

A microscopic view of various bacteria, including spherical cocci and rod-shaped bacilli, in shades of blue, purple, and pink. The background is a soft, out-of-focus gradient of light colors.

# BioMicroWorld2018 Conference

PROGRAM OUTLINE

The conference presentations will start on Thursday 24 May at 11:00, although there will be a registration period from 9:30 to 11:00 in the morning. The Conference will finish on Friday 25 May around 15:00.

In any case, attendees will be able to pick up the conference materials at the registration desk at any time during the conference. The conference/registration desk will be placed at the main hall at the conference venue (Torremolinos Congress Center)

ORAL PRESENTATIONS will take place according to the following structure:

<b>Day</b>	<b>Sessions</b>
Thursday, 24 May	<ul style="list-style-type: none"><li>➤ Biotechnologically relevant enzymes and proteins</li><li>➤ Food microbiology</li><li>➤ Microbial physiology, genetics, evolution and adaptation</li><li>➤ Microbial production of high-value products</li><li>➤ Medical Microbiology. Antimicrobial agents and chemotherapy. Antimicrobial resistance</li></ul>
Friday, 25 May	<ul style="list-style-type: none"><li>➤ Agriculture, soil, forest microbiology</li><li>➤ Environmental, marine, aquatic microbiology.</li><li>➤ BBB - Biodeterioration, Biodegratation, Bioremediation</li></ul>

There will be 2 POSTER SESSIONS at the main hall at the conference venue according to the following structure:

<b>Day</b>	<b>Time</b>	<b>Sessions</b>
Thursday, 24 May	From 15:30 to 16:15	<ul style="list-style-type: none"><li>➤ Biotechnologically relevant enzymes and proteins</li><li>➤ Food microbiology</li><li>➤ Microbial production of high-value products</li><li>➤ Medical and veterinary microbiology. Antimicrobial agents and chemotherapy. Antimicrobial resistance</li></ul>
Friday, 25 May	From 11:00 to 11:45	<ul style="list-style-type: none"><li>➤ Agriculture, soil, forest microbiology</li><li>➤ Environmental, marine, aquatic microbiology.</li><li>➤ BBB - Biodeterioration, Biodegradation, Bioremediation</li></ul>

Posters are expected to be posted during the whole day assigned. Presenters are expected to be available for discussion of their posters during the corresponding sessions.

## SCIENTIFIC PROGRAM

### REGISTRATION & COFFEE

9:30-11:00

Thursday, 24 May 2018 (At the main hall)  
(Registration can also be done at any time during the Conference)

### ORAL PRESENTATIONS

Thursday, 24 May 2018

#### Sessions:

Biotechnologically relevant enzymes and proteins  
Food microbiology

Chair: Prof. Andrey Karlyshev (Kingston University London, United Kingdom)

#### PLENARY LECTURE

11:00-12:00

Bacterial amyloids for materials sciences and biomedicine  
**Antonio Villaverde**

12:00-12:15

The Expression of a *Putative Glycoside* hydrolase Family 10 Xylanase from *Eucalyptus globulus* in *Pichia pastoris*  
**Nurul Izzati**

12:15-12:30

Metagenomic in Deep biosphere: biotechnological solutions for the future  
**Igor Tiago**

12:30-12:45

Sustainable food processing using ferulic acid esterases  
**Kathrin Schulz**

12:45-13:00

Application of the next generation genome sequencing for metagenomic analysis of dairy products  
**Andrey Karlyshev**

13:00-14:00

**LUNCH BREAK (Buffet at the main hall)**

#### Sessions:

Microbial production of high-value products  
Microbial physiology, genetics, evolution and adaptation  
Medical Microbiology. Antimicrobial agents and chemotherapy. Antimicrobial resistance

Chair: Dr. Antonio Martínez-Murcia (Miguel Hernández University and Genetic PCR Solutions, Spain)

14:00-14:15

Internal validation of GPS<sup>TM</sup> *CanAur dtac-qPCR Test* following the UNE/EN ISO/IEC 17025:2005 for detection of emergent nosocomial *Candida auris*  
**Antonio Martínez-Murcia**

14:15-14:30

Prospecting for electrically active bacteria  
**Kenneth Neilson**

14:30-14:45

Production of valuable microbial biomass and biodiesel from sugarcane distillery wastewater  
**Thomas Petit**

14:45-15:00

A transcriptomic insight to the life of *E. coli* and cryptic *Escherichia* in marine sediment  
**Stanley Lau**

15:00-15:15

Stress survival strategies of the dominating bacteria *Enterococcus mundtii* in the gut of *Spodoptera littoralis*  
**Tilottama Mazumdar**

15:15-15:30

The RNPP family of quorum-sensing regulators: structure-function analysis  
**Sylvie Nessler**

15:30-16:15

**POSTER SESSION & COFFEE BREAK  
(at the main hall)**

## Friday, 25 May 2018

### Session:

Agriculture, soil, forest microbiology

**Chair: Dr. Valeria Todeschini** (University of Piemonte Orientale, Italy)

09:30-09:45	Effects of AM fungi inoculation and phosphatic nutrition on growth parameters, mineral uptake and photosynthetic efficiency in tomato <b>Valeria Todeschini</b>
09:45-10:00	Exploring the rhizosphere microbiome of <i>Vitis vinifera</i> using metagenomic and metaproteomic approaches: phylogenetic and functional characterization <b>Elisa Bona</b>
10:00-10:15	Biological control of coffee rust ( <i>Hemileia vastatrix</i> ) with the enzyme complex of <i>Trichoderma</i> sp <b>Sandra Luz Hernández Valladolid</b>
10:15-10:30	When you cannot see the wood for the trees: Patterns of soil bacterial communities along the altitudinal distribution range of <i>Abies pinsapo</i> relic conifer forests <b>Lucía Álvarez Garrido</b>
10:30-10:45	Plant succession impacts on host-AMF specificity <b>Catarina Campos</b>
10:45-11:00	<i>In vitro</i> culture of arbuscular mycorrhizas, 30 years later <b>Alberto Bago Pastor</b>
11:00-11:45	<b>POSTER SESSION &amp; COFFEE BREAK</b> <b>(at the main hall)</b>

### Sessions:

Environmental, marine, aquatic microbiology  
BBB - Biodeterioration, Biodegradation, Bioremediation

**Chair: Dr. Vasily Vavilin** (Water Problems Institute of the Russian Academy of Sciences, Russia)

11:45-12:00	Describing dynamic changes in carbon isotope signatures of carbon dioxide and methane is a tool to determine the pathway of methane formation from cellulose <b>Vasily Vavilin</b>
12:00-12:15	Metagenomics Analysis of Acidic Mine Drainage in Çan, Çanakkale <b>Ahmet Çabuk, Belma Nural Yaman</b>

12:15-12:30	Metagenomics' decodes life sustainability in the dark deep biosphere <b>Igor Tiago</b>
12:30-12:45	Effect of the water hyacinth plant on formation of biofilm layer and antibiotic resistance bacteria in the anaerobic membrane bioreactor systems (MBR) <b>Sevcan Aydın</b>
12:45-13:00	Biosurfactant Testing and Evaluation Using Respirometry <b>Tomáš Lederer</b>
13:00-13:15	<i>Halobacterium salinarum</i> : an old problem in historical parchments, a modern problem in brine cured hides <b>Luciana Migliore</b>
13:15-13:30	Microbial (microalgae and bacteria) identification and their relationship with presence of phosphates and nitrates in a lotic ecosystem <b>Hugo Diósefat Puga Barajas</b>
13:30-13:45	Remediation Potential of Microbial Community Existing in Rhizosphere of <i>Typha latifolia</i> to Degrade Polybrominated diphenyl Ether <b>Malik Hayat</b>
13:45-14:45	<b>LUNCH BREAK (Buffet at the main hall)</b>

## POSTER PRESENTATIONS

**Thursday, 24 May 2018 | Main Hall**  
**From 15:30 to 16:15**

### Sessions:

Medical and veterinary microbiology. Antimicrobial agents and chemotherapy. Antimicrobial resistance  
 Food microbiology  
 Microbial production of high-value products  
 Biotechnologically relevant enzymes and proteins

Code	Title	Presenter(s)
T1	Transition of the activity to hydrolysis of dietary glucosylceramide by intestinal bacteria in Dogs with age	Narito Asanuma
T2	Culture and real-time pcr analysis of Fusobacterium nucleatum microleakage in teeth implant surfaces	Alper Ergin
T3	Quantitative biofilm formation and scanning electron microscopy detection of six different microorganims on different aryclic base materials	Alper Ergin
T4	Carvacrol acts as a bacterial efflux pump inhibitor when co-administered with berberine in <i>Bacillus subtilis</i>	Başak Ataş
T5	The use of LNA probe in direct detection and quantification of <i>Salmonella</i> spp. in chicken tissue samples by real-time PCR	Agata Cisek
T6	Extraction of dermatophytes DNA from animal ringworm clinical samples- comparison of methods	Iwona Dąbrowska
T7	Synthesis and <i>in-vitro</i> biological evaluation some novel N,N-Diphthaloyl imide derivatives	Hossein Mostafavi
T8	Antibacterial effect of the methanolic extract and the essential oil of the valence ancyclus ( <i>Anacyclus valentinus</i> ) and their contribution to the improvement of the gentamicin effect	Khadidja Side Larbi
T9	Distribution of virulence and resistance genes in biofilm-producing <i>Enterococcus faecium</i> isolates from infections and colonization	Elżbieta Tryniszewska
T10	Comparison of the occurrence of resistance to macrolides, lincosamides and group B streptogramins in coagulase-negative <i>Staphylococcus</i> strains	Piotr Wiczorek

T11	Phenotypic and genotypic antibiotic resistance of coagulase-negative staphylococci from ready-to-eat food in Poland	Wioleta Chajęcka-Wierzchowska and Anna Zadernowska
T12	Pathogenicity of coagulase-negative staphylococci isolated from ready-to-eat food in Poland	Wioleta Chajęcka-Wierzchowska and Anna Zadernowska
T13	Characterization of Toxin Genes and Antimicrobial Susceptibility of <i>Staphylococcus aureus</i> Isolates in Fishery Products in Iran	Noushin Arfatahery
T14	Evaluation of the microbiota in foods served in different establishments of collective social collective food establishments	Alexandra Esteves
T15	Microbiota associated with food contact surfaces in different university catering establishments	Alexandra Esteves
T16	Fungal diversity and ochratoxin A presence on green coffee dietary supplements	Otniel Freitas-Silva
T17	Sensitivity test for peracetic acid and sodium hypochlorite against <i>Aspergillus</i> Flavi section isolated from Brazil nut	Otniel Freitas-Silva
T18	Effects of feeding <i>Solea senegalensis</i> with <i>Ulva ohnoi</i> supplemented diet on the intestinal microbiota	Milagros Fumanal Florido
T19	Evaluation of the seaweed <i>Ulva ohnoi</i> as feed additive for Senegalese sole ( <i>Solea senegalensis</i> ) juveniles: effects on growth and digestive functionality	Milagros Fumanal Florido
T20	Natural fruity beer: study of the performance of <i>Saccharomyces cerevisiae</i> and <i>Geotrichum fragrans</i> in co-culture during beer fermentation	Thomas Petit
T21	Biotechnological approach for production of red bikaverin and violet naphthoquinones pigments by <i>Fusarium oxysporum</i>	Yanis Caro
T22	<i>Bacillus coagulans</i> MA-13: a promising thermophilic and cellulolytic strain for the production of lactic acid from lignocellulosic hydrolysate	Patrizia Contursi

T23	A novel thermostable $\beta$ -glucosidase from hyperthermophilic bacterium <i>Dictyoglomus turgidum</i>	Danila Limauro
T24	BIO-ATTRACT: a biological approach to alleviate plant biotic and abiotic stresses	Yaite Cuesta Arenas

**Friday, 25 May 2018 | Main Hall**  
**From 11:00 to 11:45**

**Session:**  
Agriculture, soil, forest microbiology  
Environmental, marine, aquatic microbiology  
BBB - Biodeterioration, Biodegradation, Bioremediation

Code	Title	Presenter(s)
F1	Bioactive lipids from endemic plant seed oils of Reunion island: a prospective study	Yanis Caro
F2	Microbial Diversity and Ecosystem Function Along a Heavy Metal Gradient	James Gannon
F3	Characterization and identification of bacteria species in the rhizosphere and rhizoplane of Bambaranut	Khomotso Herminah Mongadi
F4	Does the arbuscular mycorrhizal fungus <i>Glomus custos</i> retain the memory of heavy metal endurance after 11 years of <i>in vitro</i> culture?	Custodia P. Cano Romero
F5	Improvement of root seed growing of <i>Lupinus albus</i> by the inoculation with PGPR mercuro-resistant bacterial strains isolated from heavy metal polluted soils	M. Robas Mora, P. A. Jiménez Gómez, A. Probanza
F6	Bio-mercury-remediation Suitability Index (BMR-SI): a novel proposal that compiles and analyzes the PGPR features and its potential use to phytoremediation	M. Robas Mora, P. A. Jiménez Gómez, A. Probanza
F7	Effect of the Natural Arsenic Gradient on the Diversity and Arsenic Resistance of Bacterial Communities of the Sediments of Camarones River (Atacama Desert, Chile)	Víctor Leandro Campos Araneda and Carla Geradine León Lemus
F8	Removal of As(III) and As(V) by using bio-catalytic calcification reactor with arsenic resistant ureolytic-calcifying bacterial strain	Víctor Leandro Campos Araneda and Carla Geradine León Lemus
F9	Genomic comparison of probiotic and pathogenic <i>Shewanella putrefaciens</i> strains	Marta Domínguez Maqueda
F10	Study of the microbiology of floating aggregates in the coastal area of the Alboran Sea	Marta Domínguez Maqueda

F11	Withdrawn
F12	Implications of denitrification in the ecological status of an urban river using enzymatic activities in sediments as an indicator
F13	Treated and untreated wastewater effluents alter river sediment bacterial communities involved in nitrogen and sulphur cycling
F14	Floating aggregates in the 'Costa del Sol': Mineral particles as supports of natural microbiology
F15	Microbial Diversity of Acidic Mine Drainage in Kahramanmaras, Turkey
F16	Biodegradation of phenylurea herbicides by a novel degrading bacterial strain, <i>Advenella sp. JRO</i>
F17	Biodegradation of phenylurea herbicides by a novel degrading microbial consortium
F18	Phenol degradation by the extremely halophilic strain <i>Haloarcula sp. D21</i> ; catechol 1,2 dioxygenase and halo-thermosatble biosurfactants production
F19	A promiscuous cadmium and arsenic resistance mechanism in <i>Thermus thermophilus</i> HB27: potential application of a new bioreporter system

Miren Martínez and Estilita Ruíz
Miren Martínez
Laura Pardo Canales
Ahmet Çabuk and Belma Nural Yaman
Jaime Villaverde
Jaime Villaverde
Lamia Alouache
Gabriella Fiorentino

## VIRTUAL PRESENTATIONS

(available at the online platform on the conference website from 17 to 25 May)

Title	Presenter(s)
Looking for beneficial applications of environmental bacteria from an olive grove for a microbe-based sustainable agriculture	Belén Álvarez
Alternariol-producing test for small-spored <i>Alternaria</i> species: a practical approach	Margarita Ustyuzhanina
Efficiency of encapsulation and viability of <i>Lactobacillus acidophilus</i> during storage: Comparison of two probiotic encapsulation techniques	Ana Júlia Alves Aguiar Athayde
Beer brewing as a learning support approach to teach microbial and biochemical aspects to secondary school students	Javier Méndez Viera
Oenological possibilities of chestnut wood in the wine aging: relationship between physical and sensory properties	Ignacio J. Díaz-Maroto Hidalgo
Kinetic modelling of <i>Trichoderma harzianum</i> growth in presence of pollutant agents	Gustavo Armando Hernández Galván
Bacteriocin-like inhibitory substances (BLIS) produced by wild lactic bacteria with effect on resistant methicillin- <i>Staphylococcus aureus</i>	Olga Myriam Vasek
Heat stress adaptation of <i>Saccharomyces cerevisiae</i> MUCL49220	Iris Cornet
Local cellular immune response to immunomodulating composition infusion in subclinically infected and healthy dairy cow mammary glands	Gundega Gulbe
Antimicrobial activity of substances produced by <i>Staphylococcus aureus</i> isolated from food against strains of clinical and food origin	Cybelle de Oliveira Dantas
Synthesis and <i>in vitro</i> antifungal activity of fungal chitosan nanoparticles against phytopathogenic fungi	Natália Ferrão Castelo Branco Melo
Glucose-dependent repression of citrate cycle in <i>Saccharomyces cerevisiae</i> was partially reverted by titanium dioxide nanoparticles exposure in heat-shock conditions	Isabel Alves-Pereira
Comparison of assay performance in the limit of detection on five qPCR platforms and four commercial master mixes for bioterrorism threat agents and/or their surrogates	María Victoria Ortega García
Biofunctionalization of nylon nanofibers to be used in immunobiosensor for biological warfare agents detecting	Inés Peraile Muñoz