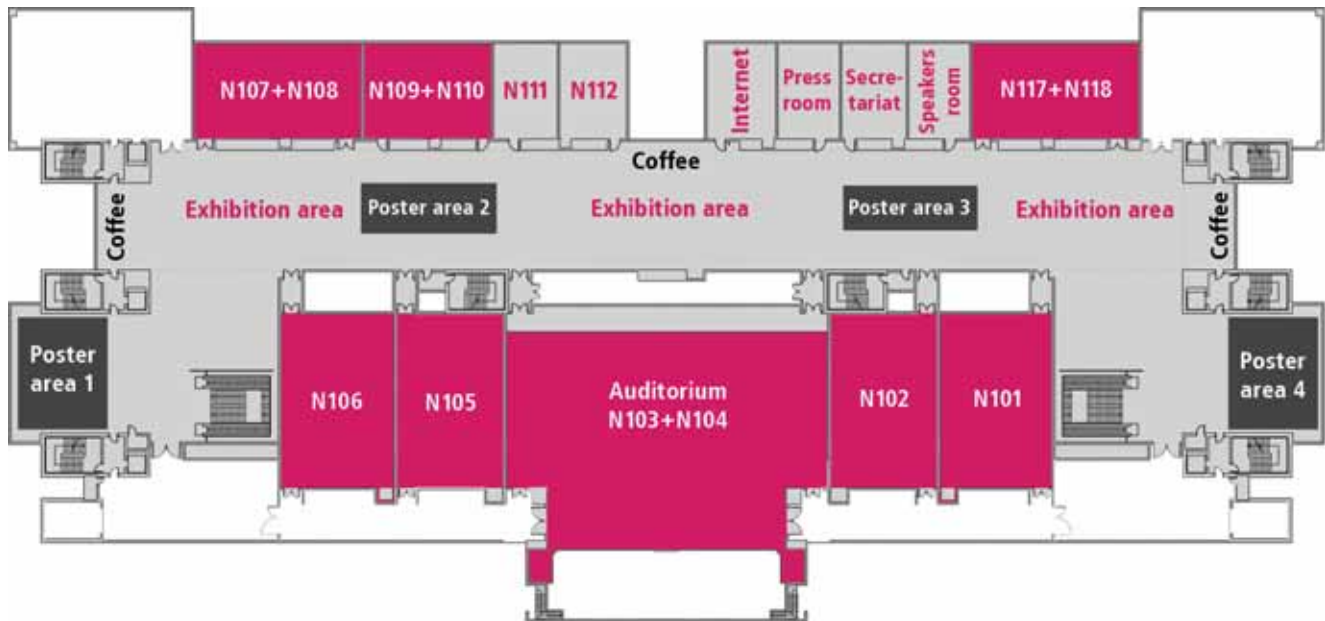


Congress Hall: North Convention Centre, 1<sup>st</sup> floorTuesday 4**Registration**

North Gate Desks

14:00

**Plenary Lectures**

Auditorium

L1. *EMBO Lecture*: Presentation.

16:15

The ubiquitin proteolytic system: From basic mechanisms through human diseases and onto drug targeting.

16:30

*Aaron Ciechanover. Center for Vascular and Tumor Biology, The Rappaport Faculty of Medicine and Research Institute, Technion-Israel Institute of Technology, Haifa, Israel.*



## L2. Immortal music and deadly septicemia: Life-threatening infectious diseases (with musical examples).

17:30

*Ernst Rietschel. Childrens' Hospital University of Cologne, Germany.*

**Opening ceremony**

Auditorium

18:30

**"Fermentation Party"**

Pavillion 9

Enjoy typical meals and drinks, courtesy of Spanish producers, wisely obtained by microbial fermentations.

19:00

**Wednesday 5**

**Poster set up** 8:45

- ATM - Antimicrobials - Use and Resistance Hall
- BIM - Biotechnology and Industrial Microbiology
- COM - Computational Microbiology
- ENV - Environmental Microbiology
- VAC - Vaccines and Immune Response
- TOO - Molecular tools for environmental pollution diagnose

**Plenary Lecture 3:** 9:00

- L3. The global biodegradation network: Microbial communities as gene landscapes.** Auditorium
- Victor de Lorenzo. Centro Nacional de Biotecnología, CSIC, Madrid, Spain.*

**Coffee break & Exhibition visit** 10:00

Exhibition Hall

**Symposia** 10:30

**Symposium 1. Genomic, proteomic and metabolomic approaches.** Room N101

*Chairs: M. Hecker and C. Buchrieser.*

- S1.1. Genomics of the fungal response to cell wall stress: the need for survival. 10:30  
*Javier Arroyo. Universidad Complutense, Madrid, Spain.*
- S1.2. Characterization of a new class of conjugative transposons in Streptococci 11:00  
*Philippe Glaser, Institut Pasteur, France*
- S1.3. *Legionella pneumophila* pathogenesis: *in vivo* gene expression in *Acanthamoeba castellanii*. 11:30  
*Carmen Buchrieser. Institut Pasteur, Paris, France.*
- S1.4. Replication of *Listeria monocytogenes* within mammalian cells. 12:00  
*Werner Goebel. University of Würzburg, Germany.*
- S1.5. From Genome to Proteome: Physiological proteomics of bacilli and staphylococci. 12:30  
*Michael Hecker. Ernst-Moritz-Arndt-Universität, Greifswald, Germany.*

**Symposium 2. Microbial Taxonomy.** Room N102

*Chairs: K.-H. Schleifer and P. Kaempfer.*

- S2.1. Describing new bacterial taxa - some practical thoughts. 10:30  
*Peter Kämpfer. Justus-Liebig-Universität, Giessen, Germany.*
- S2.2. On the unavoidable artificiality of the taxonomic classification system. 11:05  
*Ramón Rossello-Mora. IMEDEA, CSIC-UIB, Illes Balears, Spain.*
- S2.3. DNA taxonomy in the age of genomics. 11:40  
*Wolfgang Ludwig. Technical University Munich, Freising, Germany.*
- S2.4. Sequences, sequence clusters and bacterial species. 12:15  
*Brian G. Spratt. Imperial College London, London, United Kingdom.*

**Symposium 3. FEMS-ESCMID joint symposium:** Room N105

**The global threat of bacterial multiresistance.**

*Chairs: F. Baquero and P. Courvalin.*

- S3.1. Modular evolution of antibiotic resistance. 10:30  
*Fernando Baquero. Hospital "Ramon y Cajal", Madrid, Spain.*
- S3.2. The ten most wanted antibiotic resistance mechanisms. 11:05  
*Patrice Courvalin. Institut Pasteur, Paris, France.*
- S3.3. Dissemination of resistance in nosocomial environments. 11:40  
*Mare Gniadkowski. National Institute of Public Health, Warsaw, Poland.*



S3.4. Rapid detection of antibiotic resistance: what are the obstacles and opportunities? <i>Herman Goossens. University of Antwerp, Antwerp, Belgium.</i>	12:15
<b>Symposium 4. Microorganisms as cell factories for new materials and processes.</b> <i>Chairs: J. Polaina and M. Kielland-Brandt.</i>	Room N106
S4.1. Metabolic engineering of vitamin B12-related processes. <i>Martin J. Warren. University of Kent, Canterbury, United Kingdom.</i>	10:30
S4.2. Extracellular/intracellular nutrient sensing by yeast. <i>Morten C. Kielland-Brandt. Carlsberg Laboratory, Copenhagen, Denmark.</i>	11:05
S4.3. Improvement of <i>Saccharomyces cerevisiae</i> capability to ferment starch by engineering the yeast endogenous glucoamylase. <i>Julio Polaina. Instituto de Agroquimica y Tecnologia de Alimentos, Valencia, Spain.</i>	11:40
S4.4. Towards biotechnological production of nonbiodegradable polymers. <i>Alexander Steinbüchel. Universität Munster, Germany.</i>	12:15
<b>Symposium 5. The microbial macromolecular machines: Linking structure and function in Microbiology.</b> <i>Chairs: V. Ramakrishnan and K. Gerdes.</i>	Rooms N107+N108
S5.1. Crystal structures of functional states of the ribosome. <i>Venki Ramakrishnan. United Kingdom.</i>	10:30
S5.2. Actins and oscillating proteins in bacterial DNA segregation. <i>Kenn Gerdes. University of Southern Denmark, Odense, Denmark.</i>	11:05
S5.3. A molecular machine for DNA transport between bacterial cells. <i>Fernando de la Cruz. University of Cantabria-CSIC, Santander, Spain.</i>	11:40
S5.4. The turbine of a biological nanomotor: Crystal structure of the c ring isolated from the <i>I. tartaricus</i> F-ATP synthase. <i>Thomas Meier. Institute of Microbiology, ETH Zurich, Switzerland.</i>	12:15
<b>Symposium 6. Immune evasion.</b> <i>Chairs: A. Alcamí and P.J. Sansonetti.</i>	Rooms: N103+N104
S6.1. Murine cytomegalovirus inhibits NK cell activation by down-modulation of cellular ligands for NKG2D receptor. <i>Stipan Jonjic. School of Medicine, University of Rijeka, Croatia.</i>	10:30
S6.2. Ubiquitination and disposal of critical immunoreceptors - Lessons from viruses. <i>Paul J. Lehner. University of Cambridge United Kingdom.</i>	11:00
S6.3. Poxvirus immune evasion: Tumour necrosis factor and chemokine binding proteins. <i>Antonio Alcamí. Instituto de Salud Carlos III, Madrid, Spain.</i>	11:30
S6.4. <i>Helicobacter pylori</i> vacuolating cytotoxin and T cell modulation. <i>Rainer Haas. Ludwig-Maximilians-University, Munich, Germany.</i>	12:00
S6.5. Rupture, invasion and inflammatory destruction of the intestinal barrier by invasive bacteria. <i>Phillippe J. Sansonetti. Institut Pasteur, Paris, France.</i>	12:30
<b>Lunch</b>	13:00
<b>Pavillion 9</b>	
<b>Poster session 1</b>	14:30
ATM - Antimicrobials - Use and Resistance	Hall
BIM - Biotechnology and Industrial Microbiology	
COM - Computational Microbiology	
ENV - Environmental Microbiology	
VAC - Vaccines and Immune Response	
TOO - Molecular tools for environmental pollution diagnose	
<i>Presence of the poster author is required along this session: Odd numbered posters from 14.30 to 15:30, even numbered posters from 15:30 to 16:30.</i>	

## Workshops

16:30

### Workshop 1. Frontiers in pathogenomics.

Room N101

Chair: L.Á. Fernández.

Introduction of the NoE "EuroPathoGenomics" 16:30

**Gabriele Blum-Oehler.** University of Würzburg, Germany.

Introduction of the ERA-NET "PathoGenoMics" 16:35

**Marion Karrasch.** Philipps-Universität, Marburg, Germany.

W1.1. Keynote lecture: Genome comparison of non-pathogenic and pathogenic meningococci. 16:40

**Christoph Schoen.** University of Würzburg, Germany.

W1.2. Integrated proteomic and genomic approaches to study *Candida albicans*-macrophage interaction. 17:00

**Elena Fernández-Arenas.** Universidad Complutense, Madrid, Spain.

W1.3. The change from planktonic to sessile life is central to pneumococcal pathogenesis. 17:15

**Marco R. Oggioni.** University of Siena, Italy.

Coffee break and Exhibition visit 17:30-17:45

Chair: C. Schoen.

W1.4. Keynote lecture: A lesson of fimbria assembly in pathogenic *E. coli* learnt from Biotechnology. 17:45

**Luis Ángel Fernández.** National Center for Biotechnology. CSIC, Madrid, Spain.

W1.5. In-vivo expression profiling of *Pseudomonas aeruginosa* in burn wounds. 18:05

**Piotr Bielecki.** German Research Center for Biotechnology. Braunschweig, Germany.

Introduction to PhD awardees from the ERA-NET. 18:20

**Rosa Rodríguez Bernabé.** Ministry of Education and Science, Spain.

Presentation of the PathoGenoMics PhD award 2006. 18:30

**Eliora Ron.** Tel-Aviv University, Israel.

Talks from awardees:

**Damien Portevin.** CNRS and Université Paul Sabatier, Toulouse, France. 19:00

**Verena Grimm.** University of Stuttgart, Germany. 19:10

**Alejandro Toledo de Arana.** Institut Pasteur, France. 19:20

### Workshop 2. Microbial Biotechnology.

Room N102

Chair: A.T. Martínez.

W2.1. Keynote lecture: Beneficial plant-microbe interactions. 16:30

**Jonathan Leder.** Novozymes Biologicals Inc., Salem, Virginia, USA.

W2.2. Exploring the biotechnological potential of marine sponge-associated microbiota by metagenomics. 17:00

**L. Grozdanov.** Zentrum für Infektionsforschung, Würzburg, Germany.

W2.3. Impact of microbial surface properties on food stability and on bacterial activity. 17:15

**M. Ly.** Université de Bourgogne, France.

Coffee break and Exhibition visit 17:30-18:00

Chair: J. Leder.

W2.4. Keynote lecture: Fungal Biotechnology for the paper industry. 18:00

**Angel T. Martínez.** CIB, CSIC. Madrid, Spain.

W2.5. Diversity and activity of sulfate reducing bacteria in anaerobic bioreactors using 16S rRNA and *DsrB* gene fragments as molecular markers. 18:30

**Shabir A. Dar.** Delft University of Technology, Delft, the Netherlands.

W2.6. Metabolic association in microbial degradation of the herbicide molinate. 18:45

**L. Barreiros.** Universidade do Porto, Portugal

<b>Workshop 3. Microbial risk assessment/Food safety.</b>	<b>Room N105</b>
<i>Chair: J. Baranyi</i>	
W3.1. <i>Keynote lecture:</i> The use of microbial risk assessment in a European food safety legislative context. <b>16:30</b> <b>Marta Hugas.</b> <i>European Food Safety Authority, Parma, Italy.</i>	
W3.2. Can a quantitative risk assessment model (QRAM) be applied to water catchments in tropical regions? <b>17:00</b> <b>Muriel Lepesteur.</b> <i>Murdoch University, Perth, Australia.</i>	
W3.3. Biofilms as possible microenvironments for <i>Helicobacter pylori</i> subsistence in water-exposed environments. <b>17:15</b> <b>N.F. Azevedo.</b> <i>Universidade do Minho, Braga, Portugal.</i>	
<u>Coffee break and Exhibition visit 17:30-18:00</u>	
<i>Chair: M. Hugas</i>	
W3.4. <i>Keynote lecture:</i> Predictive Microbiology for food safety and quantitative microbial risk assessment of food. <b>18:00</b> <b>József Baranyi.</b> <i>Institute of Food Research, Norwich, United Kingdom.</i>	
W3.5. Identification of a novel bacterial lysozyme inhibitor in <i>Salmonella</i> Enteritidis. <b>18:30</b> <b>L. Callewaert.</b> <i>Katholieke Universiteit Leuven, Leuven, Belgium.</i>	
W3.6. Diversity of <i>Lactococcus lactis</i> antagonistic potential against <i>Staphylococcus aureus</i> . <b>18:45</b> <b>S. Even.</b> <i>INRA Agrocampus, Rennes, France.</i>	
<b>Workshop 4. Microbial life at the limit.</b>	<b>Room N106</b>
<i>Chair: N. Gunde-Cimerman.</i>	
W4.1. Osmotic adaptation in thermophilic bacteria. <b>16:30</b> <b>Milton S. da Costa.</b> <i>Universidade de Coimbra, Portugal.</i>	
W4.2. Microbial life at the thermodynamic limit: Syntrophic growth on formate. <b>17:00</b> <b>C.M. Plugge.</b> <i>Wageningen University, The Netherlands</i>	
W4.3. Thermophilic hydrogenogenic CO-oxidizing prokaryotes from hot volcanic environments. <b>17:15</b> <b>T.G. Sokolova.</b> <i>Russian Academy of Sciences, Moscow, Russia</i>	
<u>Coffee break and Exhibition visit 17:30-18:00</u>	
<i>Chair: M. da Costa</i>	
W4.4. Fungi in salterns and glaciers – a new world of eukaryotic extremophiles. <b>18:00</b> <b>Nina Gunde-Cimerman.</b> <i>University of Ljubljana, Slovenia.</i>	
W4.5. Isolation and characterization of a novel genus of gas-vacuolate extremely halophilic archaea from the Dead Sea. <b>18:30</b> <b>A. Oren.</b> <i>The Hebrew University of Jerusalem, Israel.</i>	
W4.6. Gene expression in the environment: extracting information from the meta-transcriptome of acidic ecosystems. <b>18:45</b> <b>V. Parro.</b> <i>Centro de Astrobiologia (CSIC-INTA), Madrid, Spain.</i>	
<b>Workshop 5. Fungal cell wall biogenesis.</b>	<b>Rooms N107+N108</b>
<i>Chair: A. Durán.</i>	
W5.1. <i>Keynote lecture:</i> Amorphous polysaccharides of the cell wall of <i>Aspergillus fumigatus</i> . <b>16:30</b> <b>Jean Paul Latgé.</b> <i>Institut Pasteur, Paris, France.</i>	
W5.2. Detection of cell wall proteins in <i>Candida albicans</i> lipid rafts during morphological transition. <b>17:00</b> <b>María Insenser.</b> <i>Universidad Complutense, Madrid, Spain.</i>	
<u>Coffee break and Exhibition visit 17:30-18:00</u>	
<i>Chair: J.P. Latgé</i>	
W5.3. <i>Keynote lecture:</i> Functions of the Bgs family of (1,3) $\beta$ -D-glucan synthase catalytic subunits from <i>Schizosaccharomyces pombe</i> . <b>18:00</b> <b>Angel Durán.</b> <i>Universidad de Salamanca. Spain.</i>	
W5.4. Chitin synthases and cell wall synthesis in the filamentous fungus <i>Aspergillus fumigatus</i> . <b>18:30</b>	

*C. Jiménez. CSIC/USAL, Salamanca, Spain.*

W5.5. The Hog1 and Cek1 MAP kinases play complementary roles in cell wall construction in the fungal pathogen *Candida albicans*. 18:45

*Rebeca Alonso Monge. Universidad Complutense, Madrid, Spain.*

## Workshop 6. Protein quality control - chaperons and proteases. Rooms N117+N118

*Chair: C. Gross.*

W6.1. *Keynote lecture:* Mechanism of activity control of the *Escherichia coli* heat shock transcription factor by DnaK and DnaJ. 16:30

*Bernd Bukau. University of Heidelberg, Germany.*

W6.2. Structure and function of RNA thermometers. 17:00

*F. Narberhaus. Ruhr-Universität Bochum, Bochum, Germany.*

W6.3. Novel Mutants in the Protein Quality Control of *Escherichia coli*. 17:15

*Itzhak Mizhari. Tel-Aviv University, Israel.*

Coffee break and Exhibition visit 17:30-18:00

*Chair: B. Bukau*

W6.4. *Keynote lecture:* 18:00

*Carol A. Gross. University of California, San Francisco, USA.*

W6.5. Acyl carrier protein/ SpoT interaction, the switch linking the stringent response to fatty acid metabolism. 18:30

*A. Battesti. LISM, CNRS, France.*

W6.6. Mechanistic studies of CadC of *Escherichia coli*, a membrane integrated sensor and transcriptional activator at low pH. 18:45

*J. Jung. Ludwig Maximilians University Munich, Germany.*

## Workshop 7. Plant-pathogen interactions. Rooms N109+N110

*Chair: B. Lugtenberg.*

W7.1. *Keynote lecture:* Plant-microbe interactions. From knowledge to benefits in plant protection. 16.30

*Emilio Montesinos. University of Girona, Spain.*

W7.2. Molecular and morphological characterization of endophytic and phytopathogenic strains of *Curtobacterium* spp. 17.00

*U.C.F. Belmonte. University of Sao Paulo, Brazil.*

W7.3. Wide range of aggressiveness and infection potential in *Erwinia amylovora*, the causal agent of fire blight. 17.15

*J. Cabrefiga. University of Girona, Spain.*

Coffee break and Exhibition visit 17:30-18:00

*Chair: E. Montesinos.*

W7.4. *Keynote lecture:* Biocontrol of plant-pathogen interactions in the rhizosphere. 18.00

*Ben Lugtenberg. Leiden University, The Netherlands.*

W7.5. Bacterial phosphatidylcholine is required for pathogenic and symbiotic plant-microbe interactions. 18:30

*S. Hacker. Ruhr University, Bochum, Germany.*

W7.6. Apoplast metabolomics and phenoarray analysis of *Pseudomonas*-plant interactions. 18.45

*A. Rico. University of Oxford. United Kingdom.*

## Special Events 19:00

### SE1. ASM-SPM-SEM Joint Symposium: "Ecology of microbial pathogens" Room N106

*Chairs: S. Maloy and R. Guerrero.*

SE1.1. Overview.

*Stanley Maloy, San Diego State University, San Diego, USA, and Ricard Guerrero, Universitat de Barcelona, Spain.*

SE1.2. Two-component signal transduction, virulence and environmental clues.

*Edmundo Calva. Universidad Nacional Autónoma de México, Cuernavaca, México.*

SE1.3. *Mycobacterium tuberculosis*: intracellular adaptation, global dissemination and implications for vaccine

development.

**Carlos Martín.** *Universidad de Zaragoza, Spain.*

SE1.4. Ecology, pathogenesis and host response in *Helicobacter pylori* infection.

**Céu Figueiredo.** *Universidade do Porto, Portugal.*

SE1.5. The ecology of *Streptococcus pneumoniae*: lessons from the conjugate vaccine.

**Keith Klugman.** *Emory University, Atlanta, USA.*

**SE2. Molecular tools for environmental pollution diagnosis.** *Chair: V. de Lorenzo (Spain).*

**Rooms N109+N110**

SE2.1. Trees as indicators of subsurface degradation of chlorinated solvents.

**U Karlson.** *National Environmental Research Institute, Roskilde, Denmark.*

SE2.2. Lipids as biomarkers in bioremediation.

**Hermann J. Helpleper.** *UFZ - Centre for Environmental Research, Leipzig, Germany.*

SE2.3. Comprehensive detection of bacterial catabolic gene families: towards a concerted understanding of the ecology of biodegradation.

**Howard Junca.** *GBF, Braunschweig, Germany.*

SE2.4. Bioremediation of chloroethene-contaminated aquifers: enzymatic activities and bacterial guilds.

**P. Rossi.** *EPFL, Lausanne, Switzerland.*

SE2.5. Sediment biobarriers for chlorinated aliphatic hydrocarbons in groundwater reaching surface water.

**W. Dejonghe.** *Catholic University of Leuven, Heverlee, Belgium.*

SE2.6. Utilization of the HbpR transcription activator of *Pseudomonas azelaica* for bacterial biosensor constructions.

**C. Vogne.** *Hospital Jean Minjoz, Besancon, France.*

**Annual assembly of the NoE "EuroPathoGenomics"**

**Room N101**

**FEMS Microbiology Reviews Meeting**

**Room N111**

## Thursday 6

Thursday 6

### Poster set up

8:45

PLA - Plant Microbiology

Hall

TAX - Microbial Diversity and Taxonomy

CLI - Clinical Microbiology

FOD - Food Microbiology and Biotechnology

CBF - Microbial Consortia and Biofilms

PHY - Microbial Physiology and Metabolism

STR - Structural Microbiology

SYS - Systems Microbiology

### Plenary Lecture

9:00

**André Lwoff prize:**

Auditorium

**L4. Evolution of microbial pathogens.**

**Jörg Hacker.** *Universität Würzburg, Germany.*

### Coffee break & Exhibition visit

10:00

Exhibition Hall

### Symposia

10:30

**Symposium 7. Molecular basis of host-pathogen interactions.**

Room N101

*Chairs: P. Cossart and F. G. del Portillo.*

S7.1. Bacterial invasion: a role for endocytosis.

10:30

**Pascale Cossart.** *Institut Pasteur, Paris, France.*

S7.2. Intracellular *Salmonella* takes the control of eukaryotic molecular motors.

11:05

**Stéphane Méresse.** *CNRS-INSERM-Université Méditerranée, Marseille, France.*

S7.3. A translocated protein of the tumor-inducing pathogen <i>Bartonella</i> protects human endothelial cells from apoptosis. <i>Christoph Dehlo. Biozentrum, University of Basel, Switzerland.</i>	11:40
S7.4. New <i>Salmonella</i> -host interactions uncovered in fibroblasts. <i>Francisco Garcia-del Portillo. Centro Nacional de Biotecnología, CSIC, Madrid, Spain.</i>	12:15
<b>Symposium 8. Networking and biocomplexity: Systems' microbiology.</b>	<b>Room N102</b>
<i>Chairs: C.J. Dorman and P. Bork</i>	
S8.1. From protein interaction networks towards community networks. <i>Peer Bork. EMBL, Heidelberg, Germany.</i>	10:30
S8.2. Supercoiling-induced DNA duplex destabilization in the <i>E. coli</i> K12 genome. <i>Craig J. Benham. University of California, Davis, USA.</i>	11:05
S8.3. Bacterial chemotaxis: Using computer models to unravel mechanism. <i>Dennis Bray. University of Cambridge, United Kingdom.</i>	11:40
S8.4. Global gene regulatory circuits in bacterial virulence. <i>Charles J. Dorman. Trinity College, Dublin, Ireland.</i>	12:15
<b>Symposium 9. Gene expression.</b>	<b>Room N105</b>
<i>Chairs: CM. Arraiano and J. Rouviere-Yaniv.</i>	
S9.1. Recent progress in understanding transcriptional regulation in bacteria. <i>Steve Busby. School of Bioscience, United Kingdom.</i>	10:30
S9.2. Unravelling the mechanisms of post-transcriptional control of gene expression by RNase II-family of enzymes. <i>Cecilia M. Arraiano. Universidade Nova de Lisboa, Portugal.</i>	11:05
S9.3. Regulatory RNAs in <i>E. coli</i> : prevalence, biological roles and mechanisms. <i>Gerhardt H. Wagner. Uppsala University, Sweden.</i>	11:40
S9.4. Multiple facets of regulation by HU reflect its multiple nucleic acids capacities. <i>Josette Rouviere-Yaniv. CNRS, Paris, France.</i>	12:15
<b>Symposium 10. Viral engineering: Vaccines and gene therapy.</b>	<b>Room N106</b>
<i>Chairs: M. Esteban and O. Danos.</i>	
S10.1. (Title to be announced) <i>Olivier Danos. CNRS, Evry, France.</i>	10:30
S10.2. Vaccine development: Targeting antigen gene expression to dendritic cells. <i>Mary K. Collins. University College London, United Kingdom.</i>	11:05
S10.3. Engineering attenuated poxvirus vectors (MVA and NYVAC) as vaccines against prevalent human diseases. <i>Mariano Esteban. Centro Nacional de Biotecnología, CSIC, Madrid, Spain.</i>	11:40
S10.4. Genetically engineered influenza viruses. <i>Adolfo García-Sastre. Mount Sinai School of Medicine, New York, USA.</i>	12:15
<b>Symposium 11. Microbial proliferation: Cytokinesis in bacteria.</b>	<b>Rooms N107+N108</b>
<i>Chairs: M. Vicente and J. Errington.</i>	
S11.1. New proteins involved in cell division of <i>Bacillus subtilis</i> . <i>Jeff Errington. University of Oxford, United Kingdom.</i>	11:40
S11.2. The power of the ring: The properties and role of FtsZ in bacterial division. <i>Miguel Vicente. CIB, CSIC, Madrid, Spain.</i>	11:05
S11.3. Minimizing the <i>E. coli</i> divisome. <i>William Margolin. University of Texas Medical School, Houston, USA.</i>	10:30
S11.4. Double stranded DNA translocation: Structure and function of FtsK <i>Jan Löwe. Cambridge, United Kingdom.</i>	12:15
<b>Symposium 12. Geomicrobiology.</b>	<b>Rooms N117+N118</b>
<i>Chairs: Bernhard Schink (Germany) and K. Pedersen.</i>	
S12.1. Geological hydrogen fuels deep intraterrestrial microbial communities via an	10:30

autotrophic hydrogen-acetate pathway.

**Karsten Pedersen.** Sweden.

- S12.2. Formation of methane-related microbialites. **11:05**  
**Joachim Reitner.** University of Göttingen, Germany.
- S12.3. *Geobacter*: A fluorescent bug lighting up the dark subsurface. **11:40**  
**Abraham Esteve-Núñez.** Centro de Astrobiología-INTA, Torrejón de Ardoz, Madrid, Spain.
- S12.4. Phototrophic oxidation of ferrous iron. **12:15**  
**Andreas Kappler.** University of Tübingen, Germany.

**Lunch** **13:00**

**Pavillion 9**

**Poster session 2** **14:30**

- |  |   |             |
|--|---|-------------|
| PLA - Plant Microbiology               | TAX - Microbial Diversity and Taxonomy    | <b>Hall</b> |
| CLI - Clinical Microbiology            | FOD - Food Microbiology and Biotechnology |             |
| CBF - Microbial Consortia and Biofilms | PHY - Microbial Physiology and Metabolism |             |
| STR - Structural Microbiology          | SYS - Systems Microbiology                |             |

*Presence of the poster author is required along this session:*

*Odd numbered posters from 14.30 to 15:30, even numbered posters from 15:30 to 16:30.*

**Workshops** **16:30**

**Workshop 8. Microbial response to stress.** **Room N101**

*Chair: F. Posas.*

- W8.1. **Keynote lecture:** Cyclic-diGMP-mediated signaling within the Sigma-S network of *Escherichia coli* **16:30**  
**Regine Hengge,** Freie Universität Berlin, Germany
- W8.2. Essential and dual role of the RcsB response regulator for the glutamate-dependent acid resistance system in *Escherichia coli*. **17:00**  
**M.-P. Castanié-Cornet.** Université Toulouse III, France.
- W8.3. Characterization of the bile stress response in *Listeria monocytogenes*. **17:15**  
**M. Begley.** University College Cork, Ireland.

**Coffee break and Exhibition visit 17:30-18:00**

*Chair: R. Hengge.*

- W8.4. **Keynote lecture:** Osmostress responses controlled by the yeast Hog1 MAP kinase. **18:00**  
**Francesc Posas.** Universitat Pompeu Fabra, Barcelona, Spain.
- W8.5. Genome-wide transcription responses of a cyanobacterium to light and nitrogen limitation in a chemostat. **18:30**  
**E. Aguirre-von-Wobeser.** Universiteit van Amsterdam, Amsterdam, The Netherlands.
- W8.6. Dual-specific phosphatase Pmp1 and the Stress Activated Protein Kinase-dependent tyrosin phosphatases Pyp1 and Pyp2 negatively modulate Pmk1 activation in *Schizosaccharomyces pombe*. **18:45**  
**M. Madrid.** Universidad de Murcia, Spain.

**Workshop 9. Virulence-related protein secretion pathways.** **Room N102**

*Chair: C. Nombela.*

- W9.1. **Keynote lecture:** Secretion of proteins by *Pseudomonas*. **16:30**  
**Alain Filloux.** CNRS, Marseille, France.
- W9.2. Reassessing the role of type III secretion systems as pathogenicity markers: the case of fluorescent *Pseudomonads*. **17:00**  
**Fabio Rezzonico.** Agroscope ACW, Wädenswil, Switzerland.
- W9.3. Characterization of TAT (Twin Arginine Translocation)-dependent proteins in *Rhizobium leguminosarum* bv viciae 3841 **17:15**  
**Luis Rey.** Universidad Politécnica de Madrid, Spain.

**Coffee break and Exhibition visit 17:30-18:00**

Chair: A. Filloux.

- W9.4. *Keynote lecture:* The characterization of the fungus *Candida albicans* cell wall subproteome reveals novel insights on the relevance of integration of proteins in the cell surface and its contribution to opportunistic virulence. **18:00**  
*César Nombela. University Complutense, Madrid, Spain*
- W9.5. Identification of the genetic determinant of the probiotic *Escherichia coli* strain Nissle 1917 (EcN) responsible for interference with invasion of gut epithelial cells by various pathogenic bacteria. **18:30**  
*Tobias A. Oelschlaeger. University of Wuerzburg, Germany.*
- W9.6. Mutagenesis of FimH N-terminal domain reveals specific interactions with FimD usher required during type 1 fimbria assembly in *Escherichia coli*. **18:45**  
*Diana Munera. National Center for Biotechnology. C.S.I.C., Madrid, Spain.*

**Workshop 10. Emerging features of bacteriophage biology. Room N105**

Chair: M. Salas.

- W10.1. *Keynote lecture:* Phages in the 21st century. **16:30**  
*Ariane Toussaint. Université Libre de Bruxelles, Belgium.*
- W10.2. Characterisation and molecular phylogeny of small ø29-like phages infecting solvent-producing clostridia. **17:00**  
*D.T. Jones. University of Otago, Dunedin, New Zealand.*
- W10.3. Dynamic of two coliphages in chicken organism towards phage therapy. **17:15**  
*A. Oliveira. Controlvet, Lda. and Universidade do Minho, Braga, Portugal.*

Coffee break and Exhibition visit 17:30-18:00

Chair: A. Toussaint.

- W10.4. *Keynote lecture:* Spo0A, the master regulator for the initiation of *Bacillus subtilis* sporulation, suppresses phage ø29 development at the level of transcription and replication. **18:00**  
*Margarita Salas. CSIC-Universidad Autónoma, Madrid, Spain.*
- W10.5. DnaA and SeqA: regulators of *Escherichia coli* chromosome replication that act also as transcription factors and control bacteriophage I DNA replication by modulation of transcription at the *oriI* region. **18:30**  
*G. Wegrzyn. University of Gdansk, Gdansk, Poland.*
- W10.6. Triggering of phage SPP1 DNA ejection by the *Bacillus subtilis* receptor YueB: the pressure of the virion capsid as DNA ejection force. **18:45**  
*C. São-José. Faculdade de Ciências da Universidade de Lisboa, Lisboa, Portugal.*

**Workshop 11. Horizontal gene transfer. Room N106**

Chair: K.M. Nielsen.

- W11.1. *Keynote lecture:* IncP-1 and IncP-9 plasmids as model agents of gene spread: Factors determining host range and transfer efficiency. **16:30**  
*Chris M. Thomas. University of Birmingham, United Kingdom.*
- W11.2. Single-cell-detection of plasmid transfer and stability in natural environments. **17:00**  
*S.J. Sørensen. University of Copenhagen, Denmark.*
- W11.3. Quantification and visualization of horizontal gene transfer between plant and bacteria in the phytosphere of transplastomic tobacco. **17:15**  
*P. Simonet. Université Claude Bernard Lyon I, Villeurbanne, France.*

Coffee break and Exhibition visit 17:30-18:00

Chair: C.M. Thomas.

- W11.4. *Keynote lecture:* Horizontal gene transfer of chromosomal DNA by natural transformation. **18:00**  
*Kaare M. Nielsen. Norwegian University of Science and Technology, Trondheim, Norway*
- W11.5. Evolution and horizontal transfer of the High-Pathogenicity Island in extraintestinal pathogenic *Enterobacteriaceae*. **18:30**  
*S. Schubert. Max von Pettenkofer-Institut für Hygiene und Medizinische Mikrobiologie, München, Germany.*
- W11.6. Involvement of sexual isolation on genomic coherence of species in *Agrobacterium* spp. **18:45**  
*D. Costechareyre. Université Lyon 1, Villeurbanne, France.*

**Workshop 12. Computational analysis and nanotechnology in Microbiology.**

Rooms N107+N108

*Chairs: C.A. Ouzounis and V.A.P. Martins dos Santos.*

- W12.1. *Keynote lecture:* Quantifying vertical and horizontal gene flow across genomes and time. **16:30**  
**C.A. Ouzounis.** Center for Research and Technology Hellas Certh, Thessalonica, Greece.
- W12.2. *Keynote lecture:* Sequence-based prediction of the optimum growth temperature of uncultured bacteria. **16:55**  
**V.A.P. Martins dos Santos.** German Research Centre for Biotechnology, Braunschweig, Germany.
- W12.3. Are the thymidylate synthases ThyA and ThyX truly sporadically distributed in the prokaryotic world? **17:20**  
**F. Escartin.** CNRS, Ecole Polytechnique, Palaiseau, France.
- W12.4. Analysis of transcription regulatory associations in *Saccharomyces cerevisiae* using the YEASTRACT database. **17:25**  
**M.C. Teixeira.** INESC-ID, Lisbon, Portugal.

**Coffee break and Exhibition visit 17:30-18:00***Chairs: E. Gazit and U. Sleytr.*

- W12.5. *Keynote lecture:* Nanobiotechnology with S-layers. **18:00**  
**Uwe B. Sleytr.** University of Natural Resources and Applied Life Sciences (BOKU), Vienna, Austria.
- W12.6. *Keynote lecture:* Molecular self-assembly and fibril formation: Mechanism of association and technological application. **18:30**  
**Ehud Gazit.** Tel Aviv University, Israel

**Workshop 13. Rhizosphere and soil microbiology.**

Rooms N117+N118

*Chair: T.R. Argueso.*

- W13.1. *Keynote lecture:* Associative and endophytic nitrogen-fixing bacteria: A review. **16:30**  
**Claudine Elmerich.** Institut des Sciences du Végétal and Institut Pasteur, Paris, France.
- W13.2. The characterisation of a plant-induced nitrilase from the plant growth-promoting bacterium *Pseudomonas fluorescens* SBW25. **17:00**  
**A.J.M. Howden.** Oxford University, United Kingdom.
- W13.3. Gallic acid degradation in the soil bacterium *Pseudomonas putida* KT2440: Deciphering new regulatory and catabolic features in the catabolism of aromatic compounds. **17:15**  
**J. Nogales.** CIB-CSIC. Madrid, Spain.

**Coffee break and Exhibition visit 17:30-18:00***Chair: C. Elmerich.*

- W13.4. *Keynote lecture:* Hydrogenases in soil bacteria and their role in nitrogen fixation by legumes. **18:00**  
**Tomás Ruiz-Argüeso.** Universidad Politécnica de Madrid, Spain.
- W13.5. Anaerobic biodegradation of hexachlorobenzene (HCB) and identification of the responsible microorganisms in soils and sediments around Europe. **18:30**  
**M.H.A. van Eekert.** Wageningen University, The Netherlands.
- W13.6. Identification of Beta-Proteobacteria preferentially associated with mycorrhized genotypes of *Medicago truncatula*. **18:45**  
**P. Offre.** INRA-Université de Bourgogne, France.

**Special Events**

19:00

**SE3. Fermentation, beverages, and health.**

Room N101

*Ramón Estruch, Hospital Clínic de Barcelona, Spain.***SE4. Roche Genome Sequencer 20 System presentation.**

Room N102

**FEMS Microbiology Letters Meeting**

Room N111

**Poster removal**

19:00

**Congress dinner: "Spanish Fiesta"**

20:30

Tickets can be purchased at Congress Secretariat (N115).

**Departure of buses from North Gate**

## Friday 7

<b>Poster set up</b>	<b>9:30</b>
CEL - Cellular Microbiology	Hall
VIR - General Virology and Bacteriophages	
EVO - Microbial Evolution and Phylogeny	
GEN - Microbial Genetics	
GAP - Microbial Genomics and Proteomics	
VRL - Microbial Virulence	
SIG - Signalling	
MIS - Miscellaneous	
<b>Symposia</b>	<b>9:45</b>
<b>S13. Emerging infections.</b>	<b>Room N101</b>
<i>Chair: H.-D. Klenk and A.D. Osterhaus.</i>	
S13.1. Avian influenza.	9:45
<i>Albert D.M.E. Osterhaus. Erasmus Medical Center, Rotterdam, The Netherlands.</i>	
S13.2. Novel insights into the enzymology of SARS coronavirus RNA synthesis.	10:20
<i>John Ziebuhr. University of Wurzburg, Germany.</i>	
<u>Coffee break and Exhibition visit 11:00-11:30</u>	
S13.3. Pathogenesis of hemorrhagic fevers caused by Ebola and Marburg viruses.	11:30
<i>Hans-Dieter Klenk. Institute for Medical Virology, Giessen, Germany,</i>	
S13.4. Is tuberculosis really an emerging or a re-emerging disease?	12:05
<i>Herve Bercovier. The Hebrew University, Jerusalem, Israel.</i>	
<b>S14. Microbial consortia and biofilms in environment and disease.</b>	<b>Room N102</b>
<i>Chairs: U. Romling and S. Molin.</i>	
S14.1. Impact of antibacterial usage upon polymicrobial communities in the environment.	9:45
<i>Peter Gilbert. University of Manchester, United Kingdom.</i>	
S14.2. The role of biofilm development in relation to bacterial infections and their treatments.	10:20
<i>Søren Molin. Technical University of Denmark, Lyngby, Denmark.</i>	
<u>Coffee break and Exhibition visit 11:00-11:30</u>	
S14.3. Biofilm associated proteins.	11:30
<i>Íñigo Lasa. Public University of Navarra-CSIC, Pamplona, Spain.</i>	
S14.4. Task distribution between the EAL-domain proteins in the regulatory network controlling multicellular behaviour of <i>Salmonella enterica</i> serovar Typhimurium	12:05
<i>Ute Römling. Karolinska Institutet, Stockholm, Sweden.</i>	
<b>S15. Environmental genomics and metagenomics.</b>	<b>Room N105</b>
<i>Chairs: John Fry (United Kingdom) and O. Béjà.</i>	
S15.1. The complete genome sequence of an as-yet-unisolated 'Rice Cluster I' methanogen.	9:45
<i>Werner Liesack. Max-Planck-Institute for Terrestrial Microbiology, Marburg, Germany.</i>	
S15.2. Ammonia oxidizing Archaea in terrestrial ecosystems.	10:20
<i>Christa Schleper. University of Bergen, Norway.</i>	
<u>Coffee break and Exhibition visit 11:00-11:30</u>	
S15.3. Metagenomics of viral 'photosynthesis'.	11:30
<i>Oded Béjà. Technion, Israel.</i>	
S15.4. The Evolutionary Links between Intracellular Pathogens and Anaerobic Ammonium Oxidizers:	12:05

A Metagenomic Approach  
*Michael Wagner. University of Vienna, Austria.*

**S16. Trends in food technology.** *Chairs: D. Ramon (Spain) and W.M. de Vos.* **Room N106**

S16.1. Genomic approaches to improve production of food-use enzymes from fungi. **9:45**  
*David B. Archer. University of Nottingham, United Kingdom.*

S16.2. Tailoring yeasts to make wines for a diverse market. **10:20**  
*Paul J. Chambers. Australian Wine Research Institute, Adelaide, Australia.*

**Coffee break and Exhibition visit 11:00-11:30**

S16.3. Functionality of probiotic and other lactic acid bacteria. **11:30**  
*Willem M. de Vos. Wageningen University and Wageningen Centre for Food Sciences, Wageningen, The Netherlands.*

S16.4. Yeast in food industry: Improvement of brewer's yeast performance. **11:55**  
*Merja E. Penttilä. VTT Biotechnology, Espoo, Finland.*

S16.5. *Bacillus cereus* food preservation and safety issues. **12:20**  
*Tjakko Abee. Wageningen University, The Netherlands.*

**S17. Protein export and secretion.** **Rooms N107+N108**

*Chair: T. Tønjum and T. Pugsley.*

S17.1. The bacterial Tat pathway. **9:45**  
*Tracy Palmer. John Innes Centre, Norwich, United Kingdom.*

S17.2. Putting proteins in their place in the bacterial cell envelope. **10:20**  
*Anthony P. Pugsley. Institut Pasteur, Paris, France.*

**Coffee break and Exhibition visit 11:00-11:30**

S17.3. Meningococcal secretin PilQ - actions and interactions. **11:30**  
*Tone Tønjum. University of Oslo, Norway.*

S17.4. Assembly and operation of the *Yersinia* Ysc injectisome. **12:05**  
*Guy R. Cornelis. Biozentrum der Universität Basel, Basel, Switzerland.*

**Lunch** **13:00**

**Pavillion 9**

**Poster session 3** **14:30**

CEL - Cellular Microbiology **Hall**

VIR - General Virology and Bacteriophages

EVO - Microbial Evolution and Phylogeny

GEN - Microbial Genetics

GAP - Microbial Genomics and Proteomics

VRL - Microbial Virulence

SIG - Signalling

MIS - Miscellaneous

*Presence of the poster author is required along this session:*

*Odd numbered posters from 14.30 to 15:30, even numbered posters from 15:30 to 16:30.*

**Workshops** **16:30**

**Workshop 14. Novel approaches for the identification and typing of microbes.** **Room N101**

*Chair: A. Querol.*

W14.1. *Keynote lecture:* Bacterial typing in clinical settings. **16:30**  
*Alex van Belkum. University Medical Center Rotterdam, The Netherlands.*

W14.2. A new approach to identify bacteria taxa-specific genetic markers. **17:00**  
*M.V. Mendes. IBMC, Porto, Portugal.*

- W14.3. Application of genomic and functional diversity of *Lactobacillus plantarum* for gene-trait matching and the development of strain-specific detection tools. **17:15**  
**V.A. Tzeneva.** Centre for Food Sciences, Wageningen, The Netherlands.

**Coffee break and Exhibition visit 17:30-18:00**

Chair: A. van Belkum.

- W14.4. **Keynote lecture:** Yeast molecular identification and characterization. **18:00**  
**Amparo Querol.** Instituto de Agroquímica y Tecnología de Alimentos (CSIC), València, Spain.
- W14.5. Characterization of *Salmonella* Typhimurium strains from Slovak Republic by DNA typing methods. **18:30**  
**H. Drahovská.** Comenius University, Bratislava, Slovakia.
- W14.6. Bacterial typing based on MNR-MLST and optic fiber microarray as a scanning technology. **18:45**  
**Y. Kashi,** Technion, Haifa, Israel.

### Workshop 15. Viral evolution and pandemics.

**Room N102**

Chair: A. Hay.

- W15.1. **Keynote lecture:** Host immunity to respiratory viruses: protective and disease-causing effects. **16:30**  
**Peter J.M. Openshaw.** Imperial College, London, United Kingdom.
- W15.2. Development of recombinant adenoviral vaccine against Severe Acute Respiratory Syndrome-Coronavirus spike protein. **17:00**  
**K.M. Law.** The University of Hong Kong, SAR, China.
- W15.3. N-terminal region of SARS-CoV S2 subunit induces cell cycle arrest and apoptosis in Vero E6 cells. **17:15**  
**Y.S. Yeung.** The University of Hong Kong, SAR, China.

**Coffee break and Exhibition visit 17:30-18:00**

Chair: P.J.M. Openshaw

- W15.4. **Keynote lecture:** The evolution of influenza A H5N1 viruses and the threat of a pandemic. **18:00**  
**Alan Hay.** National Institute of Medical Research. London, United Kingdom.
- W15.5. Adaptation of avian influenza virus to mice depends on enhanced transcription and replication activity in mammalian cells. **18:30**  
**Gulsah Gabriel.**
- W15.6. Infection by and transmission of influenza A H5N1 viruses in birds and indicate other animals. **18:45**  
**Albert D.M.E. Osterhaus.** Erasmus Medical Center, Rotterdam, The Netherlands.

### Workshop 16. Two component systems response regulators.

**Room N105**

Chair: J.F. Martín.

- W16.1. **Keynote lecture:** Two-component regulatory systems: modular variations of a common principle. **16:30**  
**Bärbel Friedrich.** Humboldt University of Berlin, Germany.
- W16.2. Membrane composition is controlled by the essential YycF response regulator in *Streptococcus pneumoniae*. **17:00**  
**M.L. Mohedano.** Centro de Investigaciones Biológicas, CSIC, Madrid, Spain.
- W16.3. An oscillating genetic network regulates bacterial cell cycle progression. **17:15**  
**Emanuele G. Blondi.** Harvard University, Cambridge, MA, USA.

**Coffee break and Exhibition visit 17:30-18:00**

Chair: B. Friedrich.

- W16.4. **Keynote lecture:** The PhoR-PhoP two-component system in the control of primary and secondary metabolism in *Streptomyces* species. **18:00**  
**Juan Francisco Martín.** Instituto de Biotecnología de León, Spain.
- W16.5. Two-component systems involved in the control of biofilm formation and virulence in *Pseudomonas aeruginosa*. **18:30**  
**A. Filloux.** Centre National de la Recherche Scientifique, Marseille, France.
- W16.6. Transcriptional autoregulation of PhoPR: A two-component system implied in *Mycobacterium tuberculosis* virulence. **18:45**  
**J. Gonzalo Asensio.** Universidad de Zaragoza, Spain

**Workshop 17. Pathogenic fungi.**

Room N106

Chair: G. Janbon.

- W17.1. *Keynote lecture*: The MAP kinase network in *Candida albicans*: role in cell wall biogenesis, stress and morphogenesis. **16:30**  
**Jesús Pla.** Universidad Complutense de Madrid, Spain.
- W17.2. Targeting stress response systems for control of mycotoxigenesis and fungal infectivity. **17:00**  
**B.C.Campbell.** USDA, ARS, WRRRC, Albany, CA, USA.
- W17.3. Macrophages discriminate between alive and heat inactivated *Candida albicans* cells. **17:15**  
 Proteomic and subproteomic studies.  
**Gloria Molero.** Universidad Complutense de Madrid, Spain.

**Coffee break and Exhibition visit 17:30-18:00**

Chair: J. Pla.

- W17.4. *Keynote lecture*: Systematic disruption of genes potentially involved in *Cryptococcus neoformans* capsular polysaccharide biosynthesis. **18:00**  
**Guilhem Janbon.** CNRS-Institut Pasteur, Paris, France
- W17.5. Capsule biogenesis in *Cryptococcus neoformans*. **18:30**  
**Jan Grijpstra.** Utrecht University, The Netherlands.
- W17.6. Human herpesvirus-6 dysregulates monocyte-mediated anticryptococcal defences. **18:45**  
**E. Blasi.** University of Modena and Reggio Emilia, Italy

**Workshop 18. ISME SESSION: Marine microbiology.**

Rooms N107+N108

Chair: S. Kjelleberg

- W18.1. *Keynote lecture*: Protein toxins of marine bacteria. **16:30**  
**Bjarnheidur K. Gudmundsdóttir.** University of Iceland, Reykjavik, Iceland.
- W18.2. Comparison of the DNA of *Vibrio shiloi* with closely related but avirulent *Vibrio mediterranei*. **17:00**  
**L. Reshef.** Tel Aviv University, Israel.
- W18.3. Colonization factors of luminous bacteria. **17:15**  
**G.A. Vydryakova.** Institute of Biophysics, Krasnoyarsk, Russia.

**Coffee break and Exhibition visit 17:30-18:00**

Chair: B.K. Gudmundsdóttir.

- W18.4. *Keynote lecture*: Biofilms on marine living surfaces. **18:00**  
**Staffan Kjelleberg.** University of New South Wales, Sydney, Australia.
- W18.5. The suboxic microcosmos bacterial diversity in oxygen-deficient oceanic waters off northern Chile. **18:30**  
**H. Stevens.** Universidad de Concepción, Chile.
- W18.6. Morphological characterization, exopolymers and prey appeal of an uncommon marine nano-diatom. **18:45**  
**A. Guinea.** Universidad Complutense de Madrid, Spain.

**Workshop 19. Mode of action of microbial toxins.**

Rooms N117+N118

Chair: C. Montecucco.

- W19.1. *Keynote lecture*: Colibactin, a hybrid peptide-polyketide genotoxin produced by *Escherichia coli*. **16:30**  
**Eric Oswald.** INRA-ENVT, Toulouse, France
- W19.2. Insecticidal toxins of *Photobacterium luminescens* and the plague. **17:00**  
**M.Hares.** Bath University, United Kingdom.
- W19.3. *Bordetella* adenylate cyclase toxin provokes calcium influx into CD11b+J774A.1 macrophages during adenylate cyclase domain translocation across the plasma membrane. **17:15**  
**R. Fiser.** Charles University; Prague, Czech Republic.

**Coffee break and Exhibition visit 17:30-18:00**

Chair: E. Oswald

- W19.4. *Keynote lecture*: Anthrax toxins: Cellular mechanism of action and role in pathogenesis. **18:00**  
**Cesare Montecucco.** Università di Padova, Italy
- W19.5. Endotoxins of *Chlamydomonas reinhardtii* modulate innate immune responses. **18:25**

**Corinna Hermann.** University of Konstanz, Germany.

W19.6. Binding and cleavage of the RNA substrate by the Kid toxin of the parD (kis-kid) system of plasmid R1. **18:40**

**Ramón Díaz-Orejas.** CSIC, Madrid, Spain.

W19.7. Improvement of oral toxicity of *Photorhabdus temperata* strain K122 against *Prays oleae* by heterologous expression of *Bacillus thuringiensis cry* genes. **18:55**

**S.Tounsi.** Centre of Biotechnology of Sfax, Tunisia.

## Special Events **19:00**

**SE5. "Microbiology undergraduate education and the Bologna process".** **Rooms N109+N110**

*Chair: Joanna Verran, Manchester Metropolitan University, UK*

**INTAS Meeting** **Room N111**

## Poster removal **19:00**

**Hall**

# Saturday 8

## Symposia **9:00**

**Symposium 18. Innovative strategies in search of new antimicrobial agents and vaccines.** **Auditorium**

*Chairs: G. Grandi and A. Lanzavecchia.*

S18.1. Post-genomics in vaccine discovery. **9:00**

**Guido Grandi.** Novartis Vaccines, Siena, Italy.

S18.2. The discovery of novel antibiotics inhibiting bacterial fatty acid synthesis from microbial natural products. **9:30**

**Fernando Peláez.** Merck, Sharp & Dohme de Espana, S.A. Madrid, Spain.

**Coffee break and Exhibition visit 10:00-10:30**

S18.3. Approaches to new drug discovery. **10:30**

**José García-Bustos.** GlaxoSmithKline, Tres Cantos, Spain.

S18.4. A new paradigm for discovery of antimicrobial leads from natural product sources. **11:00**

**Phil Youngman.** Merck Research Laboratories, Rahway, New Jersey, USA.

**Symposium 19. Intracellular signaling in microbes.** **Room N101**

*Chairs: R. Kahmann and A. di Pietro*

S19.1. H<sub>2</sub>O<sub>2</sub> signaling by redox modifications of cysteine residues. **9:00**

**Michel B. Toledano.** CEA-Saclay, Gif-sur-Yvette, France.

S19.2. Genetic dissection of a conserved MAP kinase cascade controlling cell fusion and pathogenicity in *Fusarium oxysporum*. **9:30**

**Antonio di Pietro.** Universidad de Cordoba, Spain.

**Coffee break and Exhibition visit 10:00-10:30**

S19.3. Innate immunity of plants against fungi; induction and avoidance of defense responses. **10:30**

**Pierre J. de Wit.** Laboratory of Phytopathology, Wageningen, The Netherlands.

S19.4. Signalling in the *Ustilago maydis*/maize pathosystem. **11:00**

**Regine Kahmann.** Max-Planck-Institut für Terrestrische Mikrobiologie, Marburg, Germany.

**Symposium 20. Biodiversity.** **Room N102**

*Chairs: H. Trüper and A. Ventosa*

S20.1. Microbial diversity of hypersaline environments. **9:00**

**Antonio Ventosa.** University of Sevilla, Spain.

- S20.2. The scope of biodiversity. 9:30  
*Brian J. Tindall. Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH, Braunschweig, Germany.*  
**Coffee break and Exhibition visit 10:00-10:30**

- S20.3. Knowledge bleed, PhenBank, and NamesforLife. 10:30  
*George M. Garrity. Michigan State University, USA.*

- S20.4. Catabolic biodiversity in rhodococci: Genetic basis and exploitation. 11:00  
*Michael J. Larkin. The Queen's University of Belfast, Northern Ireland, United Kingdom.*

- S20.5. Taxonomy or Biodiversity? 11:30  
*Hans G. Trüper. Rheinische Friedrich-Wilhelms-Universität, Bonn, Germany.*

**Symposium 21. Synthetic microbiology, biocatalysis and bioremediation.** Room N105

*Chairs: J.L. Ramos and M.M. Yakimov.*

- S21.1. Systems biotechnology: Intracellular carbon flux analysis in *E. coli* and *Pseudomonas* biocatalysts. 9:00  
*Andreas Schmid. University of Dortmund, Germany.*

- S21.2. Optimization of the solvent tolerant *Pseudomonas putida* S12 as host for the production of aromatics from renewable feedstocks. 9:30  
*J. Wery. Wageningen University, The Netherlands.*  
**Coffee break and Exhibition visit 10:00-10:30**

- S21.3. Role of the H-NS-like protein TurA of *Pseudomonas putida* KT2440 in TOL pathway regulation. 10:30  
*Giovani Bertoni. Università degli Studi di Milano, Milan, Italy.*

- S21.4. Obligate marine hydrocarbonoclastic bacteria: Biogeography, ecophysiology and biotechnological application. 11:00  
*Michael M. Yakimov. Istituto per Ambiente Marino Costiero, Messina, Italy.*

- S21.5. The multidrug efflux regulator TtgV recognizes a wide range of structurally different effectors in solution and complexed with target DNA. 11:30  
*Juan Luis Ramos. CSIC, Granada, Spain.*

**Symposium 22. Co-evolution of bacteria and their hosts.** Rooms N106

*Chairs: A. Chakrabarty and E. Rosenberg.*

- S22.1. The coral probiotic hypothesis: possible nonclassical evolution to disease resistance. 9:00  
*Eugene Rosenberg. Tel-Aviv University, Israel.*

- S22.2. (Co)Evolution and the virulence of bacteria and viruses. 9:30  
*Bruce R. Levin. Emory University, Atlanta, USA.*  
**Coffee break and Exhibition visit 10:00-10:30**

- S22.3. Co-evolution of host and pathogenic bacteria. 10:30  
*Ananda Chakrabarty. University of Kansas Medical Center, Kansas City, USA.*

**Plenary Lecture** 12:00

- L5. Emerging and re-emerging viruses. Auditorium  
*Brian W.J. Mahy. National Center for Infectious Diseases, Atlanta, USA.*

**Closing ceremony** 13:00

Auditorium