Development of a novel, robust and cost-efficient process for valorizing dairy waste exemplified by ethanol production
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Genetics of Lactococci
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Harnessing biocompatible chemistry for developing improved and novel microbial cell factories
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Sweet As Sugar-Efficient Conversion of Lactose into Sweet Sugars Using a Novel Whole-Cell Catalyst
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Systems Biology – A Guide for Understanding and Developing Improved Strains of Lactic Acid Bacteria
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

The SPI-19 encoded type-six secretion-systems (T6SS) of Salmonella enterica serovars Gallinarum and Dublin play different roles during infection
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Alterations in the transcription factors GntR1 and RamA enhance the growth and central metabolism of Corynebacterium glutamicum
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

Droplet-based microfluidics as a future tool for strain improvement in lactic acid bacteria
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

Inactivation of TCA cycle enhances Staphylococcus aureus persister cell formation in stationary phase
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

Protein from green biomass as a food resource
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2018 › Research › peer-review

A bacterial cell factory for efficient production of ethanol from whey
Research output: Patent › Patent – Annual report year: 2017 › Research
High-level production of diacetyl in a metabolically engineered lactic acid bacterium
Research output: Patent › Patent – Annual report year: 2017 › Research

A novel genetic tool for metabolic optimization of Corynebacterium glutamicum: efficient and repetitive chromosomal integration of synthetic promoter-driven expression libraries
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Butanol is cytotoxic to Lactococcus lactis while ethanol and hexanol are cytostatic
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Engineering Lactococcus lactis into a cell factory for production of butanol isomers
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2017 › Research › peer-review

Finding the Needle in the Haystack-the Use of Microfluidic Droplet Technology to Identify Vitamin-Secreting Lactic Acid Bacteria
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Harnessing the respiration machinery for high-yield production of chemicals in metabolically engineered Lactococcus lactis
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Lipid Biotechnology and Biochemistry
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 2017 › Research › peer-review

Metabolic characterization and transformation of the non-dairy Lactococcus lactis strain KF147, for production of ethanol from xylose
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Protein from green biomass as a food resource
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2017 › Research › peer-review

Re-wiring of energy metabolism promotes viability during hyperreplication stress in E. coli
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Micro-organism for the production of stereo-specific s, s-2,3-butanediol
Research output: Patent › Patent – Annual report year: 2016 › Research

Acetoin and 2,3 butanediol isomers synthesis in metabolically engineered Lactococcus lactis
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2016 › Research › peer-review

A novel cell factory for efficient production of ethanol from dairy waste
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

Biofilm as a production platform for heterologous production of rhamnolipids by the non-pathogenic strain Pseudomonas putida KT2440
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

Can microbes compete with cows for sustainable protein production - A feasibility study on high quality protein
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review
Combining metabolic engineering and biocompatible chemistry for efficient production of food ingredients
Combining metabolic engineering and biocompatible chemistry for high-yield production of homo-diacetyl and homo-(S,S)-2,3-butanediol
Draft Genome Sequence of Hymenobacter sp. Strain AT01-02, Isolated from a Surface Soil Sample in the Atacama Desert, Chile
Elucidation of the regulatory role of the fructose operon reveals a novel target for enhancing the NADPH supply in Corynebacterium glutamicum
Integrating biocompatible chemistry and manipulating cofactor partitioning in metabolically engineered Lactococcus lactis for fermentative production of (3S)-acetoin
Microbial population heterogeneity versus bioreactor heterogeneity: evaluation of Redox Sensor Green as an exogenous metabolic biosensor
Stimulation of acetoin production in metabolically engineered Lactococcus lactis by increasing ATP demand
Synthesis of (3R)-acetoin and 2,3-butanediol isomers by metabolically engineered Lactococcus lactis
Adaptation of Lactococcus lactis to high growth temperature leads to a dramatic increase in acidification rate
A New Type of YumC-Like Ferredoxin (Flavodoxin) Reductase Is Involved in Ribonucleotide Reduction
High-level ethanol production by metabolically engineered Lactococcus lactis using economically renewable feedstocks
Increased expression of pyruvate carboxylase and biotin protein ligase increases lysine production in a biotin prototrophic Corynebacterium glutamicum strain
Acetate Kinase Isozymes Confer Robustness in Acetate Metabolism
Development of droplets-based microfluidic systems for single-cell high-throughput screening
<table>
<thead>
<tr>
<th>Title</th>
<th>Research output: Contribution to journal › Journal article – Annual report year:</th>
<th>Research › peer-review</th>
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<tr>
<td>Polyamines Are Required for Virulence in Salmonella enterica Serovar Typhimurium</td>
<td>2012 › Research › peer-review</td>
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<tr>
<td>Tunable promoters in synthetic and systems biology.</td>
<td>2012 › Research › peer-review</td>
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<tr>
<td>Tuning of Controller for Type 1 Diabetes Treatment with Stochastic Differential Equations</td>
<td>2012 › Research › peer-review</td>
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<td>Bacillus subtilis Two-Component System Sensory Kinase DegS Is Regulated by Serine Phosphorylation in Its Input Domain</td>
<td>2011 › Research › peer-review</td>
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<tr>
<td>The construction of a library of synthetic promoters revealed some specific features of strong Streptomyces promoters</td>
<td>2011 › Research › peer-review</td>
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<td>Towards a quantitative prediction of the fluxome from the proteome</td>
<td>2011 › Research › peer-review</td>
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<td>Bacillus subtilis BY-kinase PtkA controls enzyme activity and localization of its protein substrates</td>
<td>2010 › Research › peer-review</td>
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<td>Metabolic and Transcriptional Response to Cofactor Perturbations in Escherichia coli</td>
<td>2010 › Research › peer-review</td>
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<td>Phosphoglycerate Mutase Is a Highly Efficient Enzyme without Flux Control in Lactococcus lactis</td>
<td>2010 › Research › peer-review</td>
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<td>The MG1363 and IL1403 Laboratory Strains of Lactococcus lactis and Several Dairy Strains Are Diploid</td>
<td>2010 › Research › peer-review</td>
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<td>Control analysis of the purine biosynthesis in Lactococcus lactis</td>
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<td>DiaCon: an interdisciplinary approach to diabetes control</td>
<td>2009 › Research</td>
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<td>Engineering of Bacillus subtilis 168 for increased nisin resistance</td>
<td>2009 › Research</td>
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<tr>
<td>Co-factor engineering in lactobacilli: Effects of uncoupled ATPase activity on metabolic fluxes in Lactobacillus (L.) plantarum and L. sakei</td>
<td>2008 › Research</td>
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<td>Control analysis of the role of triosephosphate isomerase in glucose metabolism in Lactococcus lactis</td>
<td>2008 › Research</td>
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Escherichia coli strains with promoter libraries constructed by Red/ET recombination pave the way for transcriptional fine tuning
Research output: Contribution to journal › Journal article – Annual report year: 2008 › Research › peer-review

Increased biomass yield of Lactococcus lactis during energetically limited growth and respiratory conditions
Research output: Contribution to journal › Journal article – Annual report year: 2008 › Research › peer-review

Online diagnosticering af bacteriofag-inficerede celler
Research output: Contribution to journal › Journal article – Annual report year: 2008 › Communication

Plasmid pCS1966, a new selection/counterselection tool for strain construction in Lactic Acid Bacteria based on the oroP gene encoding an orotate transporter from Lactococcus lactis
Research output: Contribution to journal › Journal article – Annual report year: 2008 › Research › peer-review

The extent of co-metabolism of glucose and galactose by L. lactis changes with the expression of the lacSZ operon from Streptococcus thermophilus
Research output: Contribution to journal › Journal article – Annual report year: 2008 › Research › peer-review

The Ser/Thr/Tyr phosphoproteome of Lactococcus lactis IL1403 reveals multible phosphorylated proteins
Research output: Contribution to journal › Journal article – Annual report year: 2008 › Research › peer-review

Bacillus subtilis strain deficient for the protein-tyrosine kinase PtkA exhibits impaired DNA replication
Research output: Contribution to journal › Journal article – Annual report year: 2007 › Research › peer-review

Detection of bacteriophage-infected cells of Lactococcus lactis using flow cytometry
Research output: Contribution to journal › Journal article – Annual report year: 2007 › Research › peer-review

The las enzymes control pyruvate metabolism in Lactococcus lactis during growth on maltose
Research output: Contribution to journal › Journal article – Annual report year: 2007 › Research › peer-review

The serine/threonine/tyrosine phosphoproteome of the model bacterium Bacillus subtilis
Research output: Contribution to journal › Journal article – Annual report year: 2007 › Research › peer-review

A synthetic promoter library for constitutive gene expression in Lactobacillus plantarum
Research output: Contribution to journal › Journal article – Annual report year: 2006 › Research › peer-review

Bacterial single-stranded DNA-binding proteins are phosphorylated on tyrosine.
Research output: Contribution to journal › Journal article – Annual report year: 2006 › Research › peer-review

Control analysis of the importance of phosphoglycerate enolase for metabolic fluxes in Lactococcus lactis subsp. lactis IL1403.
Research output: Contribution to journal › Journal article – Annual report year: 2006 › Research › peer-review

Genetics of Lactococci
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 2006 › Research › peer-review

Lactococcus lactis - traditional and GMO strains
Research output: Contribution to journal › Conference abstract in journal – Annual report year: 2006 › Research › peer-review
Synthetic promoter libraries- tuning of gene expression.
Research output: Contribution to journal › Journal article – Annual report year: 2006 › Research › peer-review

Control analysis as a tool to understand the formation of the las operon in Lactococcus lactis
Research output: Contribution to journal › Conference abstract in journal – Annual report year: 2005 › Research › peer-review

Control analysis as a tool to understand the formation of the las operon in Lactococcus lactis
Research output: Contribution to journal › Journal article – Annual report year: 2005 › Research › peer-review

In vitro characterization of the Bacillus subtilis protein tyrosine phosphatase YwqE.
Research output: Contribution to journal › Journal article – Annual report year: 2005 › Research › peer-review

Lactococcus lactis - a diploid bacterium.
Research output: Contribution to conference › Poster – Annual report year: 2005 › Research

Lactococcus lactis is diploid
Research output: Contribution to conference › Paper – Annual report year: 2005 › Research

Nucleotide Metabolism and its Control in Lactic Acid Bacteria
Research output: Contribution to journal › Journal article – Annual report year: 2005 › Research › peer-review

Protein-Tyrosine Phosphorylation in Bacillus subtilis.
Research output: Contribution to journal › Journal article – Annual report year: 2005 › Research › peer-review

Triosephosphate isomerase has no control on the glycolytic flux and metabolic shift in Lactococcus lactis IL1403
Research output: Contribution to journal › Conference abstract in journal – Annual report year: 2005 › Research › peer-review

Tunable promoters in systems biology.
Research output: Contribution to journal › Journal article – Annual report year: 2005 › Research › peer-review

Experimental modulation of gene expression
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 2004 › Research

Expression of the pyrG gene determines the pool sizes of CTP and dCTP in Lactococcus lactis
Research output: Contribution to journal › Journal article – Annual report year: 2004 › Research › peer-review

Hvad kontrollerer syrningseffektiviteten af den primære starter?
Research output: Contribution to journal › Journal article – Annual report year: 2004 › Research

Kontrolanalyse af glykosen i mikrobielle systemer
Research output: Contribution to journal › Journal article – Annual report year: 2004 › Research

Transformation of Leuconostoc carnosum 4010 and evidence for natural competence of the organism
Research output: Contribution to journal › Journal article – Annual report year: 2004 › Research › peer-review

Experimental control analysis of glycolysis in Lactococcus lactis
Research output: Book/Report › Report – Annual report year: 2003 › Communication

Glyceraldehyde-3-phosphate dehydrogenase has no control over glycolytic flux in Lactococcus lactis MG1363
Research output: Contribution to journal › Journal article – Annual report year: 2003 › Research › peer-review
Hemin reconstitutes proton extrusion in an H+-ATPase-negative mutant of Lactococcus lactis
Research output: Contribution to journal › Journal article – Annual report year: 2001 › Research › peer-review

Lactate dehydrogenase has no control on lactate production but has a strong negative control on formate production in Lactococcus lactis
Research output: Contribution to journal › Journal article – Annual report year: 2001 › Research › peer-review

Twofold reduction of phosphofructokinase activity in Lactococcus lactis results in strong decreases in growth rate and in glycolytic flux
Research output: Contribution to journal › Journal article – Annual report year: 2001 › Research › peer-review

Hemin reconstitutes the growth of an H+-ATPase negative mutant of Lactococcus lactis.
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2000 › Research › peer-review

Is the glycolytic flux in Lactococcus lactis controlled by glycolysis itself?
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2000 › Research › peer-review

The B, C and D Cell Cycle periods increase with increasing generation time in slowly growing cultures of Escherichia coli.
Research output: Contribution to journal › Journal article – Annual report year: 2000 › Research › peer-review

The Frequency of Mutators in Populations of Escherichia coli
Research output: Contribution to journal › Journal article – Annual report year: 2000 › Research › peer-review

The membrane-bound H+-ATPase complex is essential for growth of Lactococcus lactis
Research output: Contribution to journal › Journal article – Annual report year: 2000 › Research › peer-review

What controls the growth rate of Escherichia coli? Is it transport after all?
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2000 › Research › peer-review

Extensive regulation compromises the extent to which DNA gyrase controls DNA supercoiling and growth rate of Escherichia coli
Research output: Contribution to journal › Journal article – Annual report year: 1999 › Research › peer-review

Metode til begrænsning af mikroorganismers produktion
Research output: Patent › Patent – Annual report year: 1999 › Research

A METHOD OF IMPROVING THE PRODUCTION OF BIOMASS OR A DESIRED PRODUCT FROM A CELL

Artificial promoter libraries for selected organisms and promoters derived from such libraries

Artificial Promoters for Metabolic Optimization
Research output: Contribution to journal › Journal article – Annual report year: 1998 › Research › peer-review

atp mutants of Escherichia coli fail to grow on succinate due to a transport deficiency
Research output: Contribution to journal › Journal article – Annual report year: 1998 › Research › peer-review
Experimental strategies to determine the control of glycolysis in Lactococcus lactis
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1998 › Research › peer-review

Growth of Escherichia coli on C4-dicarboxylates is significantly controlled by the C4-dicarboxylate transporter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1998 › Research › peer-review

Hierarchical control of DNA supercoiling
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1998 › Research › peer-review

Hierarchical Control of the H+-ATPase on cytochrome expression in Escherichia coli
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1998 › Research › peer-review

Modeling of free-energy metabolism in Lactococcus lactis
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1998 › Research › peer-review

Synthetic promoters for experimental control analysis
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1998 › Research › peer-review

Synthetic promoters for Metabolic Engineering
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1998 › Research › peer-review

The glycolytic flux in E. coli appears to be controlled by the demand for ATP
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 1998 › Research › peer-review

Thermodynamics of complexity: The live Cell
Research output: Contribution to journal › Journal article – Annual report year: 1998 › Research › peer-review

The sequence of spacers between the consensus sequences modulates the strength of procaryotic promoters
Research output: Contribution to journal › Journal article – Annual report year: 1998 › Research › peer-review

Hierarchical control of electron-transfer
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1997 › Research › peer-review

A method of converting ATP into ADP in a living cell

Changes in the cellular energy state affect the activity of the bacterial phosphotransferase system
Research output: Contribution to journal › Journal article – Annual report year: 1996 › Research › peer-review

Control of DNA supercoiling in the procaryotic cell.
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1996 › Research › peer-review

DNA supercoiling depends on the phosphorylation potential in Escherichia coli.
Research output: Contribution to journal › Journal article – Annual report year: 1996 › Research › peer-review
**Multiplicity of control**
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1993 › Research › peer-review

**Nonlinear control and self-organisation**
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1993 › Research › peer-review

**The use of lac-type promoters in control analysis**
Research output: Contribution to journal › Journal article – Annual report year: 1993 › Research › peer-review

**Carbon and energy metabolism of atp mutants of Escherichia coli**
Research output: Contribution to journal › Journal article – Annual report year: 1992 › Research › peer-review

**Uncoupler resistance in E. coli Tuv and Cuv is due to the exclusion of uncoupler by the outer membrane**
Research output: Contribution to journal › Journal article – Annual report year: 1990 › Research › peer-review

**Projects:**

- **Characterization of novel lantibiotics in actinobacteria**
  Project: PhD

- **Production of therapeutic proteins in Lactococcus lactis**
  Project: PhD

- **Improving the thermotolerance of the mesophilic starter**
  Project: PhD

- **ALLEVIATE - A novel strategy for food allergy prevention and treatment**
  Project: Research

- **Udvikling af mikroorganismer til biobrændselsproduktion**
  Project: PhD

- **Forøget laktat dannelse i mælkesyrebakterier**
  Project: PhD

- **Characterization of a high-temperature adaptive Lactococcus lactis mutant and it’s application in milk fermentation**
  Project: PhD

- **Lactic Acid Bacteria as cell factories**
  Project: PhD

- **Protein production in Gram-positive bacteria under adverse conditions**
  Project: PhD

- **Udvikling af bakterielle strukturer med universel resistens mod bakteriofag infektion**
  Project: PhD

- **Generation and evaluation of artificial mammalian promoters for in vivo expression of therapeutic genes**
  Project: PhD
Kontrolanalyse af ethanol produktion i Saccharomyces Cerevisiae
Project: PhD

Metabolisk kontrol-analyse af glykolysen i lactococcus lactis
Project: PhD

Improvement of the ethanol yield of hemicellulose degrading bacteria
Project: PhD

Analysis of insulin binding by systematic amino acid scanning mutagenesis Importance of insulin B chain residues for receptor isoform binding
Project: PhD

Kontrol af Biofilmdannelse
Project: PhD

Metabolic optimization of Corynebacterium glutamicum for enhanced lysine production
Project: PhD

Lactic Acid Bacteria as a new platform for sustainable production of biochemicals
Project: PhD

Transforming Lactococcus lactis into a microbial cell factory
Project: PhD

Pseudomonas species as a platform for biofuels and biochemicals
Project: PhD

Development of Model Systems for the Biodegradation of Glycerol
Project: PhD

The potential of Lactic Acid Bacteria as microbial factory for pentanol isomer production
Project: PhD

Stokastisk dynamisk modellering til kort-tidsregulering af glukose/insulin-metabolismen
Project: PhD

Comparative Systems Biology
Project: PhD

Optimering af fermenteringsprocessen til lysin produktion
Project: PhD

Brug af Bacillus Subtilis til Produktion af et naturligt aromastof
Project: PhD

Protein-Tyrosine Phosphorylation in Bacillus Subtilis Signal Transduction
Project: PhD
Elucidating and comparing flux regulation across bacterial species
Project: PhD

Development of new diagnostic technologies
Project: PhD

Enzyme Immobilisation and Bioprocessing
Project: PhD

Production of organic acids in Gram - positive bacteria
Project: PhD

Improving second generation biorefinery processes using clues from stress response in Lactococcus lactis
Project: PhD

Biofuels of the future - Development of a Lactic Acid Bacteria platform for sustainable production of higher alcohols
Project: PhD

Acidification by Lactic Acid Bacteria
Project: Research

Energy metabolism and stress in Lactococcus lactis
Project: Research

Starter cultures with universal resistance against bacteriophages
Project: Research

Synthetic promoters for control analysis and metabolic engineering
Project: Research

E. coli cell cycle in chemostat cultures
Project: Research

Hierarchical Control Analysis of free-energy metabolism in E. coli
Project: Research

DNA supercoiling and Nucleoid structure in E. coli
Project: Research

Control and Regulation of DNA supercoiling in E. coli
Project: Research

Control of Metabolic flux through glycolysis in L. lactis
Project: Research

Mælk - diagnosticering af bakteriofaginficerede celler i syrningsprocesser
Project: Research

Mælk, syrningsaktivitet af den primære starter
Project: Research
The role of post-transitional modifications in the control of carbon metabolism of Gram positive bacteria
Project: Research

Kontrol analyse af ethanol produktion i Saccharomyces cerevisiae
Project: Research

Press clippings:

Græsprotein
Press/Media: Press / Media

Fremtidens fødevareproduktion
Press/Media: Press / Media

Vedr nye nature artikler om biologisk containment
Press/Media: Press / Media

Pressekontakt - Mikrobiel production af protein
Press/Media: Press / Media

Development of mucosal delivery system of therapeutic proteins for colorectal cancer using lactic acid bacteria
Press/Media: Press / Media

Pressekontakt - Mikrobiel production af protein
Press/Media: Press / Media