



2022  
**Belgrade**

# **FEMS Conference on Microbiology**

in association with  
Serbian Society of Microbiology

**30 June - 2 July**

**2022 • Serbia**

**ELECTRONIC  
ABSTRACT BOOK**

## Message from the organizers

**Dear colleagues and friends,**

The 1st FEMS Belgrade Conference on Microbiology in collaboration with Serbian Society for Microbiology was held from 30 June to 2 July 2022.

A large number of high-quality scientific contributions was presented at the Conference. We are delighted to have been able to put them together and send you the FEMS Conference Abstract Book. With thanks to your contributions, we can now proudly present an abstract book that both reflects the scientific abundance of the conference and serves as a memento of an event worth remembering. We thank all participants and in particular the presenters of these abstracts for making this happen!

This conference was a pioneering endeavour, one of the largest and most important microbiology events in East Europe in 2022. As in 2020, when we had to pursue the first conference online due to the COVID-19 pandemic, this conference faced challenging times but could luckily be held both onsite and online.

Again, in 2022, we were faced with the great challenges as it was the case back in 2020, and yet again, a brave decision to move ahead has been made and it paid off.

You showed large interest to become part of the Conference and our joint history. Almost 1.000 scientific contributions were submitted, and more than 870 were approved. This showcases not only the large interest to be part of the conference, but also it is the reason this event was such a success.

We are thankful and proud to have welcomed almost 600 microbiologists from 40 European countries and another 20 countries worldwide, almost 200 more participants online. With ten core scientific sessions, including one session with the best grant alumni presentations, three plenary lecture and a COVID-19 round table, six industry lectures and a satellite symposium, the total of invited lectures amounted to 60. In addition, six thematic sessions with over 120 short oral/e-poster presentations of selected participants-authors in the main program Finally, over 400 e-posters/presentations on demand, in total over 600 presentational items, uploaded on the Conference ONLINE platform and accessible to participants until the 31 December 2022.

We thank the pharmaceutical, lab and biomedical industry partners from Serbia, the South East Europe region and worldwide for their recognition of the importance of the event, their participation and their support.

We hope that you enjoyed the content and all the other aspects of the Conference. If you missed anything, you can catch up by watching the recordings, presentations or have a detailed look at the posters.

We warmly wish you health, love and happiness and are looking forward to the new encounters, coming up next: FEMS 2023 Congress in Hamburg, FEMS 2024 Conference in Tallinn and numerous events of the SSM in Serbia and South East Europe region.

**Sincerely** .....



*Hilary Lappin-Scott*

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**Prof. Hilary Lappin-Scott**  
Scientific Committee Chairperson,  
FEMS President



*Vaso Taleski*

.....

**Prof. Vaso Taleski**  
Organizing Committee Chairperson,  
FEMS Director of Events and Internationalization



*Dragojlo Obradović*

.....

**Prof. Dragojlo Obradović**  
Scientific Committee Co-Chairperson,  
President of Serbian Society of Microbiology



*Lazar Ranin*

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**Prof. Lazar Ranin**  
Organizing Committee Co-Chairperson,  
Vice-President of Serbian Society of Microbiology

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**Scientific Committee Chairperson, FEMS President**

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**894 / MICROBIOLOGICAL AND HISTOLOGICAL ANALYSIS OF TONSIL  
TISSUE FROM PATIENTS DIAGNOSED WITH CHRONIC TONSILLITIS****08****Keywords:** *tonsillitis, biofilm, Staphylococcus aureus***Marina Kostic** / nan, *Serbia***Marija Ivanov** / Institute for Biological Research "Siniša Stanković" - National institute of Republic of Serbia, University of Belgrade, Belgrade, *Serbia***Snežana Sanković Babić** / Clinic for otorhinolaryngology, Clinical hospital Centre Zvezdara, Belgrade, *Serbia***Zvezdana Tapavčević** / Department of Pathology, School of Dental Medicine, University of Belgrade, Belgrade, *Serbia***Oliver Radanović** / Institute of Veterinary Medicine of Serbia, Belgrade, *Serbia***Ana Ćirić** / Institute for Biological Research "Siniša Stanković" - National institute of Republic of Serbia, University of Belgrade, Belgrade, *Serbia***Marina Soković** / Institute for Biological Research "Siniša Stanković" - National institute of Republic of Serbia, University of Belgrade, Belgrade, *Serbia*

If chronic tonsillitis (CT) is treated surgically, the long-term risks of infections and respiratory diseases are higher, making of high importance to find an alternative for tonsillectomy. In order to isolate and identify the causing agents of CT, a total of 79 postoperative palatine and adenoid tissue samples were obtained from the ENT Clinic, KBC Zvezdara. A total of 82 bacterial species were isolated and identified by MALDI-TOF. They belong to the genera *Streptococcus*, *Staphylococcus*, *Micrococcus*, *Rothia*, *Enterobacter* and *Stenotrophomonas*. Analysis of the incidence of bacteria isolated from tissue samples showed the highest prevalence of *Streptococcus oralis* (27/33%), followed by *S. aureus* (17/21%) and *Streptococcus parasanguinis* (16/20%). Histological analysis of tissue samples was conducted in order to detect the presence of CT-causing bacteria. In addition to interfollicular hyperplasia, colonies of species *S. aureus* and *Stenotrophomonas maltophilia* were detected in histological material. The presented results confirm that the colonizers of tonsils tissues can be both G (+) and G (-) bacteria. The presence of *S. aureus* in the tonsillar tissue even after the antibiotic therapy may be related to its ability to form biofilm. Our study demonstrated that among 17 *S. aureus* isolates, 13 displays more pronounced biofilm forming ability than the reference strain *S. aureus* ATCC 11632, and only 4 isolates display lower biofilm forming ability. The presence of biofilm might be the reason for the recurrence of infection. Therefore, a searching for new antibiofilm therapeutics in CT therapy is of great importance.

**ACKNOWLEDGEMENTS/REFERENCES**

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