Putting microbiology first: Get involved!

We are proud and thankful to work with a diverse community of around 30,000 researchers, microbiology experts, business partners and campaigners to advance microbiology for the benefit of society. Working with this fantastic community from our coalition of 52 Member Societies, international science academies and growing body of volunteers allows us to jointly promote excellence in science and to maximize the impact of microbiology on a global level.

Get involved
In this month’s issue, we showcase some of the people and activities from this ever growing microbiology community. We look forward to working with more of you in the future and invite you to get involved in making microbiology count.

New to the FEMS family
We are delighted to introduce the Lithuanian Microbiological Society as a new FEMS Member Society. They are a valuable addition to the FEMS family and we look forward to working more closely with them.

We also welcome the following newly elected Directors to the FEMS Board for the period 2018-2020:
• Dr Vaso Taleski (Macedonia) - Director of Events & Internationalisation
• Dr Andriy Sibirny (Ukraine) - Director of Education & Public Engagement
• Dr Patrik Bavoil (USA) - Director of Research & Publications

We would like to thank Dr Per-Eric Lindgren, Dr Joanna Verran and Dr Jim Prosser for their impressive contribution to the microbiology community. They will be stepping down from their Director positions in January 2018. We will miss working with them!

How to get involved:
• Share your microbiology activities to the wider microbiology network using our Opportunities Board
• Volunteer with us
• Get involved with our campaigns
• Develop new publishing concepts with the Letters Incubator
• Be a part of the FEMS network by joining one of our Member Societies and reap the benefits
• Attend the various microbiology meetings and courses that we sponsor
• Develop yourself as a microbiologist by applying for one of our Grants

Find out more >

OCTOBER 2017
Continued from page 1

World Teachers’ Day
5 October 2017

In conjunction with World Teachers’ Day, the Professional Development section of FEMS Microbiology Letters has launched a new Keeping Education Fresh Thematic Issue. This Issue is edited by Beatrix Fahnert and brings together new discussions and perspectives from leading experts in the field on innovative methods for student engagement.

“Educating the next generation for the benefit of society is an honour and responsibility, which we take very seriously... Reviewed are the needs and features of modern-ised doctoral training in line with broader career choices, as well as pioneering changes to the training of infection specialists, and how antimicrobial stewardship should be embedded in clinical education.”

Beatrix Fahnert
Professional Development Section
Editor, FEMS Microbiology Letters

Alongside this Thematic Issue, we are also evaluating the current state of education and educators in the microbiology field. We invite you to share your experiences in our Education Survey. Your opinion matters and will help the community identify the key issues and opportunities in education.

The survey deadline is 31 October 2017.

One Health campaign

Our One Health campaign aims to highlight the importance of having an integrated and multidisciplinary approach for global health that takes into account human, animal and environmental health. Our One Health campaign is led by our dedicated volunteers, Teja Širec and Tomasz Benedyk. Their monthly guest posts about One Health help to raise the profile of One Health to the wider microbiology community, and is testament to the great impact that our volunteers have.

“Being a part of the One Health campaign endows us with ultimate experience as scientists and science communicators. We believe that global approach and interdisciplinarity are key for tackling complex problems such as antimicrobial resistance or climate change. It is very rewarding to see that our work has attracted many FEMS affiliates and we hope that it will inspire scientists to join the One Health community. We have no doubts that the importance of the One Health initiative will keep growing in the near future, and in many areas of research it will become a game changer.”

Teja and Tomasz
One Health campaign volunteers

Peer Review campaign

Over the past few months, we have interviewed campaigners, researchers and thought leaders in peer review in our monthly Peer Review - reviewed series. By engaging with the faces behind peer review, we want to better understand how to effect real change in how peer review is delivered for the benefit of society. This month we are joined by Andrew Preston from Publons.

“Peer review is at the heart of the research process. It underpins the entire academic enterprise and is key to solving the critical problems in research today.”

New collaborative project with students from TU Delft

We are delighted to announce that we have started an exciting new collaborative project with students from TU Delft, The Netherlands. The aim of this interdisciplinary project is to design and produce an interactive mapping tool that enables microbiologists anywhere in the world to easily find, reach and connect with the different research institutions, practitioners and individuals from the growing global microbiology community.

Watch this space...

Peer Review campaign

Introducing a new Thematic Series for Letters Incubator

The Letters Incubator offers the opportunity for key opinion leaders to collaborate with new talent from the microbiology community in developing creative publishing ideas and innovative article types on emerging topics in science.

We are delighted to introduce a new Thematic Series for the Letters Incubator: Microbial Symbioses

Guest Editors:
- Prof Sir Andersson: professor in molecular evolution at Uppsala University and one of the pioneers of the first genome project in Sweden
- Dr Daniel Tamarit: postdoctoral researcher in molecular evolution who is closely affiliated to Sir Andersson’s research group at Uppsala University

This Thematic Series aims to be a comprehensive community resource of original results and reviews on microbial associations and symbioses, showcasing the current developments in symbiotic systems, host-symbiont interactions and symbiont biology.

We interviewed both guest editors to find out more about why they decided to work together on this Thematic Series with the Letters Incubator:

“I very much enjoy being exposed to a variety of novel projects and ideas... I am looking forward to gaining a deeper understanding of the details of the publication process.”
- Daniel Tamarit, Guest Editor

“The ability to be a mentor and work with a young researcher on a research theme that is at the core of my research interests... Now, I want to pay back the opportunities that others have given me by supporting young researchers and helping them to learn and do great science.”
- Sir Andersson, Guest Editor

We warmly invite you to submit your research to this exciting new Thematic Series.

Take part in the Education Survey >
Get involved with the One Health campaign >
Get involved with the Peer Review campaign >
Read the Thematic Issue >
Submit to the Microbial Biofilms Thematic Issue

Congratulations to FEMS poster prize winners

We were delighted to sponsor the 7th International Conference on Polar and Alpine Microbiology (PAM 2017) which took place in Nuuk, Greenland on 8-12 September 2017. Congratulations go to the winners of the FEMS Microbiology Ecology Poster Prizes at PAM 2017:
- 1st prize: Max Showalter University of Washington, USA
- Runner-up: Takumi Murakami Institute of Technology, Japan
- Runner-up: Kathrin Bender University of Tromsø, Norway

We also extend our congratulations to the winners of the FEMS Microbiology Ecology and Pathogens and Disease poster prizes at the 5th European Congress on Microbial Biofilms (Eurobiofilms 2017), which took place in Amsterdam, The Netherlands on 19-22 September 2017.
- FEMS Microbiology Ecology winner: Vera Carniello University of Groningen, The Netherlands
- Pathogens and Disease winner: Sonali Singh University of Nottingham, UK

To showcase the new developments in biofilm research, FEMS Microbiology Ecology and Pathogens and Disease have joined forces with Eurobiofilms 2017 to produce a Thematic Issue on microbial biofilms.

We invite you to submit your papers for publication: accepted manuscripts dealing with the biomedical aspects of biofilms will be published in Pathogens and Disease, while accepted manuscripts dealing with environmental/ecological aspects of microbial biofilms will be published in FEMS Microbiology Ecology. The deadline for submissions is 30 November 2017.

Submit to the Microbial Biofilms Thematic Issue

FEMS Journal Development Editor, Frédérique Belliard (centre) presents the poster prizes to Sonali Singh (left) and Vera Carniello (right) at Eurobiofilms 2017

OCTOBER 2017
**FEMS Microbiology Reviews**

**MiniReview**

*Transmission as a basic process in microbial biology. Lwoff Award Lecture*

Fernando Baquero won the FEMS-Lwoff Award in 2015. His André Lwoff Award Lecture on microbial transmission at the FEMS Microbiology Congress in Maastricht in 2015 forms the basis of this review.

Authors: Baquero

DOI: doi.org/10.1093/femsre/fux042

**FEMS Microbiology Letters**

**MiniReview**

*Autotrophic biorefinery: dawn of the gaseous carbon feedstock*

This MiniReview looks at the current methods for CO₂ storage and capture, the need to develop sustainable methods and the ways of improving the sequestration efficiencies by various novel technologies. An autotrophic biorefinery model is also discussed with the potential to operate and produce a multitude of biobased products.

Authors: Butti and Mohan

DOI: doi.org/10.1093/femsec/fnx166

**Pathogens and Disease**

**MiniReview**

*Do antimicrobial mass medications work? A systematic review and meta-analysis of randomised clinical trials investigating antimicrobial prophylaxis or metaphylaxis against naturally occurring bovine respiratory disease*

A systematic review and meta-analysis of randomised clinical trials investigating antimicrobial prophylaxis or metaphylaxis against naturally occurring bovine respiratory disease.

Authors: Baptiste and Kyvsgaard

DOI: doi.org/10.1093/femspd/ftx083

**FEMS Yeast Research**

**Research Article**

*Yeast multistress resistance and lag-phase characterisation during wine fermentation*

New insights on conventional and non-conventional yeast’s lag phase during alcoholic wine fermentation focusing on genetic and multistress resistance to environmental factors typically present at fermentation start.

Authors: Ferreira et al.

DOI: doi.org/10.1093/femsyr/fox091

**FEMS Microbiology Ecology**

**Research Article**

*A case for the protection of saline and hypersaline environments: a microbiological perspective*

Humans have enjoyed many benefits from saline environments but if they are not protected, these environments will become degraded and their microbial communities lost.

Authors: Paul and Mormile

**Thematic Issues**

Explore the special issues, Thematic Issues and conference special issues across all five FEMS journals:

- **Pseudomonas Thematic Issue connected to the 16th International Conference on Pseudomonas (UK)**
  Editor: Craig Winstanley
- **Escherichia Coli Thematic Issue**
  Editors: Wolfgang Kneifel, Stephen Forsythe
- **Pathogens and Disease Thematic Issue**
  Editors: Alison K. Criss and Christoph Tang
- **Vaccines Virtual Special Issue**
  Editor: Peter Timms
- **Joint issue: Pathogens and Disease and FEMS Microbiology Ecology**
  Editors: Edmundo Calva and Stanley Maloy
GRANTS CORNER

Sudhanshu Mishra

Grant: FEMS Early Career Scientist Grant
Meeting: 7th Congress of European Microbiologists (FEMS 2017), Valencia, Spain. 9-13 July 2017

Sudhanshu Mishra is a postdoctoral researcher at the Sichuan Agricultural University, China. His main research area is the gut microbiota diversity of the giant panda.

“I would like to pay my sincere thanks to the conference committee for selecting me for the FEMS Early Career Scientist Grant. This grant enabled me to attend this reputed conference and get expert suggestions on my research work from scientists and researchers. It also helped in networking with researchers having different expertise. It was my first FEMS grant and attendance at this conference. I look forward to attend future FEMS conferences. I hope FEMS continues to support young investigators for future events. I can offer to volunteer for upcoming conferences.”

MORE INFO ON FEMS GRANTS >

OPPORTUNITIES

Post on our Opportunities Board!

Do you want to promote your event, job, funding or interesting projects on our website to the wider microbiology community?

You can do this on our Opportunities Board! Here you can find FEMS-sponsored events and funding, as well as many other exciting jobs, events, courses, resources and funding opportunities from the microbiology community.

Adding your opportunity on our Opportunities Board is easy! All you have to do is register for a free FEMS account and follow our Contributor Guide and video guide to create and share your opportunity to the wider microbiology community on our website.

OPPORTUNITIES BOARD >

FEMS-sponsored meeting of the month

4th International Conference on Microbial Diversity
Location: Bari, Italy
Dates: 24-26 October 2017

The 4th International Conference on Microbial Diversity is a consolidated biennial event bringing together agricultural, environmental and food microbiology researchers and professionals from all over the world.

Drivers of microbiota establishment and composition in different ecosystems are the focus of this conference, which are key factors in the vast and fascinating field of microbial diversity.

MORE INFO ON THIS MEETING >

FEMS-sponsored training course

Diagnosis and Therapy of Fungal Diseases (DTFD) has become an important and essential national meeting in the field of fungal diseases, a forum in which mycologists, clinicians and basic researchers from different fields exchange research results and opinions on medical mycology practice.

This outstanding scientific program will include plenary sessions on fungal infections.

FIND OUT MORE ABOUT THIS COURSE >
Who would have thought that the secret to a long life would be revealed through the gut microbiome of the naked mole-rat? This aesthetically unusual mammal shows remarkably few age-related degenerative changes and is seemingly unaffected by cancer. Researchers have discovered peculiarities in the gut microbiota of the naked mole-rat that could be linked to its longevity.

Source: Nature

A research team at John Hopkins University have been testing genetically modified (GM) mosquitoes to prevent the spread of malaria. These GM mosquitoes have an altered microbiota that suppresses human malaria-causing parasites. They prefer to mate with wild mosquitoes and have successfully passed on their malaria resistance to many generations of offspring.

Source: Science Daily

We are all aware that plastics have a detrimental effect on marine life. Researchers have now found that plastic nanoparticles in water may end up inside the brains of fish and could be the cause of their observed behavioural disorders.

Source: Science Daily

“The secret lies in the naked mole-rat!”