4. Patents

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4. Conde N, de Nadal E, Furukawa K, **Hohmann S**, Macia J, Posas F, Regot S (2011) Reprogrammable multicellular synthetic circuits. WO2012022741.

#### 5. Book chapters

More than 20.

#### 6. Invited lectures at conferences

More than 60.

#### 7. Invited and special seminars

More than 80.