

20

23

European Society of  
Clinical Microbiology and  
Infectious Diseases

**Yearbook**

124

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# Society



Annelies Zinkernagel,  
ESCMID President

## African proverb cited by Nelson Mandela: If you want to go fast, go alone. If you want to go far, go together.

### Fighting together the global threat of infectious diseases

Last year we celebrated our 40 year anniversary. It all started with a vision: a group of 10 friends working in infectious diseases and clinical microbiology who wanted to bring together leading scientists and improve our understanding of pathogens and infections. Today we welcome over 10,000 members to ESCMID and over 16,000 attendees to ESCMID Global (formerly known as ECCMID)!

40 years ago, mortality from infectious diseases was at an all-time low in the US and Europe. Sanitation, clean water, a public health system, antibiotics and vaccination have had a great effect. The trajectory seemed to go in one direction only: lower and lower. However, this did not continue. Mortality from infectious diseases

started to increase again, during the '80s and since the '90s, we saw the HIV epidemic taking a huge toll and the breakthrough of antiretroviral therapy; the growing "silent pandemic" of antimicrobial resistance, which continues to be one of the biggest health threats to mankind; the emergence or re-emergence of Polio, Ebola, Zika, and most recently Mpox to name the most prominent.

Finally, we saw SARS-CoV-2 causing a pandemic that changed the world and caused a massive shift in public awareness and perception of infectious threats. In just three years, approximately 6.9 million people died. Most people would have never thought that this was still possible in our modern world: complete lockdowns; stopping businesses, travel, education, social activities and cultural life; eternally crowded megacities went silent; empty streets, empty skies, people

ordered to stay at home. But we also witnessed an incredible response: vaccines were developed and tested faster than ever before; an estimated 13.53 billion vaccine doses have been administered to date; wearing masks became a new norm across the globe; billions of people learned what FFP2 means; billions of people were reminded of basic hygiene rules. Globally, COVID-19 raised public awareness of the threat of infections like nothing before experienced in our lifetime. Four years after COVID-19, we find ourselves in a completely different position.

After decades of having vaccines and antibiotics to hand, most modern societies felt safe. For the vast majority, epidemics were a thing of the past and warnings about a global threat of infectious diseases seemed far-fetched. Today, we know better: this is a great opportunity and also a great responsibility.

### A new way forward

Over four decades, ESCMID has grown and expanded its activities and outreach. In recent years, this development has greatly accelerated. We revised the ESCMID strategy, and these are our top priorities – for now and the foreseeable future: education, emerging infections and antimicrobial resistance. Our new strategic focus demands a global perspective and a stronger presence with our audiences.

### Lead the way in guiding the practice, education and training of specialists in CM & ID globally:

Educating ourselves and the next generation is of extreme importance to ESCMID, thus we have strengthened our education portfolio with a new Education Director who works closely with the Education Officer. The ESCMID Education Subcommittee is now focused on two working groups, one on eLearning activities and one on courses. Both working groups will have a chairperson who will sit on the ESCMID Education Subcommittee board. In order to strengthen all our leadership skills, we started a leadership program for individuals with active leading roles at ESCMID – the feedback was great. Thus, it will be rolled out for all members in 2024 with two different courses, one on understanding yourself to improve leading others and the other on improving presentation skills to efficiently bring your message across more.

### Prepare for and rapidly respond to emerging infections:

To lead the fight against infections, we must think and act globally. In our globalised economy, more than one billion people cross

borders every year. With the vast amount of travellers that may also be transporting animals and goods, antimicrobial resistance and emerging infections are spread successfully across the globe. We have appointed a director of the newly established Emerging Infections Subcommittee, that will work on preparedness and response to emerging infections, by developing guidance, educational and research activities in this realm.

### Drive forward the response to antimicrobial resistance (AMR):

AMR, the silent pandemic, has been ongoing and increasing but has received little acknowledgment so far: more awareness is needed. Therefore, we have put much more emphasis on AMR and have appointed a director for the newly established AMR Action Subcommittee. We have initiated a high-level collaboration with the Global Leaders Group on AMR just before ECCMID 2023 by organising a symposium where policy meets science, which had great resonance and participation from high level politicians, WHO representatives and H.R.H Crown Princess Mary Elizabeth, Princess of Denmark. This collaboration will continue at ESCMID Global 2024 as well, with another high-level symposium to forge partnership between policy and science.

Diagnostics is key for AMR, hence we reinforce our support to the European Committee on Antimicrobial Susceptibility Testing (EUCAST) and the EUCAST Development Laboratory (EDL) in providing breakpoints and antimicrobial susceptibility testing methods on a global scale; focus on infection prevention and control against AMR with the European Committee on Infection Control (EUCIC) and its training programme; as well as developing further the ESCMID Antimicrobial Stewardship Certificate.

Thank you for your support and commitment to ESCMID, as well as your team spirit and trust. I very much look forward to continue working together.

# For a healthier tomorrow we need to fight infections worldwide by collaborating beyond borders and disciplines.

At this year's ESCMID Global (formerly known as ECCMID) in Barcelona, Spain, I will be assuming the role of President, taking over from my colleague and friend Annelies Zinkernagel.

The COVID-19 pandemic has changed the world and especially the fields of clinical microbiology and infectious diseases. Now, as we are still in a post pandemic era, ESCMID is taking responsibility to lead and navigate the CM and ID community in an increasingly complex world. The pandemic has painfully reminded us that infectious diseases need to be seen in a broader perspective and require a multifaceted approach.

In this light, in the upcoming two years of my presidency, I will continue the path laid out by the new ESCMID strategy, where we will continue to serve our broad and diverse community throughout the full career span within CM, ID, IPC and One Health on scientific, educational and professional matters, both in Europe and globally. We will continue to develop ESCMID Global to allow it to encompass new CM/ID/IPC/One Health related topics while still keeping its core topics. The new ESCMID strategy is based on three pillars, Education – investing in the leaders of tomorrow, Antimicrobial Resistance (AMR) – be at the forefront of the fight against the silent pandemic, Emerging Infections – alert and prepare our community for emerging threats. In order to strengthen these areas, we have appointed directors for each of them as well as reorganised and established new subcommittees that will take care of rolling out our strategy for those areas.

In addition, we will intensify our collaboration with partner – and affiliated societies and expand our global outreach. In order to further strengthen the ESCMID community and liaise with our affiliated societies, we will establish a network of local champions. For members in resource-limited countries we are establishing new award categories – emerging investigator awards,

better possibilities for gaining experience through observership and mentorship and more eLearning opportunities. All these initiatives are on top of discounts on membership fees, registration fees for all our events, multiple attendance and travel grants that we offer already.

As part of our responsibility of fighting the silent pandemic, we are organising for the second time the ESCMID-GLG high-level event "Forging partnerships between science and policy". This event is a unique opportunity for policymakers and distinguished scientists to delve into strategic AMR issues and focus on pioneering solutions to guarantee equitable access to antibiotics and complementary diagnostics. Together, we can work towards innovative solutions, ensuring a healthier future for all.

I'm very much looking forward to this task, not to say challenge, and I am grateful for the excellent work of my predecessors that have navigated ESCMID through the pandemic and helped growing and shaping it to the Society it is today. I'm positive that, with the support of the excellent members of the Executive Committee, the ESCMID Office and the collaboration with partner societies, I will be able to stand up to this honourable task with confidence.

## Word of thanks

I conclude by thanking all the colleagues who dedicate time, passion and talent to help ESCMID achieve its mission. Among them, all Executive Committee and ad-hoc members, chairs and members of our standing committees (EUCAST and EUCIC) and Subcommittees, Parity Commission, Ethics Advisory Committee, Trainee Association of ESCMID (TAE), Study Groups, Congress Programme Committee, and the Clinical Microbiology and Infection (CMI) Editorial Board: without your

Robert Skov,  
ESCMID President-  
Elect and  
Secretary General



engagement and hard work ESCMID would not exist. Last but not least, I want to thank Annelies Zinkernagel and Maurizio Sanguinetti for the passion and commitment they put into the Society during their presidencies; it's an honour to take over from you, and I will proudly build on the foundation you formed to achieve our common goals.

## Outlook on highlights of the ESCMID events and programmes in 2024

To fulfil our mission and address our strategic focus on education, antimicrobial resistance and emerging infections, we have planned several activities for state-of-the-art education and science on CM & ID, among which are:

### ESCMID think tank and ESCMID-GLG Symposium on AMR on 26 April 2024:

This two-parts high-level event will provide a forum where policymakers and distinguished scientists are able to engage on key AMR issues and forge partnerships between science and policy. This session is intended to strengthen the links between research, policy and practice to generate sustainable solutions and a broader research agenda to address the pressing needs of AMR across all sectors.

### ESCMID Summer School on 29 June to 6 July 2024:

A one-week course dedicated to postgraduate and continuing medical education. The programme covers a broad range of topics in CM & ID and will interest young MDs at the end of their specialty training as well as biologists, pharmacists, Ph.D. students, and postdoctoral fellows working in the infection field.

### ESCMID-ASM Conference on drug development on 17–20 September 2024:

Co-sponsored by the American Society for Microbiology (ASM), this multidisciplinary conference will cover the challenges, opportunities and current requirements for antimicrobial drug development to address antimicrobial resistance.



For a more comprehensive overview on our education programmes and scientific projects, check our website

# Thank you

In April 2024, Maurizio Sanguinetti and Alexander Friedrich will leave the ESCMID Executive Committee (EC), after serving 8 years within the society's leadership team. We deeply thank Maurizio and Alex for their efforts at ESCMID during their terms in the EC – their commitment will be missed, and we are sure that they will greatly contribute to ESCMID activities in the coming years.

## Maurizio Sanguinetti

### Serving the Society in many ways

In April 2024, Immediate Past President Maurizio Sanguinetti will complete his term on the ESCMID Executive Committee (EC). Maurizio served in different ESCMID leading bodies, such as the board of the ESCMID Study Group of Invasive Fungal Infections (EFISG), the Education Subcommittee and the Parity Commission. He joined the EC in 2016 as Professional Affairs Officer, where he served until 2018. He then became President in 2020, until 2022.

### Presidency through challenging times

Maurizio has been the ESCMID President during the difficult times of the COVID-19 pandemic. He would have started his presidency in Paris at ECCMID 2020, however, the congress was cancelled, and this was an unexpected setback that put the society under enormous pressure, both financially and operationally. During his presidency, ESCMID quickly adapted to changes and managed to deliver online content to members and the community, such as webinars on the pandemic and the online conference ECCVID in 2020 – as well as the first ever fully online ECCMID in 2021, and the first ever hybrid



ECCMID in 2022. These achievements uplifted the Society and gave us new means to support our growing community.

### Eventful times

A highlight during Maurizio's term as Immediate Past President, was the organisation of the 20th ESCMID Summer School, held in Rome in July 2023, which was a great success. Maurizio also contributed to activities related to the participation of ESCMID to the European Clinical Research Alliance on Infectious Diseases (Ecraid).

Maurizio is a fantastic investigator in clinical microbiology, and he always had a quiet and friendly way to solve problems, as well as willingness to help!

## Alexander Friedrich

### Long-term involvement

In April 2024, Treasurer and Financial Support Officer Alexander Friedrich will complete his term on the ESCMID Executive Committee (EC). Alex has been the chair of the Study Group on Epidemiological Markers (ESGEM) and joined the EC in 2016 as Treasurer, where he served for two consecutive terms until 2024.

### Making ends meet

As a scientist, being the treasurer of a society presents multiple challenges, which were unexpectedly intensified during the COVID-19 pandemic. Nonetheless, his reporting on the Society's budget was exemplary and always detailed and precise. During his term as treasurer, strategic investments have been made by the Society to build the infrastructure for delivering content in new ways. His ability to rapidly understand how to translate efforts into resources have been a great asset for ESCMID activities.

### Legacy in infection control

One of the great contributions of Alex to the Society, has been the establishment of the European Committee on Infection Control



(EUCIC), together with Evelina Tacconelli. He immediately understood the potential of creating EUCIC and supported strongly all the immense amount of work needed to build it from scratch. EUCIC is now one of the most active standing committees of ESCMID, providing educational and research resources in infection control to our community.

Alex was also keen on acknowledging the environmental impact of the society activities and worked on initiatives to promote a sustainable future for ESCMID. To summarise Alex's work in the EC, he is the meta-competence man!

# New Executive Committee Members

At the end of 2023, elections were held among the ESCMID members to fill two positions on the ESCMID Executive Committee, both representing Clinical Microbiology. The new members duly elected were Fidelma Fitzpatrick, Clinical Microbiology specialist at Beaumont Hospital, Dublin (Ireland), and Gülşen Özkaya Şahin, Clinical Microbiology specialist at Region Skåne, Laboratory Medicine, Lund (Sweden).

Fidelma and Gülşen will join the ESCMID Executive Committee in April 2024. We congratulate the new elected officers and look forward to their contributions to the Society.

## Fidelma Fitzpatrick

ESCMID has been part of Fidelma's career as a clinical microbiologist from when she first specialised in clinical microbiology over 25 years ago. As a clinical microbiologist based on a small island in the west of Europe, from the outset, it was very clear why international collaboration was important, not only for her own career development, but ultimately for the benefit of Irish patients.

Fidelma has worked at a national level for several years before turning towards academia. As the Irish ECDC national HAI focal point, she gained great experience of international collaborations and discussions centred on HAI epidemiology. The networks she developed through ESCMID have helped her to date with developing national guidelines and programmes, establishing national surveillance programmes in addition to having a network of international experts to help with difficult clinical cases. Fidelma has also been a member of several ESCMID guideline



**Fidelma Fitzpatrick**  
Professor of Clinical Microbiology and Head of Department, Royal College of Surgeons in Ireland Consultant Microbiologist, Beaumont Hospital, Dublin, Ireland

groups enjoying these collaborations hugely in addition to learning significantly from other colleagues. Most recently, she has coordinated her centre in hosting a number of ESCMID international observers and enjoyed sharing best practices and experiences with them.

Fidelma has also worked closely with patient representatives at national and local level and seen the huge benefits of this for national programmes, research and teaching. As a clinician, educator and researcher, it can be difficult to look beyond the symptoms and truly understand the impact of infection, sepsis, or antimicrobial resistance on patients and their families.

As a new EC member, Fidelma will bring her enthusiasm to shaping ESCMID's strategy for the coming years, progress PPI in all aspects of ESCMID, continue to focus and mentor early-career researchers and trainees and ensure our members benefit from membership in the same way she has over the last 25 years.

## Gülşen Özkaya Şahin

Gülşen's journey within the Society has been one of active engagement, serving in the ESGVH for two terms (as the current chair of the Study Group) and dedicating three years to the ESCMID's Education Subcommittee.

Gülşen firmly believes that science recognises no borders – it transcends political divisions, and a unified Europe plays a pivotal role in advancing global scientific progress. In this light, she is deeply convinced that ESCMID, as one of the foremost scientific nongovernmental organisations, holds a vital position in advancing research, education, and offering valuable guidance to administrative and governmental bodies, not only in Europe but also at a global scale.



**Gülşen Özkaya Şahin**  
Senior Consultant of Clinical Microbiology Region Skåne, Laboratory Medicine Lund, Sweden

Gülşen's commitment is to channel her energy and enthusiasm into all facets of the Society's activities. Furthermore, she aspires to inspire and encourage greater participation from members hailing from regions that have been less actively involved until now. It is her firm belief that such encouragement is indispensable for elevating scientific standards and fostering a cohesive scientific environment across Europe.

Another key objective is to foster stronger interdisciplinary relationships with related scientific societies. Through these collaborations, Gülşen aims to bolster the influence of clinical microbiology and infectious diseases within the broader medical landscape in Europe and beyond.

Gülşen's dedication to ESCMID's mission runs deep, she is eager to contribute to its realisation and genuinely feels privileged to serve and make a meaningful impact.

## Executive Committee Members

### Current members



**Annelies Zinkernagel**  
President



**Robert Skov**  
President-Elect &  
Secretary General



**Jon Friedland**  
Scientific Affairs  
Officer



**Alex Friedrich**  
Treasurer & Financial  
Support Officer



**Emmanuelle Cambau**  
Education Officer



**Anu Kantele**  
Professional Affairs  
Officer



**José Ramón Paño-Pardo**  
Guidelines, Publications &  
Communications Officer



**Maurizio Sanguinetti**  
Immediate  
Past President

### Members as of 29th April 2024



**Robert Skov**  
President  
–  
ESCMID Council



**Jon Friedland**  
President-elect &  
Secretary General  
–  
ESCMID Council



**Annelies Zinkernagel**  
Immediate Past-  
President & Treasurer



**Gülşen Özkaya Şahin**  
Scientific Affairs Officer  
–  
Scientific Affairs  
Subcommittee,  
Study Groups



**Emmanuelle Cambau**  
Education Officer  
–  
Education  
Subcommittee



**Anu Kantele**  
Professional Affairs  
Officer  
–  
Professional Affairs  
Subcommittee,  
Parity Commission, TAE



**José Ramón Paño-Pardo**  
Publications and &  
Guidelines Officer  
–  
Publication Sub-  
committee, Guidelines  
Subcommittee



**Fidelma Fitzpatrick**  
Pandemic Preparedness  
Officer  
–  
AMR Action Subcommit-  
tee, Emerging Infections  
Subcommittee

## Ad hoc Members

### Current members



**Jakob Moran-Gilad**  
ECCMID Programme  
Director



**Leonard Leibovici**  
CMI Editor-in-Chief



**Mary Horgan**  
Education Director



**Holger Rohde**  
AMR Action Director



**Luigia Scudeller**  
Guidelines Director



**Christian Giske**  
EUCAST Chairperson



**Evelina Tacconelli**  
EUCIC Chairperson



**Murat Akova**  
Membership Counsellor

### Members as of 29th April 2024



**Jakob Moran-Gilad**  
ESCMID Global  
Programme Director  
–  
ESCMID Global  
Programme Committee



**Leonard Leibovici**  
CMI Editor-in-Chief



**Angela Huttner**  
CMI Communications  
Editor-in-Chief



**Mary Horgan**  
Education Director  
–  
Education  
Subcommittee



**Holger Rohde**  
AMR Action Director  
–  
AMR Action  
Subcommittee



**Xavier Lescure**  
Emerging Infections  
Director  
–  
Emerging Infections Sub-  
committee



**Luigia Scudeller**  
Guidelines Director  
–  
Guidelines  
Subcommittee



**Sören Gatermann**  
EUCAST Chairperson



**Nico Mutters**  
EUCIC Chairperson



**Murat Akova**  
Membership Counsellor  
–  
Ethics Advisory  
Committee



## Other Functions

### Current member



**Giulia De Angelis**  
ECCMID Associate  
Programme Director

## Executive Office

### Current members



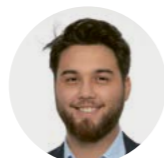
**Simone Brüderli**  
Chief Operating Officer



**Carla Seiler**  
Head of  
Event Organisation



**Benjamin Schirra**  
Project Manager (Events)



**Erik Wennström**  
Event Coordinator



**Alessandro Piroso**  
Science Project Manager



**Mélinda Müller**  
Professional Affairs  
Coordinator



**Magdalena Krzyzaniak**  
Science Manager



**Patrick Kudyba**  
Associate Science  
Manager



**Chiara Speziale**  
Science &  
Guidelines Manager



**Piotr Kardas**  
Science &  
Education Manager



**Majella Ding**  
Science Programme &  
Education Coordinator



**Mark Vogel**  
Associate Education  
Manager



**Nicolas Burri**  
Education Coordinator



**Gabriela Albornoz**  
Education Coordinator



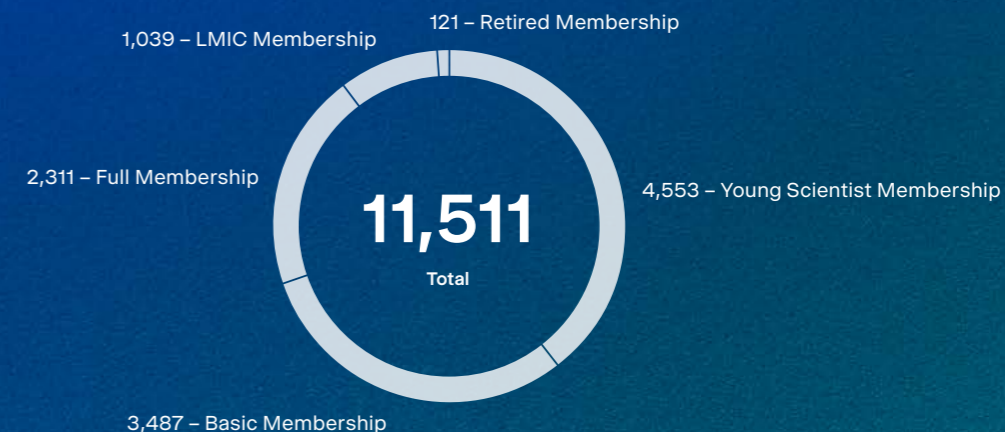
**Fernanda Barony**  
Education Coordinator



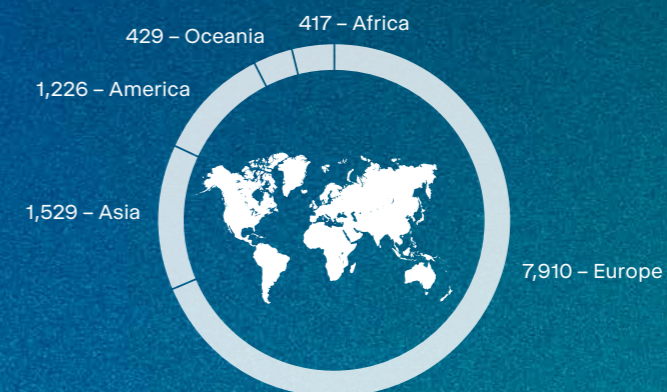
**Abrey Oliver**  
Science Intern

## Membership Stats

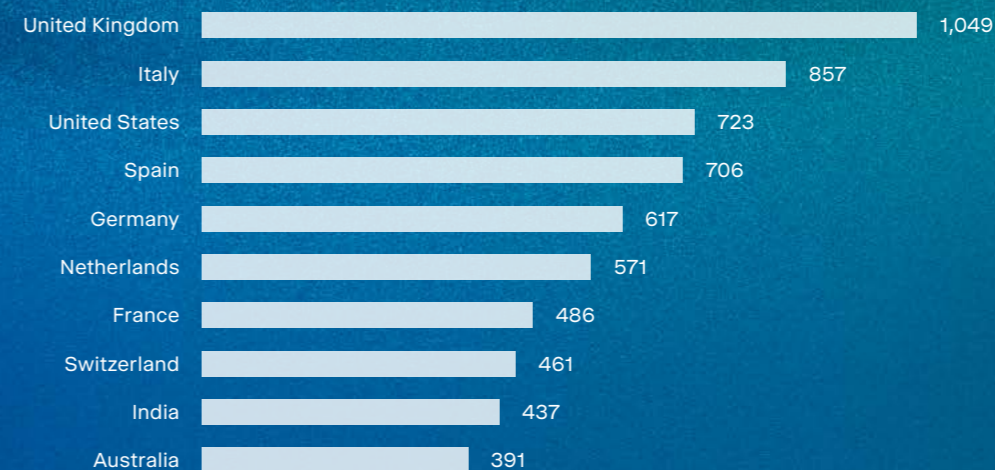
### Type of membership



### Membership by continent



### Top ten membership countries





Science



Jon S. Friedland,  
ESCMID Scientific  
Affairs Officer

## Bringing science forward

This has been another great year for ESCMID science which underpins all ESCMID activities. It is a complete pleasure to interact with so many leading experts as well as talented young scientists across the field of infection. Their excellence supported by a high level of enthusiasm is inspiring.

Science is always at the heart of ESCMID and our activities and support for innovative research and scientific excellence show through in our report for the past year. You will read in this chapter about the developments of our ESCMID Study Groups, the innovative research projects that have been awarded funding, the fantastic young investigators that were recognised this year and the tireless work of the Scientific Affairs Subcommittee (SAS). We continue to focus on improving the diagnosis, treatment and prevention of infection-related diseases, and this shines through in this report.

We continue to expand our research grant funding year after year to accommodate the

influx of important research that is taking place and particularly to support first time researchers who are just starting their career in clinical microbiology and infectious disease. To further support this, we have partnered with the ESCMID Förderverein who have contributed this year to support projects covering the important topics of emerging infections and antimicrobial resistance (AMR) which are the two key areas of focus in ESCMID's strategic mission.

AMR continues to be a silent pandemic that has wide ranging effects on global health. ESCMID participated once again this year to World Antimicrobial Awareness Week, a WHO initiative that takes place every November bringing to light this very serious threat. This year under the guidance of the ESCMID AMR Action Committee Director, Holger Rohde, ESCMID organised a two-part webinar series covering the evolution of AMR emergence and how technology can be used to support the control of AMR emergence. These webinars were well attended and are the latest additions to the ESCMID virtual events of the year, which included a joint ESCMID/IDSA webinar exploring what to expect from the respiratory virus season. We can look forward to many more events such as these to take place in the years ahead as we develop our strategy for combatting AMR on a global scale.

### Supporting Young Investigators

Next, I would like to bring your attention to the Young Investigator Awards for 2024. This year we introduced several changes to the awards including adding another type of award, the Emerging Young Investigator Award which aims to support and acknowledge young scientists in LMICs within the field of infection. I am pleased to announce the first recipient of this award is Ira Praharaaj from India. I am also delighted to introduce the 4 Young Scientist Awardees for 2024 who are: Nathan Brendish, Pieter De Cock, Henning Grull and Rasmus Leistner. These young researchers have shown outstanding drive and talent through the beginning of their careers in CM and ID and stand out from the crowd. The awardees have truly exceptional achievements, and I am very much looking forward to being with you and listening to them speak at ESCMID Global 2024.

### ESCMID Research Grants

I think that it is important to support the growing ESCMID scientific community and their ground-breaking research. Our Research Grant Programme remains highly popular with over

130 submitted proposals within the theme of Bacterial Infections and Diseases. For the 2024 ESCMID Research Grant call, 38 research grants were awarded. This is 9 more from the previous Bacterial call continuing the trend of increasing the amount of grants awarded. At this point, I want to sincerely thank our committed panel of expert reviewers for tackling the immense task that was laid before them. They have all done a terrific job evaluating the large number of proposals, being flexible and we really appreciate them giving their time to support ESCMID.

For the second time, we have awarded the Study Group Collaboration Grant, which will now become a regularly awarded research grant for as long as we continue to receive high-quality translational research proposals. This year we congratulate Dr Michael Beeton, who was awarded for leading a project entitled "Developing a novel method for assessing global genetic diversity and molecular surveillance of Mycoplasma pneumoniae during its re-emergence after the COVID-19 pandemic and beyond" on behalf of ESGMAC, ESGEM and ESGMD. There were many excellent proposals submitted by our Study Groups, and I want to thank the SAS and our external reviewers for their support in assessing the applications. We wish Dr Beeton and colleagues much success in his project and look forward to seeing the results.

In addition to the SG Collaboration Grant, we have awarded our normal Study Group Research Grants. We awarded a record number of SG research grants this year thanks to both ESCMID and the ESCMID Förderverein. Applicants had more chances than ever before to receive funding, and this is shown in the number of received submissions which reached 19 which was a 70 % increase from the previous year. After careful consideration and review from the SAS members and an external expert reviewers, the Executive Committee decided to make 7 awards this year, 5 from ESCMID and 2 from the ESCMID Förderverein for proposals dealing with AMR and Emerging Infections.

I would like to congratulate all of the many excellent grantees this year and wish them "Good luck!" in their upcoming projects.

### ESCMID Study Groups: networking through science

The ESCMID Study Groups are a central source of participation available to all ESCMID members and with 32 different specialist groups, almost all areas of science are covered.

They create education, training, networking, research and leadership opportunities in the fields of clinical microbiology and infectious diseases. For the past year, the Study Groups have improved their communication outreach and built upon their networks, which shows in the level of activity that we see from them. Overall, they have increased the number of publications, educational events, and networking presence via communication to the members in their Study Group newsletters or to the wider public on dedicated social media channels. This year we hosted a “Summer of Study Groups” social media campaign that gave the ESCMID community an inside look at the leaders and how being a part of the group can benefit the average ESCMID member.

I am delighted that our Study Groups have been growing in size and activity. We have most Study Groups now over a critical mass with sizable

member growth in all 32 groups. The Study Groups continue their mission of reaching out and engaging their communities in a number of ways. A prime example are the Study Group Webinars which I am happy to report have continued to grow and expand. This year alone, the SGs organised over 35 virtual events with many of them claiming audiences of over 100 attendees. These free virtual seminars range from lunch-time keynote lectures to educational “back-to-basics” series introducing the group to a wide audience of young professionals. This, along with the many publications, ongoing research projects, guideline development and external collaborations organised through the Study Groups, shows that they are leaders promoting ESCMID across all sectors. We look forward to seeing the continued growth, scientific activity and outreach of these important working groups on behalf of ESCMID.

#### The Scientific Affairs Subcommittee expands!

The Scientific Affairs Subcommittee (SAS) has the key role of advising the society on strategic matters related to Scientific Affairs. Each SAS member takes individual responsibility for a specific assigned section/theme (see table next page) which is their expertise and, as section/theme leader, they will work in that area to facilitate scientific collaborations. Furthermore, the SAS members participate in the evaluation of Study Group research grant applications and carefully analyse the productivity of the ESCMID Study Groups as presented in the annual reports, with the final aim of maximising their scientific activity. The SAS also contributes to the main congress meeting. I am very pleased to acknowledge the entire SAS for the outstanding work that they have done this year and for their continued support of the Scientific Affairs of ESCMID.

This year after request from the membership, we have expanded the SAS to include a new theme of Infection Prevention and Control (IPC). IPC has become a mainstay topic in the ESCMID scientific strategy and it was time to implement this as a theme under the SAS allowing a specific member to oversee the various activities that fall under this umbrella. After a successful open call, we would like to formally congratulate Elena Carrara from Italy as the newest member of the SAS and inaugural leader of the IPC theme. We are confident that she will do a fantastic job and look forward to what she will bring to the position and the committee as a whole. Congratulations and good luck!

## Study Groups

Now is the time to look back over the many activities performed by our Study Groups in 2023. The following pages show a selection of the major achievements and ongoing activities of the individual study groups. In general, the Study Groups contribute strongly to the congress scientific programme by proposing scientific sessions and submitting abstracts to be presented. They organise the majority of courses/workshops for the ESCMID education programme and publish key scientific articles on behalf of ESCMID. The Study Groups are a major part of ESCMID’s continuing mission to promote and support research, education, training, and good medical practice for all aspects of Clinical Microbiology and Infectious Diseases. Study Group membership is open to all ESCMID members and you are invited to join those matching your interests.

#### Scientific Affairs Subcommittee

- Chair:  
Jon Friedland (United Kingdom)
- Bacteria & Bacterial Diseases:  
Colin MacKenzie (Germany)
- Fungi & Fungal Diseases:  
Alexandre Alanio (France)
- Parasites & Parasitic Diseases:  
Kurt Hanevik (Norway)
- Viruses & Viral Diseases:  
Christine Kelly (Ireland)
- Pathogenesis & Immunology:  
Silvio Daniel Brugger (Switzerland)
- Epidemiology, Vaccinology & Public Health:  
Bettie Voordouw (Netherlands)
- Clinics & Therapeutics:  
Pontus Naucler (Sweden)
- Diagnostics:  
Joanna Maria Zajkowska (Poland)
- Antimicrobial Resistance & Susceptibility Testing:  
Alvaro Pascual Hernandez (Spain)
- Infection Prevention and Control:  
Elena Carrara (Italy)
- TAE representative (Ad hoc):  
Nicholas Power (Ireland)

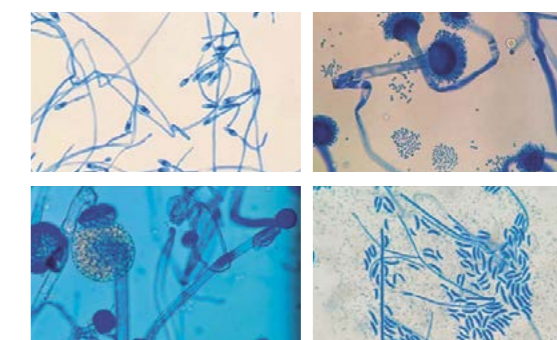
#### ESCMID Study Group for *Clostridioides difficile* (ESGCD)



ESGCD Executive Committee at ECCMID 2023

- Our first year working with our patient representative on the executive committee, John Heritage (he oversees the direction of our voyage).
- Organised five webinars, including three covering Back to Basics of *C. difficile* infection, one in collaboration with ESGHAMI and one highlighting the work of our members. These are available at: [elibrary.escmid.org](http://elibrary.escmid.org) (search term ESGCD).
- Co-organised the ESCMID postgraduate course on clinical studies in Prague Czech Republic and three other conferences where the central theme was *C. difficile*.
- Supported young scientists by free registration, prizes for the best posters and lectures.
- Released four newsletters about all our activities that are available on the ESGCD website.

#### ESCMID Fungal Infection Study Group (EFISG)



Microscopic characteristics of 4 fungi responsible for invasive fungal infections with lactophenol cotton blue staining (x400). Images from the collection of Saint-Louis Hospital, Paris, France.

- Publication of the guideline “A conceptual framework for nomenclatural stability and validity of medically important fungi: a proposed global consensus guideline for fungal name changes” de Hoog S, et al. *J Clin Microbiol.* 2023.
- Organisation of the ESCMID Postgraduate Education Course on Antifungal stewardship from primary to tertiary care. Leuven, Belgium 9–10 February 2023.
- Co-organisation of postgraduate Education Course: Update on Infections in Immunocompromised Host by ICHS and EFISG, ESGICH, ESGREV. Online 28–29 November 2023.

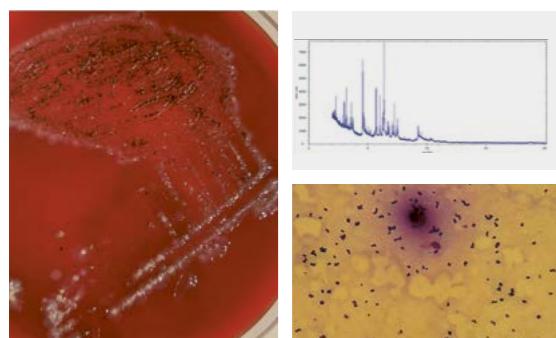
**ESCMID Food- and Water-borne Infections Study Group (EFWISG)**



EFWISG at ECCMID 2023

- Co-organisation of the ESCMID Hybrid Postgraduate Educational Course “An Introduction to Healthcare Associated Waterborne Infections: Ecology, Prevention, and Control”, 31st October – 2nd November, Belfast, UK.
- Publication of the article “Unraveling Enterococcus susceptibility to quaternary ammonium compounds: genes, phenotypes, and the impact of environmental conditions”, Microbiology Spectrum, 2023.
- The exponential increase of EFWISG members: during EFWISG welcomed 42 members from 25 different countries, thank you!

**ESCMID Study Group for Anaerobic Infections (ESGAI)**



Mixed culture of anaerobic bacteria, Gram stain of Gram-positive anaerobic cocci, and a MALDI spectrum of a clinical anaerobic isolate.

- Co-leading organiser of the Anaerobe 2023 conference which took place 12–14 July 2023 in Cardiff, UK.
- Supported the organisation of ESCMID Global 2024 with 8 scientific session proposals.
- Consistent communication with members including periodic newsletters and the upkeep of a Social media group.

**ESCMID PK/PD of Anti-Infectives Study Group (EPASG)**



Faculty members and participants at the first EPASG postgraduate course to be organised outside Europe, in Boston pre-IDWeek 2023.

- Organisation of the ESCMID postgraduate course “Optimised dosing of antibiotics – understanding PK/PD, clinical breakpoints, and therapeutic drug monitoring” 9–10 October 2023, in Boston, US.
- Organisation of three sessions at session and two webinars on PK/PD and therapy optimisation of antimicrobials, including antibiotics, antivirals, antifungals and phages, and how to write successful grant applications.
- Publication of international consensus recommendations for the use of prolonged infusion and therapeutic drug monitoring of beta-lactam antibiotics, endorsed by ESCMID, IDSA, BSAC and other societies.

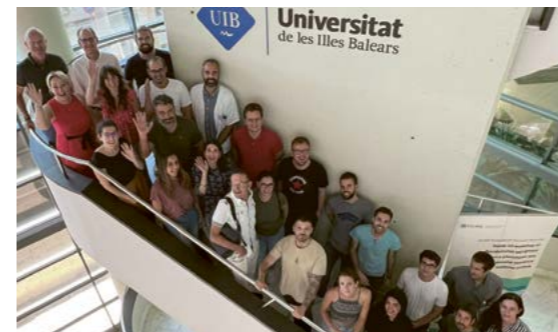
**ESCMID Study Group for Antimicrobial stewardship (ESGAP)**



ESGAP at ECCMID 2023

- Publication of the original article “National Action Plans for Antimicrobial Resistance – a framework for operationalizing existing plans and developing a research strategy to address gaps and opportunities” Charani et al. Lancet Glob Health. 2023.
- Organiser of the World AMR Awareness Week webinar “Behaviour change interventions in antimicrobial stewardship programmes” that took place 13 November 2023, Online.
- ESGAP supported the tutorship and observership programme as part of the ESCMID AMS Certificate programme. These mentors help the participants develop and implement an AMS project prepared and executed throughout the 2-year study period.

**ESCMID Study Group for Antimicrobial Resistance Surveillance (ESGARS)**



Students and faculty of the Hands-on workshop on Pseudomonas aeruginosa resistance phenotypes and whole genome sequence resistome analysis

- Ongoing research project “Improving survival of Pseudomonas aeruginosa antibiotic resistance in Europe”. PI Antonio Oliver on behalf of ESGARS. JPIAMR 2022 network call.
- Organised the technical workshop Last-line antibiotics against XDR/PDR Gram-negatives: Understanding phenotype-genotype correlations and PK/PD approaches. Athens, Greece, 7–9 June 2023.
- Organised the hands-on workshop on Pseudomonas aeruginosa resistance phenotypes and whole genome sequence resistome analysis. Palma, Spain, 4–8 September 2023.

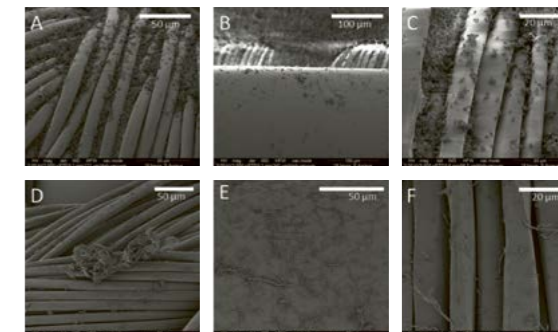
**ESCMID Study Group for Bloodstream Infections, Endocarditis and Sepsis (ESGBIES)**



Infective Endocarditis (2021 SingHealth Group.)

- Published the groundbreaking CarDINE study “Risk factors for Gram-negative bacterial infection of cardiovascular implantable electronic devices: multicentre observational study.”
- Hosted an engaging webinar on the hot topic of echocardiography for Enterococcus faecalis bacteraemia (Webinar title: An echocardiography is needed in all patients with Enterococcus faecalis bacteraemia? PROS [Anders Dahl, Denmark] and CONS [Nuria Fernández-Hidalgo, Spain], available in congress library).
- Initiated a survey on ‘Early oral switch in endocarditis: an international cross-sectional survey by ESGBIES’ to be published in 2024.

**ESCMID Study Group for Biofilms (ESGB)**



Formation of Staphylococcus aureus and Pseudomonas aeruginosa aggregates on EndoVascular Aneurysm Repair (EVAR) grafts after just 15 min bacterial exposure, followed by 18h of incubation. (Sunnerhagen et al. CMI 2023)

- Published a follow up to our original guidelines on diagnosis and treatment of biofilm infections. Led by Prof Niels Hoiby, we provide an opinion piece on whether or not to undertake a revised guideline.
- The ESGB committee led two online webinars in our Biofilm Corner sessions, where we brought together experts to discuss extracellular vesicles and bacteriophage in the context of biofilms.
- Our members led an editorial board to publish a Special Edition from Eurobiofilms 2022. This series of 23 papers was edited by Maria Dolores Macia, Elisa Borghi and Tom Coenye.

**ESCMID Study Group for Lyme Borreliosis (ESGBOR)**



Tick bite of an Ixodes ricinus nymph, left index finger (Volker Fingerle)

- Co-organiser of the International Symposium on Tick-Borne Pathogens and Disease, 22–25 October 2023, Vienna, Austria.
- Lead organiser of the ESGBOR Symposium – Lyme vaccine and beyond, 13–14 September 2023, Frankfurt, Germany.
- Publication of the article “Identification of potential biomarkers in active Lyme borreliosis” in PLoS ONE 2023;18(6):e0287586.
- Successful application for a “Subcommittee on the Taxonomy of Borrelia” at the International Committee for Systematics of Prokaryotes (ICSP).

**ESCMID Study Group for Critically Ill Patients (ESGCIP)**



ESGCIP at ECCMID 2023

- Publication of a large international multicentre cohort on bloodstream infections in critically ill patients: "Epidemiology and outcomes of hospital-acquired bloodstream infections in intensive care unit patients: the EURO-BACT-2 international cohort study." Tabah et al. Intensive Care Medicine 2023.
- Publication of a large international multicentre cohort on Pneumocystis jirovecii pneumonia: "Pneumocystis jirovecii pneumonia in intensive care units: a multi-center study by ESGCIP and EFISG". Giacobbe et al. Critical Care 2023.
- Membership increased significantly in the last year: from 97 to 125 members.

**ESCMID Study Group for Epidemiological Markers (ESGEM)**



ESGEM at ECCMID 2023

- A new ESGEM Executive Committee was elected: Natacha Couto as Chair (United Kingdom), Ângela Novais as Secretary (Portugal), Benjamin P. Howden as Treasurer (Australia), Sylvain Brisse as Scientific Officer (France) and Sandra Reuter as Education Officer (Germany).
- Two publications were supported by ESGEM, one original article entitled "Phylogenomics of Globally Spread Clonal Groups 14 and 15 of Klebsiella pneumoniae" by Rodrigues et al. Microbiology Spectrum, and a personal view entitled "Taking hospital pathogen surveillance to the next level" by Werner et al. Microbial Genomics.
- ESGEM introduced 3 Travel Grants for ESCMID Global 2024 to support Young Researchers. With this initiative we hope we can support more young scientists in their pursuit to attend the great ESCMID conference.

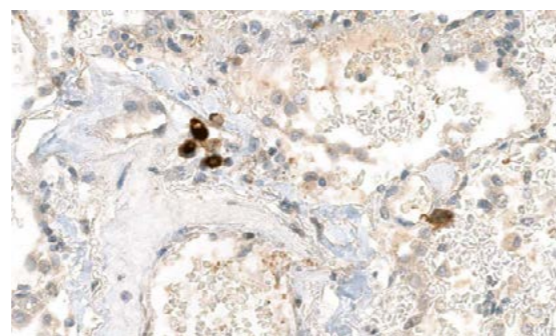
**ESCMID Study Group for Clinical Parasitology (ESGCP)**



ESGCP at ECCMID 2023

- Organised the highly successful online course "Advanced course on histopathology of parasitic infections: when the past becomes the future" This course will be available in the ESCMID library.
- Organised the 2-hour congress symposium "Human-animal interface: chasing Echinococcus", which gave an overview of recent research developments with practical importance in diagnosing echinococcal infections, neglected zoonoses of major medical importance prioritised by the WHO 2021–2030 roadmap of neglected infectious diseases, touching ecology, clinical management and control.
- The ESGCP provided three attendance grants for congress attendees presenting posters in clinical parasitology.
- Our study group went from just 80 members in April 2023 to 123 members in October 2023!

**ESCMID Study Group for Forensic and Postmortem Microbiology (ESGFOR)**



Spike protein detected in lung cells (brown coloration) from an autopsy of a patient that died suddenly after a positive nasal RT-PCR for SARS-CoV-2. Courtesy of Domitille Callon, Reims, France.

- Research grant supported by ESGFOR Dr Domitille Callon, Reims, France: 'Pathogenesis of Viral Myocarditis as a Cause of Sudden Death Study of Viral Inflammatory Markers'.
- Manuscript in Microorganisms, 2023: 'The future is now: unraveling the expanding potential of human (necro)microbiome in forensic investigations' Cláudia-Ferreira et al.
- Postgraduate ESCMID course, 1–2 March, 2023: 'What can forensic medicine teach us for the management of pandemics?' co-organisers ESGIE and SEPAP.
- Online workshop ESGFOR-SEPAP "Challenging autopsy cases: what we may learn from them" 19 December, 2023.
- Develop and implement an AMS project prepared and executed throughout the 2-year study period.

**ESCMID Study Group for Host and Microbiota Interaction (ESGHAMI)**



ESGHAMI at ECCMID 2023

- Publication of the original article: "Which trial do we need? A sequential multiple assignment randomized trial to determine the optimal Clostridioides difficile treatment sequence" van Prehn et al. CMI 2023.
- Co-organisation of the hybrid symposium "Microbiome: From benchtop to bedside", 7 November 2023, Ghent, Belgium.
- More than double number of members in 2023 compared to 2022.
- Lively discussions at ESGHAMI business meeting 2023.

**ESCMID Study Group for Infectious Diseases of the Brain (ESGIB)**



ESGIB at ECCMID 2023

- Publication of the "ESCMID Guidelines on diagnosis and treatment of brain abscess in children and adults" Bodilsen et al. CMI 2023.
- ESGIB organised the first on-site teaching course since COVID19 in Amsterdam on Diagnostic and therapeutic approach to patients with CNS infections. With 75 participants the course was the largest organised by ESGIB so far and it was fully booked months in advance, showing the interest for CNS infections is growing.
- ESGIB organised a scientific meeting and dinner the Friday before ECCMID to share our research findings and increase interaction in the community.

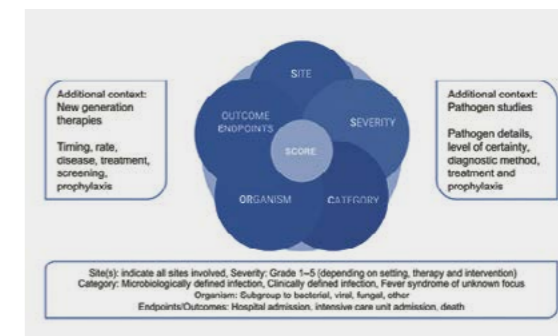
**ESCMID Study Group for Implant-associated Infections (ESGIAI)**



ESGIAI at ECCMID 2023

- Publication of the article: Is an isolated positive sonication fluid culture in revision arthroplasties clinically relevant? Rondaan C, et al. Clin Microbiol Infect. 2023.
- Organisation of the Web-symposium "Differences and similarities in diagnosis and treatment among cardiovascular, orthopaedic and neurosurgical implant-associated infections" (June 2023) and Bimonthly Case Discussion Webinars.
- SILO App ESGIAI Case Discussion Group: A chat for case discussion in the Siilo App, allowing a free discussion about complex cases in implant-associated infections between all the members that are included in the group.

**ESCMID Study Group for Infections in Compromised Hosts (ESGICH)**



Consensus position statement on advancing the standardised reporting of infection events in immunocompromised patients by Teh et al. Lancet Infect Dis 2023

- Organiser of the ESCMID Post-graduate course "Transplant Infectious Diseases: Quality and Safety in Transplantation" Belo Horizonte, June 2023.
- Co-organiser of the ESCMID Post-graduate course "Update on Infections in Immunocompromised Host" Online, November 2023.
- Support to the Infections and Transplantation – 9th International Congress, Varese 6–8 September 2023 and the Congresso Brasileiro de Infectologia, Salvador.

**ESCMID Study Group for Infections in the Elderly (ESGIE)**



ESGIE at ECCMID 2023

- Organised the ESCMID Post-graduate course “Respiratory infections in elderly” Bordeaux, France, 5–6 October 2023.
- Publication of the original article “Predictors of survival in elderly patients with coronavirus disease 2019 admitted to the hospital: derivation and validation of the FLAMINCOV score” Tiseo et al. CMI 2023.
- Publication of the original article “Real-life experience with remdesivir for treatment of COVID-19 among older adults: a multicentre retrospective study” Margalit et al. J Antimicrob Chemother 2023.

**ESCMID Study Group for Legionella Infections (ESGLI)**



ESGLI members at the 7th International conference of ESGLI

- Published an article “Premise plumbing bacterial communities in four European cities and their association with Legionella” in *Frontiers in Microbiomes* as a result of an ESCMID funded research grant.
- Organised the 7th International conference of the ESCMID study group on Legionella infections, Chania, Crete 23–24 October 2023.
- Lead organiser of an ESCMID funded postgraduate course – An introduction to healthcare associated waterborne infections: ecology, prevention, mitigation and control, Belfast 31st October – 2nd November 2023.

**ESCMID Study Group for Infections in Travellers and Migrants (ESGITM)**



ESGITM at ECCMID 2023

- Support for the European Conference on Tropical Medicine and International Health 20–23 November 2023. Session on Migrant Health. To screen or not screen: This is the question.
- Excellent contribution to the ESCMID Global 2024 programme with 4 accepted session proposals.
- Continue support and communication for the ESGITM members by way of periodic newsletters.

**ESCMID Study Group for Mycoplasma and Chlamydia Infections (ESGMAC)**



ESGMAC at ECCMID 2023

- Published the article “Mycoplasma pneumoniae: delayed re-emergence after COVID-19 pandemic restrictions” Patrick M Meyer Sauteur, et al. *Lancet Microbe* 2023.
- Organised the 3 Virtual Events covering: “Update on Chlamydia trachomatis”, “Zoonotic Chlamydia and Chlamydia like bacteria” and “Research and clinical aspects of Chlamydiales and Mycoplasma”.
- Ongoing work on the Chlamydia pneumoniae ESGMAC study. Epidemiological study with > 15 laboratories in Europe in order to retrospectively describe the epidemiology of Chlamydia pneumoniae from January 2014 to December 2023 (10 years period).

**ESCMID Study Group for Genomic and Molecular Diagnostics (ESGMD)**



ESGMD at ECCMID 2023

- Organisation of the ESCMID Postgraduate Technical Workshop “Diagnostic Microbiology: MALDI-TOF, genomics, metagenomics, automation and molecular microbiology 2nd course”, 12–15 June in Lausanne, Switzerland.
- Six ESGMD webinars on relevant topics related to molecular and genomic diagnostics.
- Published the article “Quality of MALDI-TOF mass spectra in routine diagnostics: results from an international external quality assessment including 36 laboratories from 12 countries using 47 challenging bacterial strains” Cuénod et al. CMI 2023.

**ESCMID Study Group for Nosocomial Infections (ESGNI)**



Intensive care room after cleaning and disinfection waiting for the next contagious patient

- Publication of the commentary “Greater attention to flexible hospital designs and ventilated clinical facilities are a pre-requisite for coping with the next airborne pandemic” Humphreys et al. CMI 2023.
- Organised the ESCMID Post-graduate course “An introduction to healthcare associated waterborne infections: ecology, prevention, mitigation and control” Belfast, Northern Ireland, 30 October – 2nd November 2023.
- ESGNI collaborated with the Healthcare Infection Society for the Annual Federation of Infection Societies (FIS) Conference 2023 (14–15 November 2023) organising a symposium “Antiseptic stewardship: Time for a wakeup call!”

**ESCMID Study Group for Mycobacterial Infections (ESGMYC)**



ESGMYC at ECCMID 2023

- Publication of the guideline “Clinical standards for the management of adverse effects during treatment of tuberculosis” Singh et al. *International Journal of TB and Lung Disease* 2023.
- Organised the ESCMID Post-Graduate Educational Course “How to use genomic data for optimizing the management of tuberculosis and other mycobacterial infections” Milan, Italy, 6–7 September 2023.
- Organised 2 webinars in collaboration with NTM-NET covering the topics “Critical review on recent drug resistant-TB trials and challenges related to implementation of new WHO recommendations” and “Nontuberculous mycobacterial infections in bronchiectasis patients from a microbiologist’s and a clinician’s point of view”.

**ESCMID Study Group for Non-traditional Antibacterial Therapy (ESGNTA)**



Participants and teachers of the ESGNTA workshop on Personalised phage therapy: from the lab to the patient a hands-on course in Brussels, Belgium July 2023

- Organisation of an ESCMID postgraduate technical workshop on Personalised phage therapy: from the lab to the patient a hands-on course in Brussels, Belgium July 2023.
- Publication of review article: Phages and phage-borne enzymes as new antibacterial agents, by the ESGNTA executive committee in *Clinical Microbiology and Infection*.
- Publication of a supplement on the November issue of *Clinical Infectious Diseases* supported by ESGNTA and edited by ESGNTA members on Personalised Phage Therapy: Basic Principles of monitoring and treatment.

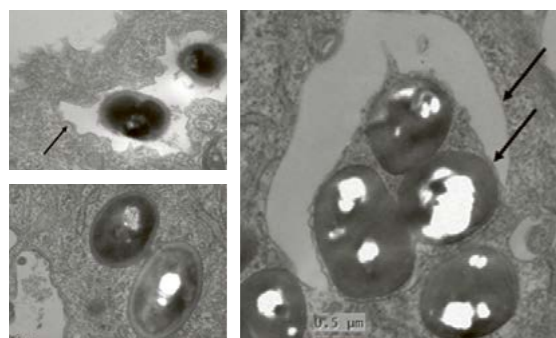
**ESCMID Study Group for Public Health Microbiology (ESGPHM)**



ESGPHM Executive Committee at ECCMID 2023

- Joint development of Position paper entitled: "Real-time genomic surveillance for enhanced control of infectious diseases and antimicrobial resistance" submitted for publication in Frontiers in Science.
- Contribution of 7 proposals to ESCMID Global 2024 with sessions accepted on Molecular wastewater surveillance, Access to laboratory diagnosis and surveillance in remote settings, Screening for the control of multidrug-resistant organisms in hospitals with cross-border care and Foodborne parasites from healthy diets.
- Several members have lent their support to the implementation of a Mini-Lab, which is being pilot tested to facilitate infection management and control of AMR in low-resource regions.

**ESCMID Study Group for Staphylococci and Staphylococcal Diseases (ESGS)**



Intracellular staphylococcus aureus

- Award of the first-ever Study Group Collaboration Grant as leading ESG for the "MUSKETEERS" project: an ESCMID initiative for a better understanding and management of S. aureus prosthetic joint infections using large scale phenogenomic analyses.
- Collaborative project within ESGS members: The Pettenko-PROJECT – Study of virulence potential of S. Pettenkoferi isolated in Europe.
- Organisation of a session at the Phage in LYON 2023 held on 27–29 November, 2023, Lyon, France.

**ESCMID Study Group for Respiratory Viruses (ESGREV)**



ESGREV at ECCMID 2023

- This year, ESGREV organised and participated in 2 webinars and 1 post-graduate course in Istanbul, Turkey.
- As a study group, we published 6 articles, including original research and guidelines, in very high-impact journals.
- In addition to collaborating with numerous ESCMID study groups, we collaborated on educational events and published guidelines with the Immunocompromised Host Society (ICHS) and American Society of Transplant and Cellular Therapy (ASTCT), respectively.
- ESGREV boasts an active X (formerly Twitter) account @esgrev\_escmid with 230+ followers. We've also published a quarterly newsletter highlighting the achievements and accolades of our accomplished membership.

**ESCMID Study Group for Viral Hepatitis (ESGVH)**



ESGVH at the 2nd Croatian Conference on Liver and Infection

- Proposal entitled Evaluation of Rocahepevirus ratti infection as emerging cause of acute hepatitis of unknown origin in Europe has been accepted for funding thanks to the ESCMID Förderverein grant for research in AMR.
- Organisation of post-graduate education course "Update on current emerging infections" in collaboration with EITaF and EIAS in Istanbul, Turkey, 19–20 January, 2023.
- Supported the organisation of 10 national conferences with speakers on behalf of ESGVH as well as 9 ESGVH webinars throughout the year.

**ESCMID Study Group for Veterinary Microbiology (ESGVM)**



ICOHAR 2023, 18–20 April 2023, Copenhagen, Denmark – a meeting showcasing some of our core objectives.

- Delivery of the conference ICOHAR International Conference on One Health Antimicrobial Resistance, 18–20 April 2023.
- Published original article in Journal of Antimicrobial Chemotherapy 'In vitro and in vivo susceptibility to cefalexin and amoxicillin/clavulanate in canine low-level methicillin-resistant Staphylococcus pseudintermedius' June 2023.
- Together with ENOVAT, one of our MoU partners, delivered 5th International Conference of the European College of Veterinary Microbiology, 21st–23rd September 2023.
- Delivered a satellite training school on veterinary clinical bacteriology at the meeting above, 20th–21st September 2023.

**ESCMID Vaccine Study Group (EVASG)**



EVASG promotes vaccinations across Europe

- In 2023, EVASG organised a 3-day post-graduate course on measles and measles eradication (Paris, March 2023); 3 more courses are planned for 2024 (vaccines and pregnancy, new vaccine platforms, ID and war).
- EVASG performed a multicentric study on vaccination and Covid-19 severity, leading to a publication in CMI in 2023; a parallel study is currently performed regarding the recent Omicron subvariants.
- Continuing to coordinate the ESCMID guidelines on the vaccination of the solid organ transplant in 2023–24, and will then focus on other immunocompromised hosts.



## AMR Action outlook

Antimicrobial resistance (AMR) is undoubtedly one of the most significant challenges facing modern medicine. Finding solutions to the silent pandemic that claimed up to 1.5 million lives in 2019 requires close collaboration among various stakeholders. Scientific societies, policy makers, social institutions, non-governmental organisations and industry associations must develop strategies at national and international levels and ensure immediate implementation of agreed actions.

Antimicrobial resistance has been an established theme within ESCMID since its inception. Driven by ESCMID study groups and other committees, excellent science and ground-breaking initiatives have been developed to improve understanding and control of AMR. Undoubtedly, AMR is a cross-cutting core

competence of ESCMID and key AMR issues are represented within the organisation by outstanding scientists and clinicians. Therefore, there is a strong belief that ESCMID can make a significant contribution to the global fight against AMR through collaboration with stakeholders at national and international levels. This self-perception has led to the integration of the fight against AMR as a strategic goal of ESCMID.

As a direct result of the strategy approved last year the ESCMID AMR Action Committee (EAAC) was established to coordinate and promote ESCMID's AMR-related activities, increase their visibility and communicate them to relevant stakeholders. In order to achieve these goals, Prof. Holger Rohde (Hamburg, Germany) has been appointed to lead the EAAC in 2023. Initial activities included organising a two-part webinar series during World Antimicrobial Resistance Awareness Week focusing on the evolution of AMR emergence and how technology can be used to support the control of AMR emergence. Additionally, the EAAC supported a scientific session at the annual meeting of the European Society for Paediatric Infectious Diseases (ESPID) and will be conducting a webinar in collaboration with IDSA. The committee is currently expanding to include six officers: Scientific Officer, ESCMID Study Group Liaison Officer, Education Officer, Guidelines & Conference Support Officer, International Policy Officer and Communications Officer. With the completion of the team in 2024, specific approaches for the achievement of the strategic objectives will be formulated and opportunities for their implementation will be identified. This is the start of demonstrating ESCMID's ability as a scientific society to make a significant contribution to the fight against AMR at the European and international level.

**Holger Rohde,**  
AMR Action  
Director



Steering Committee,  
June 2023.

## European Committee on Antimicrobial Susceptibility Testing (EUCAST) in 2023–24

EUCAST provides breakpoints and antimicrobial susceptibility testing methods on a global scale. ESCMID is the administrative, financial, and scientific framework for EUCAST. ESCMID ([escmid.org](http://escmid.org)) and the European Centre for Disease Prevention and Control (ECDC; [ecdc.europa.eu](http://ecdc.europa.eu)) supported EUCAST financially in 2023. ESCMID also supports the development of the EUCAST disk diffusion method, and the EUCAST microdilution methods for fungi, veterinary pathogens, and mycobacteria. EUCAST has a memorandum of understanding with the European Medicines Agency to develop breakpoints for antimicrobial agents licensed in Europe.

“During 2023, the breakpoint revision for fosfomycin was completed. New breakpoints were devised for antimicrobial agents against anaerobic bacteria, *Brucella melitensis* and *Bacillus anthracis*, in collaboration with experts in Europe. Non-species PK-PD breakpoints were taken out of the breakpoint tables and replaced by a guidance document with cut-off values to be used for bacterial species lacking clinical breakpoints. Important work continued on antimicrobial susceptibility testing of endocarditis pathogens and defining paediatric dosing regimens.”

Christian Giske, EUCAST Chair

#### EUCAST Steering Committee

The Steering Committee met five times during 2023 (face-to-face and by videoconference) and dealt with many aspects of breakpoints and antimicrobial susceptibility testing. “Visiting” General Committee members and European Medicines Agency (EMA) representatives and/or ECDC representatives attended some meetings.

In 2023, Christian Giske (Sweden) was the Chair, John Turnidge (Australia) (January to June) and then Mandy Wootton (UK) (June onwards) were the Scientific Secretaries, Rafael Cantón (Spain) the Clinical Data Coordinator, and Gunnar Kahlmeter (Sweden) the Technical Data Coordinator. Regular Steering Committee members were Alasdair MacGowan (UK), Gérard Lina (France), Sören Gatermann (Germany), Christoffer Lindemann (Norway), with Barbara Holzkecht (Denmark) and Anouk Muller (Netherlands) representing General Committee members and Joseph Meletiadis (Greece) and Shampa Das (UK) as PK/PD experts. Marlène Amara will be replacing Gerard Lina as the French representative in 2024.

#### EUCAST General Committee

The annual on-site meeting for General Committee members and colleagues in general was held at the ECCMID Meeting in Copenhagen in 2023.

#### National Antimicrobial Susceptibility Testing (AST) Committees (NACs)

Nearly all European and many non-European countries have established NACs (see figure below). These provide national input to all aspects of EUCAST, promote national strategies for susceptibility testing and help implement EUCAST breakpoints and methods. Interest in EUCAST from countries outside the European Union continue to increase. See link for full list of NACs: [eucast.org/nac](https://eucast.org/nac)

#### EUCAST Global Influence

The number of laboratories/countries globally using the EUCAST breakpoints/guidelines and disk diffusion methods continue to grow:

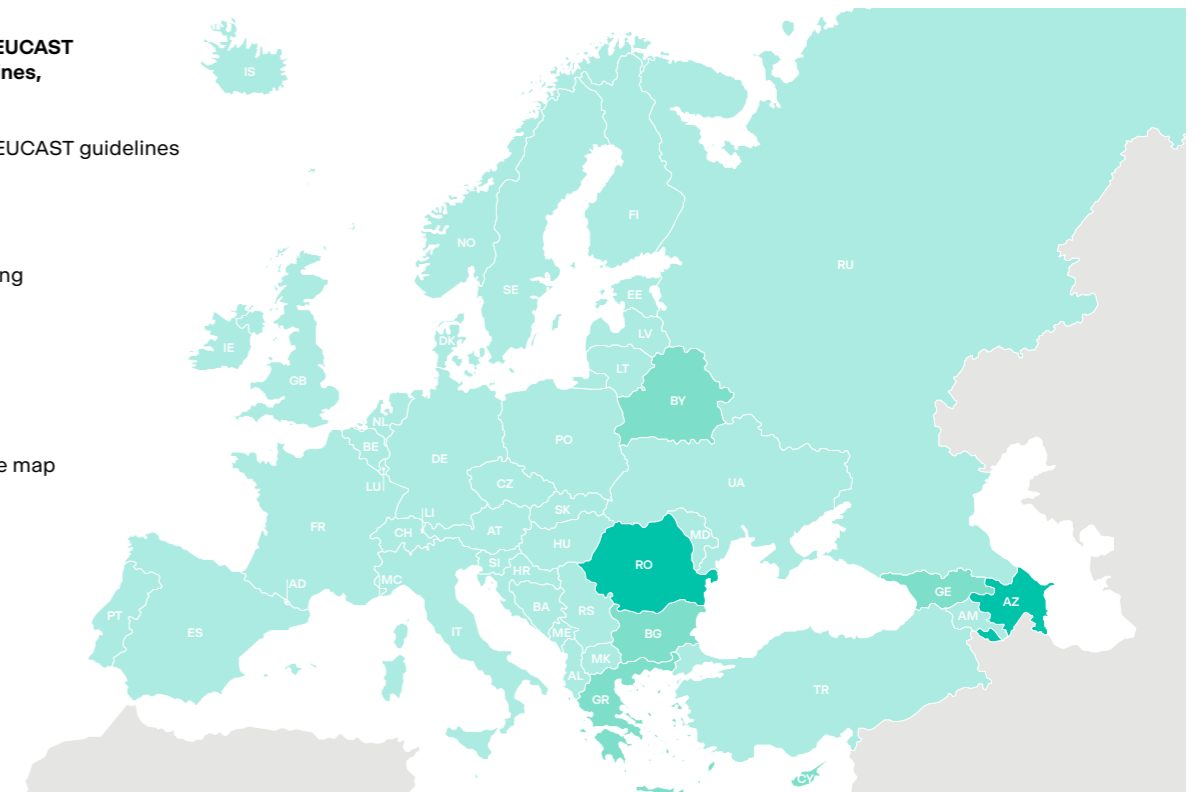
Implementation of EUCAST breakpoints/guidelines, January 2024

% Laboratories on EUCAST guidelines

- > 90 %
- 50–90 %
- 10–50 %
- < 10 %
- Information lacking

Countries not on the map

- Australia
- Brazil
- China
- Canada
- Iceland
- Israel
- Malta
- Morocco
- New Zealand
- South Africa
- USA



## Subcommittees

The following subcommittees were active during 2023:

### Antifungal Susceptibility Testing Subcommittee (AFST) 1 January – 31 December, 2023

The AFST continued with their work on breakpoints and methods for antifungal agents. The AFST General Subcommittee held the annual meeting on 17 April and the Steering Committee of the AFST Subcommittee held face to face meetings on 17–18 January, 2023 (Rotterdam, NL), 18 April (ECCMID, DK) and online meetings 11–12 July, 2023. An autumn meeting was postponed due to an unexpected death.

The following has occurred during 2023.

- Rezafungin is a new echinocandin agent which has proven difficult to test using the standard reference EUCAST E.Def 7.3.2 method.
  - A multicentre study was conducted and published in 2023 demonstrating in a multicentre format that a modified method including Tween-20 0.002% in the medium eliminated this issue (Arendrup et al., 2023).
  - A rationale document has been prepared and approved, but will not be released until the drug is licensed.
  - Updated BP and ECOFF overview document and QC document including the rezafungin ECOFFs and QC ranges for rezafungin testing has been released).
  - Finally, a new method document E.Def 7.4 has been released including the Tween 20 supplementation method.
- A screening agar for detection of terbinafine and itraconazole resistance in *Trichophyton* spp. has been developed and is currently being analysed in a multicentre study (5 laboratories, a blinded strain collection of 30 wild type and mutant strains, 2 batches of agar plates). The study has been delayed, a) because the commercially prepared plates did not meet QC criteria, b) a notable number of dermatophyte strains had been contaminated with multidrug resistant gram-negative rods. New plates and strain sets have been prepared and tested during Q3–Q4 of 2023.

- The anidulafungin and micafungin rationale documents are undergoing revision. MIC distributions for 10 more species have been prepared and collected and will be forwarded for ECOFF validation by EUCAST ECOFF subcommittee and EUCAST SC in September. Following that, the RDs will be updated and released, likely later this year (2023) or early 2024.

- Susceptibility testing of echinocandins against *Aspergillus* is not feasible following the EUCAST standard method E.Def 9.4 because these agents are not bactericidal and the aberrant growth endpoint is challenging to read with the standard inoculum. A multicentre study has been conducted during this past year and a revised method document using a lower inoculum is now validated. The *Aspergillus* reference testing document will be updated to include this method.

- Manogepix is a new antifungal agent in development for clinical use. A multicentre study has been performed to generate MIC distributions for ECOFF setting. Six centres have participated during Q3–Q4 2023. Data management is ongoing.

- EUCAST ECOFFs and breakpoints against *Candida auris* are lacking for licensed agents (amphotericin B, echinocandins and flucytosine) and upcoming ones (rezafungin and manogepix). Multicentre MIC data are currently being generated for all five agents.

- Publications  
Arendrup, M.C., Arikan-Akdagli, S., Castanheira, M., Guinea, J., Locke, J.B., Meletiadi, J., Zaragoza, O. 2023 Multicentre validation of a modified EUCAST MIC testing method and development of associated epidemiological cut-off (ECOFF) values for rezafungin. *J. Antimicrob. Chemother.* 78, 185–195. [doi.org/10.1093/jac/dkac373](https://doi.org/10.1093/jac/dkac373).

### Veterinary Antimicrobial Susceptibility Testing Subcommittee (VetCAST) 1 Jan – 31 Dec 2023

The Steering Committee (SC) is composed of Chair Peter Damborg (Denmark), Scientific Secretary Gudrun Overesch (Switzerland), PK data coordinators Ludovic Pelligand (UK) and Ronette Gehring (Netherlands), and PD data coordinator Kees Veldman (Netherlands).

In addition, Pierre-Louis Toutain (France), Petra Cagnardi (Italy) and Alain Bousquet-Melou (France) are supporting and closely involved in the work of the SC.

Many of the activities of VetCAST are done in collaboration with a European COST Action initiative called the European Network for Optimisation of Veterinary Antimicrobial Treatment (ENOVAT).

VetCAST undertook the following activities during the report period:

- Provided QC ranges for *Staphylococcus aureus* ATCC 29213 (amoxicillin, amoxicillin-clavulanic acid (fixed ratio), ampicillin, chlortetracycline and oxytetracycline) and for *Streptococcus pneumoniae* ATCC 49619 (amoxicillin-clavulanic acid (fixed ratio), chlortetracycline and oxytetracycline). Moreover, 16 new ECOFFs and 7 new TECOFFs were established. MIC data for this purpose had been obtained from 5 laboratories testing in parallel tetracyclines and beta-lactam MICs for isolates belonging to *Staphylococcus aureus*, *Staphylococcus pseudintermedius*, *Streptococcus equi*, *Actinobacillus pleuropneumoniae*, *Mannheimia haemolytica*, and *Pasteurella multocida*.
- Drafted a first version of a veterinary breakpoint table (not published yet).
- Organised in July a workshop on quantitative methods for determination of clinical breakpoints as part of the international congress of the European Association for Veterinary Pharmacology and Toxicology (EAVPT).
- Held in May a training school in Toulouse entitled “Hands on the pharmacokinetic/pharmacodynamics approach for antibiotics”.
- Published a paper entitled “Pharmacokinetic-pharmacodynamic cutoff values for benzylpenicillin in horses to support the establishment of clinical breakpoints for benzylpenicillin antimicrobial susceptibility testing in horses”.

- Created three rationale documents for public consultation (comments due in Jan 2024):
  - Amoxicillin-clavulanic acid in dogs – IV
  - Amoxicillin-clavulanic acid in dogs – Oral
  - Benzylpenicillin in horses – IM

- Continued collecting and modelling PK and PD data. Apart from data leading to the three RDs stated above, priorities were given to:
  - Doxycycline in pigs
  - Oxytetracycline in cattle

- Formal presentations of the VetCAST-ENOVAT work
  - 5th International Conference of the European College of Veterinary Microbiology, September 2023 in Bled, Slovenia, presentation done by Gudrun Overesch

### Antimycobacterial Susceptibility Testing Subcommittee (AMST) 1 Jan – 31 Dec 2023

The ongoing work on breakpoints and methods for antimycobacterial agents in the AMST moved forward during 2023. The AMST committee met on 14 February (virtual meeting), at ECCMID Copenhagen on 16 April (hybrid meeting) and 4 December 2023 (virtual meeting).

During 2023 the EUCAST-AMST welcomed new general committee members (Slovenia, Ukraine, Benin, Switzerland, and the US).

The AMST undertook the following activities during the report period:

- Continued multicentre study for the calibration of MIC determination in microdilution assays and Bactec MGIT against the EUCAST-AMST reference method: Phase 2 of the study started in the autumn/winter of 2023, organised by Jensen, Becton-Dickinson and ThermoFisher.
- Finalisation of the EUCAST-AMST multicentre study on MIC determination of *M. tuberculosis* H37Rv reference strain against non-water-soluble drugs: Eight laboratories from the EUCAST-AMST laboratory network performed MIC-testing on the *Mtb* H37Rv strain for bedaquiline (BDQ), clofazimine (CFZ), pretomanid (PA), and delamanid (DLM) with the use of a modified reference protocol for MIC-determination of non-water-soluble agents. Results were analysed and the original

EUCAST reference protocol for MIC-determination of *M. tuberculosis* was complemented with the test procedure to be used for non-water-soluble agents. The revised reference protocol will be published on the EUCAST website for open consultation before the final publication. A manuscript of the multicentre study will be submitted for publication in a scientific journal in the beginning of 2024.

- New reference protocol developed for the MIC-determination of non-tuberculous mycobacteria (NTM): An EUCAST-AMST reference protocol for the MIC-determination of non-tuberculous mycobacteria was developed in 2023 and has been reviewed thoroughly by the AMST committee. A multicentre study was initiated in late 2023 to validate the protocol by testing the *M. avium* ATCC 700898 and *M. abscessus* ATCC 19977 reference strains against several relevant antimicrobials (e.g. clarithromycin, azithromycin and amikacin). Two laboratories have started the testing at this point and the study will continue during 2024.
- Discussion with Otsuka Pharmaceuticals about testing of a new compound: AMST met with Otsuka during the ECCMID in Copenhagen and at the Union meeting in Paris November 2023 and discussed the mutual interest to conduct a multicentre study for testing of a new antimycobacterial agent. The AMST has forwarded the request to the AMST laboratory network to find out which of the reference laboratories can contribute with MIC testing of the new Otsuka compound with the EUCAST reference method during 2024.
- Formal presentations of the EUCAST-AMST work: European Congress of Clinical Microbiology and Infectious Diseases (ECCMID): April 2023 in Copenhagen, presentation done by Emmanuelle Cambau (EUCAST Educational workshop), Jim Werngren (eposter), and Thomas Schön (eposter).
- Publications: Towards clinical breakpoints for non-tuberculous mycobacteria – Determination of epidemiological cut off values for the *Mycobacterium avium* complex and *Mycobacterium abscessus* using broth microdilution. Fröberg G, Maurer FP, Chrysanthou E, Fernström L, Benmansour H,

Boarbi S, Mengshoel AT, Keller PM, Viveiros M, Machado D, Fitzgibbon MM, Mok S, Werngren J, Cirillo DM, Alcaide F, Hyyryläinen HL, Aubry A, Andres S, Nadarajan D, Svensson E, Turnidge J, Giske CG, Kahlmeter G, Cambau E, van Ingen J, Schön T; EUCAST AMST and ESCMYC study groups. *Clin Microbiol Infect.* 2023 Jun;29(6):758–764. doi:10.1016/j.cmi.2023.02.007. Epub 2023 Feb 20. PMID: 36813087.

#### Susceptibility testing of anaerobic bacteria

Following publication of breakpoints and disk diffusion method for common rapidly-growing anaerobes (*Bacteroides* spp., *Prevotella* spp., *Fusobacterium necrophorum*, *Clostridium perfringens*, and *Cutibacterium acnes*), breakpoints and methods were developed for additional agents (ampicillin, amoxicillin, amoxicillin-clavulanic acid, ertapenem, imipenem and for *C. acnes* ceftriaxone and linezolid). These were published in March 2023 (version 13.1). The subcommittee was disbanded in June 2023 and further and the necessary work on development of breakpoints for additional species was taken covered by EDL and the Steering Committee: *Clostridium ramosum*, *Clostridium innocuum*, *Clostridium tertium*, *Clostridium septicum*, *Cutibacterium avidum*, *Fingoldia magna*, *Parvimonas micra*, *Fusobacterium nucleatum*, *Peptostreptococcus anaerobius* and *Peptoniphilus* spp. Breakpoints and methods for some or all of these are expected late 2024 or early 2025.

#### Whole Genome Sequencing (WGS) Ad hoc Subcommittee

During 2023, the subcommittee on whole genome sequencing was reconvened to provide an updated review of the utility of whole genome sequencing to provide clinically useful susceptibility results. The subcommittee is chaired by Antonio Oliver (Spain) and Örjan Samuelsen (Norway).

#### Bacteriophage AST Ad hoc Subcommittee (PHAST)

A new subcommittee was set up to define and promote the development and standardisation of reference methods for in vitro phage susceptibility testing (PST), determine European criteria for the interpretation of PST for the

monitoring of phage activity, promote quality assurance of in vitro phage susceptibility testing and promote education and training in phage susceptibility testing. The committee is chaired by Frederic Laurent (France).

#### MIC Distribution and ECOFF Subcommittee

The review of all MIC distributions and ECOFFs were completed using the newly developed SOP 10.2 in 2023. The subcommittee is co-chaired by Gunnar Kahlmeter and John Turnidge. A position paper summarising how EUCAST develops wild type distributions and ECOFFs was published in 2023: Wild-type distributions of minimum inhibitory concentrations and epidemiological cut-off values-laboratory and clinical utility. Gunnar Kahlmeter & John Turnidge. *Clin Microbiol Rev.* December 1, 2023.

#### EUCAST network laboratories

The work on developing the structure of “EUCAST Network Laboratories” continued in 2023. These labs have specific expertise and training in EUCAST Antimicrobial Susceptibility Testing (AST) for bacteria and EUCAST Antifungal Susceptibility Testing (AFST) methods, respectively. EUCAST Network Laboratories are committed to help develop, validate, and troubleshoot EUCAST AST/AFST methods and/or to help train and educate other laboratories in EUCAST methods. They also play an important role in trouble-shooting and improving methods and/or assisting the EDL and the Steering Committee in the development of clinical breakpoints by providing strains and MIC datasets. For more information and for laboratories interested in participating, please visit The EUCAST AST Network Laboratories on the EUCAST website ([eucast.org](http://eucast.org)). Currently, 25 bacteriology and 15 mycology laboratories have been integrated into the networks.

#### Joint EUCAST/CLSI Working Group

The EUCAST Steering Committee continue to collaborate with the Clinical Laboratory Standards Institute (CLSI), to improve various aspects of susceptibility testing.

Following the publication of SOP 11 (Procedure for optimising disk contents (potencies) for disk

diffusion testing of antimicrobial agents using harmonised CLSI and EUCAST criteria), two further SOPs were published in 2023:

- SOP 12.0 Process for submitting disk content (potency) data for joint CLSI and EUCAST working group review and approval (21 September, 2023).
- SOP 13.0 Procedure for confirming the acceptability of Mueller-Hinton agar sources for subsequent use in CLSI and/or EUCAST studies to establish disk diffusion quality control ranges (21 September, 2023).

These SOPs promote a harmonised approach to all technical aspects of development of disk diffusion methods for new antimicrobial agents.

#### EUCAST Development Laboratory for anti-bacterial agents

The EUCAST Development Laboratory had another active year. There was ongoing work on several old and new agents in pre-clinical or clinical development, work on the selection of disk contents for disk diffusion and the development of zone diameter breakpoints to correlate with clinical MIC breakpoints and ECOFFs. Significant activities included:

- Extensive methodology development for cefiderocol, including both disk diffusion and media evaluation for MIC reference testing, often in collaboration with multiple groups.
- Evaluation of commercial BMD products for testing cefiderocol against Enterobacterales, along with colleagues in France.
- Developed and published breakpoints for new agents for use in the Rapid Antimicrobial Susceptibility testing (RAST) methodology (published March 2023).
- Developed and published breakpoints for prolonged incubation (16–20h) for RAST.
- Developed and published (March 2023) breakpoints for additional antimicrobial agents for anaerobe bacteria.
- Developing a EUCAST disk diffusion method for *Neisseria gonorrhoeae*.
- Developing MIC and zone diameter breakpoints for *Nocardia* spp. Together with colleagues in France and Australia.
- Reviewing benzylpenicillin breakpoints for *Streptococcus pneumoniae*.

- Reviewing and developing breakpoints for enterococci other than *E. faecium* and *E. faecalis*.
- Development of disk contents and zone diameter breakpoints for several new agents.
- Digital seminars, SOPs, instruction videos, scientific articles, tutorial programmes.
- Participation with lectures and posters in conferences and courses.
- Welcoming ESCMID/EUCAST Observers.
- Updated Frequently Asked Questions.

### EUCAST breakpoints

Version 13.1 of the MIC and zone diameter breakpoint tables for bacteria was published on the EUCAST website in June 2023. The new table included additional breakpoints for anaerobic bacteria. Version 14.0 breakpoint tables for bacteria were published in early December 2023 for consultation and in its final state on 1 January, 2024 ([eucast.org/clinical\\_breakpoints](https://eucast.org/clinical_breakpoints)). Breakpoints for new agents are set by EUCAST as part of the marketing authorisation process with the European Medicines Agency (EMA). In the past year, breakpoints for several new agents are in the process of being evaluated. Existing breakpoints are also revised as part of an ongoing process.

Work is also in progress, in conjunction with the European Society for Paediatric Infectious Diseases, on developing an equivalent tab to the Dosages tab for paediatrics. Throughout 2024 work will continue on reviews of breakpoints specifically for endocarditis and meningitis.

### EUCAST guidance

The EUCAST guidance document on *Stenotrophomonas maltophilia* has been extensively reviewed in 2023, due for publication in 2024. The following guidance documents were published in 2023; Guidance on the Implementation of Revised Aminopenicillin Breakpoints for Enterobacterales (published January 2023), Cefotaxime and Ceftriaxone for *Staphylococcus aureus* infection (published January 2023), Graphs to illustrate Area of Technical Uncertainty (published February 2023) to complement the Area of Technical Uncertainty (ATU) in antimicrobial susceptibility testing guidance document (published January 2022), Guidance

on use of fosfomycin i.v. breakpoints (published December 2023) and finally, EUCAST guidance on When there are no breakpoints in breakpoint tables (published June 2023) provides guidance on various agents against aerobic and anaerobic bacteria and is designed to provide support following the removal of the PKPD tab in version 14.0 of the breakpoint tables. Development work is continuing on updating the Burkholderia cepacia guidance document plus various new guidance documents.

### EUCAST documents

During 2023, rationale documents were re-formatted and new versions developed following MIC distribution and ECOFF reviews throughout 2022–2023. Rationale documents for the following agents were published in 2023: tigecycline (3.0), ceftriaxone (1.0), cefiderocol (2.0) and i.v. fosfomycin (1.0). Updating of other rationale documents to the new format will take place over the next few years.

Standard Operating Procedures (SOPs) 11 and 12 were published in 2023, covering collaborative processes between EUCAST and CLSI.

- SOP 12.0 Process for submitting disk content (potency) data for joint CLSI and EUCAST Working Group review and approval (21 September, 2023).
- SOP 13.0 Procedure for confirming the acceptability of Mueller-Hinton agar sources for subsequent use in CLSI and/or EUCAST studies to establish disk diffusion quality control ranges (21 September, 2023).

### EUCAST education

The EUCAST Steering Committee held the following educational sessions at ECCMID 2023 (Copenhagen, DK):

- 3 hr Educational Workshop
- 2 hr Symposium: "Treatment of Severe Infections"
- 1 hr Symposium: "Use and Misuse of MICs in Patient Management"
- 1 hr Meet the Experts Session: "Frequently Asked Questions on EUCAST Antimicrobial Susceptibility Testing"

EUCAST Steering Committee members lectured on the ESCMID Postgraduate Course "Antimicrobial susceptibility testing with EUCAST criteria and methods", in Melbourne, Australia 28–31 October, 2023.

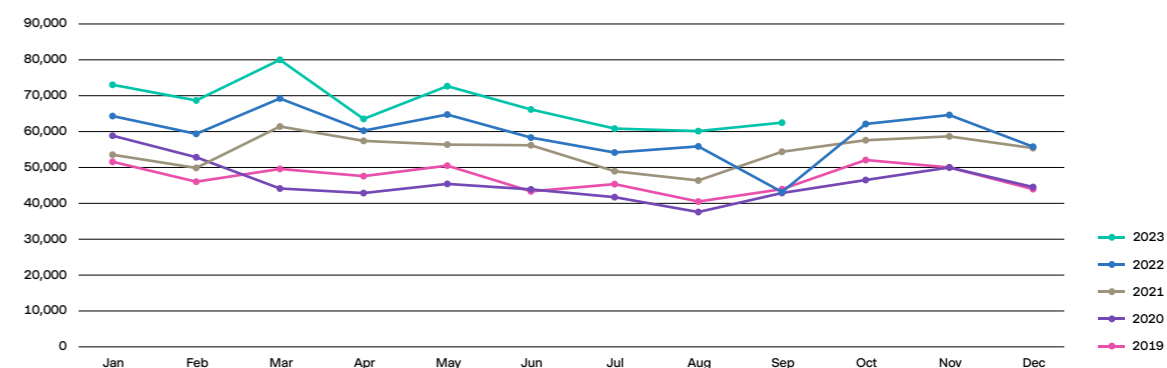
### EUCAST website

The website and its contents are continually updated. All significant changes are highlighted in the "News" section on the homepage as well as via an automated "Newsletter", plus a list of all changes is available via the "Website changes" link below the contents list ([eucast.org/website\\_changes](https://eucast.org/website_changes)). Documents updated in 2023 included breakpoint tables, QC tables, SOPs, reading guides and method descriptions, frequently asked questions, guidance documents and expert rules for Enterobacterales (January 2023), *Staphylococcus* spp. (February 2023) and *Enterococcus* spp. (January 2023).

Problems with AST procedures and material are updated regularly and published on the EUCAST "Warnings!" website ([eucast.org/ast\\_of\\_bacteria/warnings](https://eucast.org/ast_of_bacteria/warnings)).

The figure below provides an overview of the unique page visits to the EUCAST website, indicating a steady increase over the years. On the EUCAST website, information on viewing figures for specific webpages such as the Rapid Susceptibility Testing methods and breakpoint tables, publications and documents, expert rules and expected phenotypes, AST of bacteria, guidance documents, AST of fungi, videos and online seminars, clinical breakpoints, and warnings are available.

Visits for eucast.org 2019–2023



### EUCAST consultations

Many of the EUCAST documents on the website were updated in 2023 and this is an ongoing process. All major changes are subjected to public consultation to garner public opinion. A summary of consultations can be found on the website: [eucast.org/documents/consultations](https://eucast.org/documents/consultations)

All EUCAST consultations are available on the EUCAST website and comments and EUCAST responses published.

In 2023, the following consultations were completed:

- Breakpoints for anaerobic bacteria. Closed 3 March 2023.
- Revised breakpoints for use of intra-venous fosfomicin. Closed 12 September 2023.
- Proposed breakpoints for *Brucella melitensis*. Closed 20 October 2023.
- Proposed breakpoints for *Bacillus anthracis*. Closed 20 October 2023.
- Proposed changes to the 2024 (v. 14.0) breakpoint table. Closed 1 November 2023.

## EUCAST publications & posters 2023

### Publications

- *Vibrio* species: development of EUCAST susceptibility testing methods and MIC and zone diameter distributions on which to determine clinical breakpoints. Onur Karatuna, Erika Matuschek, Jenny Åhman, Hayat Caidi and Gunnar Kahlmeter. *Journal of Antimicrobial Chemotherapy*, December 2023.
- Wild-type distributions of minimum inhibitory concentrations and epidemiological cut-off values-laboratory and clinical utility. Gunnar Kahlmeter & John Turnidge. *Clin Microbiol Rev*. December 1, 2023.
- Towards clinical breakpoints for non-tuberculous mycobacteria – Determination of epidemiological cut off values for the *Mycobacterium avium* complex and *Mycobacterium abscessus* using broth microdilution. Fröberg G, Maurer FP, Chryssanthou E, Fernström L, Benmansour H, Boarbi S, Mengshoel AT, Keller PM, Viveiros M, Machado D, Fitzgibbon MM, Mok S, Werngren J, Cirillo DM, Alcaide F, Hyyryläinen HL, Aubry A, Andres S, Nadarajan D, Svensson E, Turnidge J, Giske CG, Kahlmeter G, Cambau E, van Ingen J, Schön T; EUCAST AMST and ESCMYC study groups. *Clin Microbiol Infect*. 2023 Jun;29(6):758–764. doi:10.1016/j.cmi.2023.02.007.
- The European committee on antimicrobial susceptibility testing disk diffusion susceptibility testing method for frequently isolated anaerobic bacteria. Erika Matuschek, Sarah Copsey-Mawer, Sara Petersson, Jenny Åhman, Trefor Elis Morris, Gunnar Kahlmeter. *CMI*, doi.org/10.1016/j.cmi.2023.01.027.
- Microbiological Epidemiology of Invasive Infections Due to Non-Beta-Hemolytic Streptococci, France, 2021. Céline Plainvert, Erika Matuschek, Nicolas Dmytruk, Marine Gaillard, Amandine Frigo, Yassine Ballaa, Eddy Biesaga, Gunnar Kahlmeter, Claire Poyart, Asmaa Tazi. *Microbiol Spectr*. 2023 Jun 15;11(3):e0016023.

### Posters

- P0344: New CLSI and EUCAST harmonised procedure for selecting optimal disk contents for disk diffusion testing Erika Matuschek, Mariana Castanheira, Sharon Cullen, Christian Giske, Gunnar Kahlmeter, Laura Koeth, Maria Traczewski, John Turnidge, Mandy Wootton, Janet Hindler.
- P0391: EUCAST disk diffusion testing of anaerobic bacteria Expanding the range of antimicrobial agents Jenny Åhman, Erika Matuschek, Sarah Copsey-Mawer, Trefor Elis Morris, Gunnar Kahlmeter.
- P0348: *Corynebacterium diphtheriae* and *C. ulcerans* – Development of clinical breakpoints using EUCAST methodology Jenny Åhman, Sylvain Brisse, Edgar Badell-Ocando, Durdica Marosevic, Anja Berger, Andreas Sing, Erika Matuschek, Gunnar Kahlmeter.
- P0399: Toxigenic and non-toxigenic *Vibrio cholerae* can share the same MIC breakpoints. Onur Karatuna, Erika Matuschek, Jenny Åhman, Hayat Caidi, Gunnar Kahlmeter.
- Robust statistical tool for defining antimicrobial inhibition zone diameter wild-type distributions and calculating ECOFFs. Erik Kristiansson, Anna Johnning & Gunnar Kahlmeter.



European Committee on Infection Control (EUCIC)

## Infection prevention and control against antimicrobial resistance: the EUCIC priority!

Hospital acquired infections and antimicrobial resistance rates have a huge burden on patients' care and must be considered indicators of quality of care. The implementation of effective infection prevention and control measures linked to appropriate antimicrobial stewardship policies are the core components of the global fight against antimicrobial resistance's spread. EUCIC is fully devoted to reducing this burden and with the first Pan-European training programme for infection control aims to increase awareness and quality of patients' care in Europe.

### EUCIC Training Programme

The EUCIC Training Programme in Infection Prevention and Control (IPC) integrates international courses in selected EUCIC training centres aiming to train a new generation of specialists in Europe. With the EUCIC Infection Prevention and Control Certificate, EUCIC provides a unique European perspective on infection control by sharing expertise and competencies within training centres, countries, and disciplines.

We first started the pan-European training program in 2018 with 25 trainees successfully graduated. Several of the former trainees have now taken over positions in IPC all over Europe or successfully integrated the IPC training in their leadership in infectious diseases and clinical microbiology fields. The alumni also formed a network of EUCIC alumni which was highly supportive during the SARS-CoV-2 pandemic. The second cohort of 30 trainees started in 2022 and now is about to graduate after the final exam at ESCMID Global 2024 in Barcelona. The Certification Ceremony will be held on 28 April 2024 at 4:00-5:15 PM in Fireplace room.

**Prof. Evelina Tacconelli**  
EUCIC Chair

**Prof. Nico T. Mutters**  
EUCIC Scientific Coordinator

**Prof. Alex W. Friedrich**  
EUCIC Clinical Coordinator

### Basic and Advanced Modules

	Date	Type of module	City	Country	Module coordinators
Infection prevention and control: core components	26–31 May 2024	Basic	Groningen	Netherlands	Andreas Voss
Antibiotic therapy and antimicrobial stewardship	25–26 September 2024	Advanced	Ljubljana	Slovenia	Tatjana Lejko Zupanc
Laboratory and clinical aspects of the surveillance of healthcare-associated infections: a theoretical and practical approach	January 2025	Advanced	Athens	Greece	Athanassios Tsakris
Automation in infection prevention and control: surveillance, outbreak monitoring and beyond	May 2025	Advanced	Utrecht	Netherlands	Jan Kluytmans
Technical hygiene and occupational safety	24–26 September 2025	Advanced	Vienna	Austria	Elisabeth Presterl
Implementation in infection prevention and control	November 2025	Advanced	Zurich	Switzerland	Walter Zingg
Dynamics of disease transmission: from genomes to infection control	February 2026	Advanced	Münster	Germany	Alexander Melmann, Dag Harmssen

### Local Modules

	Date	City	Country	Module coordinators
Surveillance and meta-competence	11–13 October 2024	Limassol	Cyprus	Constantinos Tsioutis
Biofilm-driven infections: research and clinical relevance	7–8 November 2024	Bucharest	Romania	Oana Sandulescu
Multidrug resistant gram negative infections at hospitals from Mediterranean countries: know them, beat them!	December 2024	Barcelona	Spain	Juan Pablo Horcajada Gallego
Infection control, antimicrobial and diagnostic stewardship in the emergency room: Simulation to enhance practice	19–20 February 2025	Lisbon	Portugal	Carlos Palos
Infection control, antimicrobial and diagnostic stewardship in the emergency room: The challenge of high-risk infectious pathogens	March 2025	Madrid	Spain	Alejandro Quiros
Training professionals in patient safety	5–6 June 2025	Matosinhos	Portugal	Isabel Neves, David Peres
Hands on network and data Analysis for Infection Control	October 2025	Groningen	Netherlands	Andreas Voss
Achieving effective behaviour change in infection prevention & control and antibiotic stewardship	1–3 December 2025	Malta	Malta	Michael Borg
Molecular and bioinformatic tools for infection control	January 2026	Bucharest	Romania	Dragos Florea
Management of “pandemic” MDROs: is it still simple and feasible?	5–7 March 2026	Venice	Italy	Annibale Raglio



Registration is open on the website [escmid.org/eucic/training-programme-2024-2026](https://escmid.org/eucic/training-programme-2024-2026)

Join us and become a part of EUCIC!

The 2024 cohort will start with the basic course in Groningen on the 26th of May 2024. The 2-year EUCIC European Training Programme consists of 10 compulsory activities and after successful completion of the programme (equivalent to ~60 ECTS), trainees will receive the European Certification EUCIC in IPC. Specialists in IPC-related fields can join the Certification accessing directly the advanced courses.

There is also further need to create more training opportunities and we are working hard to establish new suitable training centres to be able to provide the course in an annual manner. If you would like to support the education activities of EUCIC contact us and apply online [escmid.org/eucic/training-programme-2024-2026](https://escmid.org/eucic/training-programme-2024-2026)

### EUCIC Working Groups

EUCIC Working Groups have been restructured. Currently, EUCIC is composed of 7 Working Groups targeting different aspects of IPC and including several experts in infectious diseases, clinical microbiology, and infection control.

#### Guidance Working Group

This group focuses on the strategy and development of EUCIC guidance documents and aims to improve the availability, dissemination and implementation of latest high level scientific evidence on the effectiveness of IPC measures in reducing hospital acquired infections and the burden of antimicrobial resistant infections in hospitalised patients and community health care settings. In 2023, EUCIC completed the evidence-based guidelines providing recommendations on surgical antibiotic prophylaxis in patients colonised pre-surgery with multidrug resistant Gram-negative bacteria. The guidelines are very innovative and for the first time provide a recommendation for targeted prophylaxis in colonised patients before abdominal and high-risk surgery (see Clinical Microbiology Infection, PMID: 36566836). The group has now completed the review process for the second planned guideline targeting patients colonised before surgery with multi-drug resistant Gram-positive bacteria. The final document will be published very soon!

The work of updating the ESCMID guidelines to reduce the transmission of multi-drug resistant bacteria in hospitalised patients is progressing further although the substantial amount of new evidence in the field delayed the extraction process. We expect to complete the work soon.

In 2024, EUCIC is aiming to develop several new guidance documents in the field of IPC with a special focus on the link between implementing together preventive measures and antimicrobial stewardship interventions and introducing automation in evidence’s retrieval and assessment. Guidance documents will include technical frameworks, white papers, and FAQ. We look for collaboration (single experts and organisations) on these topics with specific reference to experts in implementation, evidence-based medicine, intelligence technology, data extraction, and dissemination. Contact us at [eucic@esmid.org](mailto:eucic@esmid.org)!

### E-learning and educational activities outside Europe Working Group

This group focuses on the assessment of innovative teaching methods for education activities in the field of IPC and aims to improve the education offer from EUCIC including new e-learning activities, personalised Learning, Open-Ended Questioning, Cooperative Learning, and Games and Puzzles. The group assesses the application of innovative tools to the development of educational materials and activities in order to facilitate dissemination and discussion among different teams across Europe and beyond. The group also evaluates requests for course outside Europe targeting IPC to assess possible integration within the EUCIC Certification.

#### Infection prevention and control accreditation Working Group

This group focuses on the development of a framework for volunteer hospital accreditation and aims to evaluate a hospital accreditation process in the field of IPC. The goal is to develop a framework to support assessment of effective infection and prevention measures in hospitalised patients and support healthcare centres to be better prepared to implement best evidence and act as champions for key infection and prevention practices.

#### UEMS Working Group

This group works together with UEMS towards recognition and accreditation of infection control at European level and aims to support the UEMS the Multidisciplinary Joint Committee on Infection Control born as a joint invitation by UEMS Infectious Diseases and Medical Microbiology Sections. The Working Group supports also the definition of standards in education activities and training of EUCIC.

#### Communication and Dissemination Working Group

This group focuses on the development of an efficient communication strategy of EUCIC results and achievements and best results from scientific literature in the field of IPC. This Working Group aims to disseminate and share the results from the different EUCIC components and Working groups with potential





You are welcome to join the EUCIC Working Groups!

Contact EUCIC at [eucic@escmid.org](mailto:eucic@escmid.org)

users – peers in the IPC and research field, policy makers, and industry.

The first Newsletter in 2024, coordinated by Constantinos Tsioutis has been published in January summarising the 2023 activities of the EUCIC members. If you miss it read it at [escmid.org/fileadmin/src/media/PDFs/3Research\\_Projects/EUCIC/EUCIC\\_Newsletter\\_2024\\_n1.pdf](https://escmid.org/fileadmin/src/media/PDFs/3Research_Projects/EUCIC/EUCIC_Newsletter_2024_n1.pdf)

Thanks to Gabriel Birgand you can routinely receive very comprehensive summaries of the latest evidence in IPC. The literature review is available here: [escmid.org/eucic/relevant\\_literature\\_summaries](https://escmid.org/eucic/relevant_literature_summaries)

#### Research Working Group

This group focuses on the development of a research network in the field of infection control. The network will be functioning as a platform for research brainstorming and development of proposals to apply for dedicated research funding through collaborative projects among ESCMID members. The network will also target data homogeneity and General Data Protection Regulation (GDPR) for data and samples exchanges among European countries to increase effectiveness of projects and results.

#### EUCIC Certification Working Group

This group supports the Education Board for the selection and coordination of the examination committee for the EUCIC Certification, organises the EUCIC exam according to UEMS/CESMA accreditation rules and ensures that the high standards are matched.

#### EUCIC and ECDC

ECDC continues to actively contribute to the EUCIC training programme within the areas of surveillance, epidemiology, and data analysis (advanced module in Athens). Furthermore, five EUCIC trainees visited the ECDC in Stockholm for a weeklong observership in 2023 which takes place annually.

EUCIC Advisory Board Member Prof. Anders Johansson attended the ECDC annual HAI-Net meeting in Stockholm from 29 November to 1st December, 2023 and presented the new EUCIC Certificate for Infection Prevention and

Control 2024–2026 and kindly invited IPC centers in Europe to contribute to the EUCIC certification organising local modules in their home countries.

#### EUCIC and WHO

EUCIC is part of the WHO Public Health Emergencies Working Group (IPC PHEWG). Prof. Nico Mutters is currently representing EUCIC in this group and has contributed to several WHO outputs and publications during his assignment. Prof. Emine Alp Meşe, scientific secretary, joined the Global Strategy on Infection Prevention and Control webinar in December underlying the importance of the EUCIC training program.

#### EUCIC and ICAP

EUCIC members in collaboration with the ESCMID Executive Committee started a profitable collaboration with the ICAP Global Health ([icap.columbia.edu](http://icap.columbia.edu)), a leading institution based in Columbia University, USA providing evidence-based health programs across the globe. First profitable collaboration was at the Warsaw Workshop from August 22nd to 26th focusing in training multidisciplinary teams in developing standard operational procedures and project management using a competency-based education model to prevent infections. The collaboration is proceeding with a series of online educational seminars held by EUCIC experts aiming to share evidence-based information and personal experiences to public health colleagues in Ukraine to reduce the rising burden of antimicrobial resistance and healthcare-associated infections in the war areas. Prof. Tsioutis in December and Prof. Petrosillo held the first very successful webinars in December 2023 and January 2024, respectively.

#### EUCIC new entries

As planned, just after ESCMID Global 2024, there will be the election for two new members of the EUCIC Steering Committee representing two countries included in the EUCIC Advisory Board. Election will be coordinated by Prof. Michael A. Borg, current Chair of the Advisory Board. All countries can be elected except for

Spain, Belgium, Sweden, Austria, Azerbaijan, Bulgaria, and Greece which have already had a seat in the Steering Committee of EUCIC.

We thank Rossitza Vatcheva- Dobrevska (Advisory Board, Bulgaria) and Juan Pablo Horcajada Gallego (Advisory Board, Spain) for their excellent work and contribution in the Steering Committee!

#### ESCMID Global Stops

Sessions co-organised by EUCIC at ESCMID Global 2024:

- **A journey from microbiology to infection prevention and control in the era of AMR:** 27 April 2024, 2:45–3:45 PM, Hall A
- **Outbreaks in healthcare settings: practical guidance and case scenarios:** 29 April 2024, 8:30–10:30 AM, Hall F
- **Improving implementation in infection prevention and control:** 30 April 2024, 11:00 AM – 12:00 PM, Hall D
- **Primer on infection prevention and control of multidrug-resistant Gram-negative bacilli:** 30 April 2024, 1:30–3:30 PM, Hall F

You are very welcome to join the EUCIC General Assembly planned on 29 April from 1:30–3:30 PM, at Meetingroom Vienna, Hall 8.0.

#### Thanks

We thank the EUCIC Examination Committee members who accepted the responsibilities, duties and presence in the European Infection Prevention and Control Certificate Assessment. Anders Johansson, Andreas Voss, Carlos Palos, Constantinos Tsioutis, Dorairajan Sureshkumar, Elena Carrara, Elisabeth Presterl, Emine Alp Meşe, Evelina Tacconelli, Hilary Humphreys, Gabriel Birgand, Jesus Rodríguez Baño, Magda Diab-Elschahawi, Nico T. Mutters, Nicola Petrosillo, Pascal Astagneau, Primrose Beryl, Walter Zingg.

Our thanks also to our communication officers Constantinos Tsioutis (Cyprus) and Gabriel Birgand (France), who are constantly working to

increase EUCIC's internet and social media presence. Follow us on twitter, LinkedIn, ResearchGate etc.

A special thanks to Chiara Speziale, Alessandro Piroso, Benjamin Schirra and Simone Bröderli from the ESCMID Office, Emine Alp Meşe from the EUCIC Office, who have helped significantly with all EUCIC activities.

- Check the video summarising EUCIC's activities at: [online.eccmid.org/tracked-link.php?id=198](https://online.eccmid.org/tracked-link.php?id=198)
- Interested in being part of a Working Group? Contact us at [eucic@escmid.org](mailto:eucic@escmid.org)
- Interested in providing a EUCIC course? Contact us at [eucic@escmid.org](mailto:eucic@escmid.org)
- The literature review is available here: [escmid.org/eucic/relevant\\_literature\\_summaries](https://escmid.org/eucic/relevant_literature_summaries)
- Suggestions for new activities are very important! Contact your country's EUCIC Board if you want to contribute to the national activities or provide new ideas to be presented at the EUCIC General Assembly. More information at: [escmid.org/eucic/national\\_antimicrobial\\_committees](https://escmid.org/eucic/national_antimicrobial_committees)

# ESCMID Emerging Infections Task Force (EITaF)

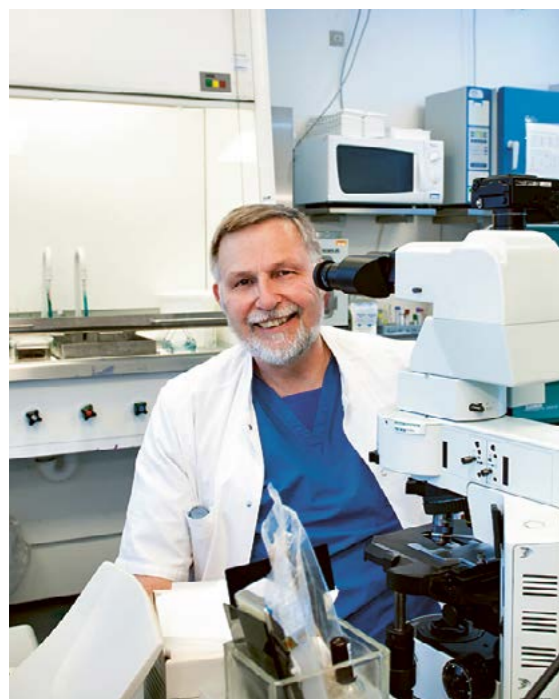
The COVID-19 pandemic has highlighted the necessity to enhance global surveillance, preparedness, and response to emerging infections. Consequently, the Executive Committee has elevated the priority of emerging infections within ESCMID and decided to transform Emerging Infections Task Force (EITaF) into a Subcommittee – the Emerging Infections Subcommittee – effective as of ESCMID Global 2024.

Until then, EITaF will continue supporting the ESCMID community with matters related to Emerging Infections.

In 2023, forty-seven new ESCMID members signed up to participate in the activities of the task force. The prime activity in 2023 has been posting news about outbreaks that task force members felt was significant enough that ESCMID members should be informed. Thus, the major focus of the task force has been to select most important outbreaks from abundant reports of new or changing infections, and to ensure that each was reported to ESCMID members with an appropriate synopsis and commentary.

In 2023, nine outbreaks were reported with an analysis of the importance of each one:

During the year, the previous posting of independent news to the EITaF list was changed to incorporate EITaF News in the weekly ESCMID Newsletter, ensuring a much broader dissemination to all ESCMID members.



Eskild Petersen,  
EITaF chair

## Publications

- Petersen E, Shan Lee S, Blumberg L, Levison ME. Antimicrobial resistance – A global problem in need of global solutions. *IJID Reg.* 2023;9:102–3. doi:10.1016/j.ijregi.2023.10.005.
- Petrosillo N, Petersen E, Antoniak S. Ukraine war and antimicrobial resistance. *Lancet Infect Dis.* 2023;23:653–4. doi:10.1016/S1473-3099(23)00264-5.
- Mipatrini D, Montaldo C, Bartolini B, Rezza G, Iavicoli S, Ippolito G, Zumla A, Petersen E. 'Disease X'-time to act now and prepare for the next pandemic threat. *Eur J Public Health.* 2022;32:841–2. doi:10.1093/eurpub/ckac151.
- Valdeiros SR, Petersen E. What you can't see can hurt you: Presymptomatic shedding of replication-competent mpox virus. *J Med Virol.* 2023 Jun;95(6):e28855. doi:10.1002/jmv.28855. PMID: 37287191.

Date posted 2023	Topics
12 December	Unusual upsurge of respiratory illness in children
11 August	Re-emergence of malaria in the United States
21 July	Influenza A(H5N1) in mammals
7 July	A variant of E-11 Enterovirus linked to severe acute hepatitis and meningoencephalitis in newborns in France
30 June	Enhanced surveillance of severe avian influenza virus infections in hospital settings
29 June	Alleged cholera outbreak after Kakhovka Dam flooding
30 May	World Health Organisation: Launching the International Pathogen Surveillance Network
31 March	Rise of H5 HPAI worldwide
11 January	COVID-19 in China and travel restrictions and Variant XBB.1.5



# Publications



**“Spreading expert knowledge in infectious diseases and clinical microbiology is a primary focus for ESCMID. We depend on our scientific publications to accomplish this vital task.”**

**José Ramón Paño-Pardo**, ESCMID Publications Officer

## ESCMID Publications

Years of dedicated effort have elevated Clinical Microbiology and Infection (CMI) to a prominent position in its field. It is consistently recognised as a top journal in both infectious diseases and microbiology. The careful selection and varied presentation of content in CMI exemplifies what ESCMID represents. We are grateful to the researchers, reviewers, and editorial board, led by Editor-in-Chief Leonard Leibovici, for the extensive work behind CMI. In this regard, it is worth mentioning two important initiatives brought forward by the journal in 2023. Seven editorial interns joined the CMI Editors’ team. They were selected through an open call among 30 applications received. Each of them will support one Editor during the editorial work, gaining important insights both on the work as well as on research methods and adequate reporting methods.

Moreover, CMI started publishing along with the accepted publications, “the story behind the study”. Authors were asked to provide some background information about the genesis of the study, the difficulties experienced, as well as some words about themselves and their team, a personal perspective that could add some value to the scientific output of their research.

You can read more about those initiatives at page 57, from the CMI Editor-in-Chief himself.

Beyond our own journals, ESCMID’s scientific output, including from our study groups, grants recipients and subcommittees, is published broadly. This wide-ranging work, detailed at page 58–64, showcases the dynamism of our society.

As an outlook for the coming year, ESCMID will launch at ESCMID Global 2024 a new full open-access journal, CMI Communications. With its own distinct personality, this publication will focus on real-world applications in clinical microbiology and infectious diseases using innovative formats aimed at engaging readers. We thank Editor-in-Chief Angela Huttner for her vision in developing this new resource, which we fully trust will advance ESCMID’s mission.

In 2024, we look forward to continuing our collaboration to further enrich and enhance ESCMID’s publications as valuable resources for the infectious diseases and clinical microbiology communities.

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### Publication Subcommittee

- José Ramón Paño-Pardo, Spain (Chair)
- Leonard Leibovici, Israel (CMI Editor-in-Chief)
- Andrew Miller, United Kingdom (Elsevier Representative)

# Clinical Microbiology and Infection (CMI)

**Leonard Leibovici,**  
CMI Editor-in-Chief

**Julia Friedman,**  
CMI Editorial Office  
Manager

CMI publishes original research and review articles to assist physicians and microbiologists in the management of patients and prevention of infectious diseases, thereby supporting the achievement of ESCMID goals. CMI promotes the use of optimal methods in basic and clinical research and aims at publishing high quality and thought-provoking studies with the potential to change clinical practice. The CMI Editorial Board applies and encourages high standards of scientific reporting and publication, as well as supports authors and peer reviewers ([clinicalmicrobiologyandinfection.com/content/collection-editorial-policies](https://clinicalmicrobiologyandinfection.com/content/collection-editorial-policies)).

In 2022 the CMI impact factor rose to 14.2. The mean time to first decision was 27 days for articles that were sent for revision after peer review, and 23 days for articles rejected after peer review.

In 2023 we have started two new endeavours. We asked authors to tell us their story behind the published study. We wanted to hear a personal perspective from them. How did the study begin? What motivated them to address the research question? Which difficulties were encountered and how did they overcome them? (These can be difficulties in the organisation: no funding, no protected time for research; or personal: moving to a new place or a new country). And a few words about themselves. Which stage of career are they in? How did the study fit in their career advancement? We would like to hear what were the strong and the weak aspects of their team and collaboration; and how mentoring worked for them. A few of the stories are already on our website: please see [clinicalmicrobiologyandinfection.com/the\\_story\\_behind\\_the\\_study](https://clinicalmicrobiologyandinfection.com/the_story_behind_the_study)



**Leonard Leibovici,**  
CMI Editor-in-Chief

We have invited people in early or mid-career to join us as editorial interns. We had about 30 candidates, all of them outstanding. We asked seven of them to join us: please see Editorial Interns on: [clinicalmicrobiologyandinfection.com/content/board-of-editors](https://clinicalmicrobiologyandinfection.com/content/board-of-editors).

We are glad to receive suggestions from candidate "Guest Editors" on a specific thematic issue (please contact the Editor-in-Chief at [leibovic@post.tau.ac.il](mailto:leibovic@post.tau.ac.il)); please submit an outline of the proposed reviews, including the names of suggested authors. Thematic issues consist of 3–5 narrative reviews addressing different aspects of the very same topic.

We welcome feedback from readers, authors, reviewers and ESCMID members, with the goal to further improve the quality of our journal. Please contact our editorial office manager, Julia Friedman ([jlubom2@gmail.com](mailto:jlubom2@gmail.com)) for comments and queries.

We thank all members of the Editorial Board and the numerous reviewers and authors that together make CMI a reference journal in the field of clinical microbiology and infectious diseases.

## List of ESCMID publications April 2023 – April 2024

### Medical guidelines and other guidance documents

- *ERS/ESICM/ESCMID/ALAT guidelines for the management of severe community-acquired pneumonia.* Martin-Loeches I, Torres A, Nagavci B, et al. [published correction appears in Intensive Care Med. 2023 May 17;:]. Intensive Care Med. 2023;49(6):615–632. doi:10.1007/s00134-023-07033-8
- *Rituals and behaviours in the operating theatre – joint guidelines of the Healthcare Infection Society and the European Society of Clinical Microbiology and Infectious Diseases.* Humphreys H, Bak A, Ridgway E, et al. J Hosp Infect. 2023;140:165.e1–165.e28. doi:10.1016/j.jhin.2023.06.009
- *ESCMID/EUCIC clinical practice guidelines on perioperative antibiotic prophylaxis in patients colonized by multidrug-resistant Gram-negative bacteria before surgery.* Righi E, Muters NT, Guirao X, et al. Clin Microbiol Infect. 2023;29(4):463–479. doi:10.1016/j.cmi.2022.12.012
- *European Society of Clinical Microbiology and Infectious Diseases Guidelines on diagnosis and treatment of brain abscess in children and adults.* Author's reply. Clin Microbiol Infect. 2024;30(1):149–150. doi:10.1016/j.cmi.2023.10.012

### Publications from Study Groups

#### EFISG

- *A conceptual framework for nomenclatural stability and validity of medically important fungi: a proposed global consensus guideline for fungal name changes supported by ABP, ASM, CLSI, ECMM, ESCMID-EFISG, EUCAST-AFST, FDLC, IDSA, ISHAM, MMSA, and MSGERC.* de Hoog S, Walsh TJ, Ahmed SA, et al. J Clin Microbiol. 2023;61(11):e0087323. doi:10.1128/jcm.00873-23.

- *Pneumocystis jirovecii pneumonia in intensive care units: a multicenter study by ESGCIP and EFISG.* Giacobbe DR, Dettori S, Di Pilato V, et al. Crit Care. 2023;27(1):323. Published 2023 Aug 24. doi:10.1186/s13054-023-04608-1

#### EFWISG

- *Unraveling Enterococcus susceptibility to quaternary ammonium compounds: genes, phenotypes, and the impact of environmental conditions.* Pereira AP, Antunes P, Bierge P, et al. Microbiol Spectr. Published online September 22, 2023. doi:10.1128/spectrum.02324-23

#### EPASG

- *International consensus recommendations for the use of prolonged-infusion beta-lactam antibiotics: Endorsed by the American College of Clinical Pharmacy, British Society for Antimicrobial Chemotherapy, Cystic Fibrosis Foundation, European Society of Clinical Microbiology and Infectious Diseases, Infectious Diseases Society of America, Society of Critical Care Medicine, and Society of Infectious Diseases Pharmacists* [published correction appears in Pharmacotherapy. 2023 Sep 19;:] [published correction appears in Pharmacotherapy. 2024 Jan 11;:]. Hong LT, Downes KJ, FakhriRavari A, et al. Pharmacotherapy. 2023;43(8):740–777. doi:10.1002/phar.2842

#### ESGAP

- *An analysis of existing national action plans for antimicrobial resistance-gaps and opportunities in strategies optimising antibiotic use in human populations.* Charani E, Mendelson M, Pallett SJC, et al. Lancet Glob Health. 2023;11(3):e466–e474. doi:10.1016/S2214-109X(23)00019-0
- *The battle against fungi: lessons in antifungal stewardship from COVID 19 times* [published correction appears in Int J Antimicrob Agents. 2023 Jul 1;62(2):106901]. Kanj SS, Haddad SF, Meis JF, et al. Int J Antimicrob Agents. 2023;62(1):106846. doi:10.1016/j.ijantimicag.2023.106846

**ESGB**

- *To update or not to update the ESCMID guidelines for the diagnosis and treatment of biofilm infections – That is the question! The opinion of the ESGB board.* Høiby, N.; Moser, C.; Oliver, A, et al. *Biofilm*. 2023;6(1). doi.org/10.1016/j.biofilm.2023.100135
- *A systematic review of the use of bacteriophages for in vitro biofilm control.* Meneses L, Brandão AC, Coenye T, Braga AC, Pires DP, Azeredo J. *Eur J Clin Microbiol Infect Dis*. 2023;42(8):919–928. doi:10.1007/s10096-023-04638-1
- *Our current clinical understanding of Candida biofilms: where are we two decades on?* Ramage G, Borghi E, Rodrigues CF, Kean R, Williams C, Lopez-Ribot J. *APMIS*. 2023;131(11):636–653. doi:10.1111/apm.13310
- *Combining phages and antibiotic to enhance antibiofilm efficacy against an in vitro dual species wound biofilm.* Akturk E, Melo LDR, Oliveira H, Crabbé A, Coenye T, Azeredo J. *Biofilm*. 2023;6:100147. Published 2023 Aug 2. doi:10.1016/j.biofilm.2023.100147

**ESGBIES**

- *Risk factors for Gram-negative bacterial infection of cardiovascular implantable electronic devices: multicentre observational study (CarDINe Study).* Pascale R, Toschi A, Aslan AT, et al. *Int J Antimicrob Agents*. 2023;61(3):106734. doi:10.1016/j.ijantimicag.2023.106734

**ESGBOR**

- *Identification of potential biomarkers in active Lyme borreliosis.* Tjernberg I, Lager M, Furset Jensen G, et al. *PLoS One*. 2023;18(6):e0287586. Published 2023 Jun 26. doi:10.1371/journal.pone.0287586

**ESGCD**

- *Re: 'The effect of antibiotic therapy for Clostridioides difficile infection on mortality and other patient-relevant outcomes' by Stabholz et al.* Van Prehn J, Skinner AM, Krutova M, Guery B. *Clin Microbiol Infect*. 2024;30(2):261–262. doi:10.1016/j.cmi.2023.10.015
- *Hear my voice: involving patients in Clostridioides difficile infection research.* Strawbridge J, Heritage J, Krutová M, et al. *Clin Microbiol Infect*. 2023;29(10):1222–1224. doi:10.1016/j.cmi.2023.06.027

- *In vivo emergence of a still uncommon resistance to fidaxomicin in the urgent antimicrobial resistance threat Clostridioides difficile.* Marchandin H, Anjou C, Poulen G, et al. *J Antimicrob Chemother*. 2023;78(8):1992–1999. doi:10.1093/jac/dkad194

- *Which trial do we need? A sequential multiple assignment randomized trial to determine the optimal Clostridioides difficile treatment sequence.* van Prehn J, van Werkhoven CH, Skinner AM, Guery B, Dubberke ER, Kuijper EJ. *Clin Microbiol Infect*. 2024;30(2):165–169. doi:10.1016/j.cmi.2023.08.023

- *European survey on the current surveillance practices, management guidelines, treatment pathways and heterogeneity of testing of Clostridioides difficile, 2018–2019: results from The Combatting Bacterial Resistance in Europe CDI (COMBACTE-CDI).* Viprey VF, Granata G, Vendrik KEW, et al. *J Hosp Infect*. 2023;131:213–220. doi:10.1016/j.jhin.2022.11.011

- *Faecal microbiota transplantation for first and second episodes of Clostridioides difficile infection.* Van Prehn J, Fitzpatrick F, Kuijper EJ; European Study Group for Clostridioides difficile and the European Study Group for Host and Microbiota Interaction. *Lancet Gastroenterol Hepatol*. 2023;8(2):109. doi:10.1016/S2468-1253(22)00342-9

- *Faecal microbiota transplantation for first and second episodes of Clostridioides difficile infection.* Krutova M, Davis K, Guery B, Barbut F. *Lancet Gastroenterol Hepatol*. 2023;8(2):111–112. doi:10.1016/S2468-1253(22)00388-0

**ESGCIP**

- *Epidemiology and outcomes of hospital-acquired bloodstream infections in intensive care unit patients: the EUROACT-2 international cohort study.* Tabah A, Buetti N, Staiquily Q, et al. *Intensive Care Med*. 2023;49(2):178–190. doi:10.1007/s00134-022-06944-2

- *Pneumocystis jirovecii pneumonia in intensive care units: a multicenter study by ESGCIP and EFISG.* Giacobbe DR, Dettori S, Di Pilato V, et al. *Crit Care*. 2023;27(1):323. Published 2023 Aug 24. doi:10.1186/s13054-023-04608-1

- *International survey of antibiotic dosing and monitoring in adult intensive care units.* Williams, P.G., Tabah, A., Cotta, M.O. et al. *Crit Care* 27, 241 (2023). doi.org/10.1186/s13054-023-04527-1

**ESGGEM**

- *Taking hospital pathogen surveillance to the next level.* Werner G, Couto N, Feil EJ, et al. *Microb Genom*. 2023;9(4):mgen001008. doi:10.1099/mgen.0.001008
- *Phylogenomics of Globally Spread Clonal Groups 14 and 15 of Klebsiella pneumoniae.* Rodrigues C, Lanza VF, Peixe L, Coque TM, Novais Â. *Microbiol Spectr*. 2023;11(3):e0339522. doi:10.1128/spectrum.03395-22

**ESGFOR**

- *The Future Is Now: Unraveling the Expanding Potential of Human (Necro)Microbiome in Forensic Investigations.* Cláudia-Ferreira A, Barbosa DJ, Saegeman V, et al. *Microorganisms*. 2023;11(10):2509. Published 2023 Oct 7. doi:10.3390/microorganisms11102509

**ESGHAMI**

- *Which trial do we need? A sequential multiple assignment randomized trial to determine the optimal Clostridioides difficile treatment sequence.* van Prehn J, van Werkhoven CH, Skinner AM, Guery B, Dubberke ER, Kuijper EJ. *Clin Microbiol Infect*. 2024;30(2):165–169. doi:10.1016/j.cmi.2023.08.023.

- *Faecal microbiota transplantation for first and second episodes of Clostridioides difficile infection.* Van Prehn J, Fitzpatrick F, Kuijper EJ; European Study Group for Clostridioides difficile and the European Study Group for Host and Microbiota Interaction. *Lancet Gastroenterol Hepatol*. 2023;8(2):109. doi:10.1016/S2468-1253(22)00342-9

- *Bacteriophage therapy in humans.* Nir-Paz R, Kuijper EJ. *Clin Microbiol Infect*. 2023;29(6):679–681. doi:10.1016/j.cmi.2023.03.011

- *Update on microbiota-derived therapies for recurrent Clostridioides difficile infections, 2023.* Benech N, Barbut F, Fitzpatrick F, et al. *Clin Microbiol Infect*. Published online December 14, 2023. doi:10.1016/j.cmi.2023.12.007

**ESGIAI**

- *Is an isolated positive sonication fluid culture in revision arthroplasties clinically relevant?* Rondaan C, Maso A, Birlutiu RM, et al. *Clin Microbiol Infect*. Published online July 28, 2023. doi:10.1016/j.cmi.2023.07.018

- *Risk factors for Gram-negative bacterial infection of cardiovascular implantable electronic devices: multicentre observational study (CarDINe Study).* Pascale R, Toschi A, Aslan AT, et al. *Int J Antimicrob Agents*. 2023;61(3):106734. doi:10.1016/j.ijantimicag.2023.106734

- *Should We Use Rifampicin in Periprosthetic Joint Infections Caused by Staphylococci When the Implant Has Been Exchanged? A Multicenter Observational Cohort Study.* Kramer TS, Soriano A, Tedeschi S, et al. *Open Forum Infect Dis*. 2023;10(10):ofad491. Published 2023 Oct 6. doi:10.1093/ofid/ofad491

**ESGIB**

- *European society of Clinical Microbiology and Infectious Diseases guidelines on diagnosis and treatment of brain abscess in children and adults* [published correction appears in *Clin Microbiol Infect*. 2024 Feb 1;]. Bodilsen J, D'Alessandris QG, Humphreys H, et al. *Clin Microbiol Infect*. 2024;30(1):66–89. doi:10.1016/j.cmi.2023.08.016

- *"European Society of Clinical Microbiology and Infectious Diseases Guidelines on diagnosis and treatment of brain abscess in children and adults" Author's reply.* Bodilsen J, D'Alessandris QG, Humphreys H, et al. *Clin Microbiol Infect*. 2024;30(1):149–150. doi:10.1016/j.cmi.2023.10.012

- *Community-acquired Staphylococcus aureus meningitis in adults.* van Soest TM, Søndermølle MB, Brouwer MC, et al. *J Infect*. 2023;86(3):239–244. doi:10.1016/j.jinf.2023.01.022

- *Pericytes are protective in experimental pneumococcal meningitis through regulating leukocyte infiltration and blood-brain barrier function.* Teske NC, Dyckhoff-Shen S, Beckenbauer P, et al. *J Neuroinflammation*. 2023;20(1):267. Published 2023 Nov 17. doi:10.1186/s12974-023-02938-z

- *Progressive Multifocal Leukoencephalopathy Treated by Immune Checkpoint Inhibitors.* Boumaza X, Bonneau B, Roos-Weil D, et al. *Ann Neurol*. 2023;93(2):257–270. doi:10.1002/ana.26512

- *Encephalitis in travellers: a prospective multicentre study.* Picard L, Mailles A, Fillâtre P, et al. *J Travel Med*. 2023;30(2):taac145. doi:10.1093/jtm/taac145

**ESGMAG**

- *Mycoplasma pneumoniae: delayed re-emergence after COVID-19 pandemic restrictions.* Meyer Sauter PM, Beeton ML; European Society of Clinical Microbiology and Infectious Diseases (ESCMID) Study Group for Mycoplasma and Chlamydia Infections (ESGMAC), and the ESGMAC Mycoplasma pneumoniae Surveillance (MAPS) study group. *Lancet Microbe*. Published online November 23, 2023. doi:10.1016/S2666-5247(23)00344-0
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**ESGIE**

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Luigia Scudeller,  
ESCMID Guidelines  
Director



# ESCMID Guidelines: a new strategic agenda for the years ahead

The ESCMID guideline programme is by now fully established and operational: 2023 was a year of evaluation, assessment, and improvement planning. The ESCMID Guidelines Subcommittee is working together with the ESCMID Executive Committee on implementing new procedures to improve identification of priority topics for guidelines development, enhancing cooperation with other relevant stakeholders, guidelines updates and production of living and rapid guidelines, accessibility, usability and implementation of ESCMID guidelines, and on providing training and support to ESCMID members.

A new call for guidelines projects was launched beginning of 2024 on the following topics:

- Infection control and ICU standard procedures to reduce VAP
- Diagnosis and treatment of endovascular graft infections
- Diagnosis and treatment of Q fever.

All the ongoing projects progressed, and several were published (ref. Table1).

The training course on systematic reviews and meta-analysis for guidelines development was held again in 2023, this time in Paris, France, on 4–7 October. 19 young members participated to this 3-days course, and they will be assigned to the new and ongoing ESCMID guidelines projects, to support the panels in performing the literature search, data extraction and

preparation of the summary of findings tables. Given the positive feedback received by the participants and being aware of the importance of training and involving new and young ESCMID members in the ESCMID guidelines programme, the Guidelines Subcommittee is already working at organising a new edition in early fall 2024, in the form of an advanced course aiming at strengthening the skills of the participants of the past editions.

ESCMID support to guidelines panels also include methodological support throughout the project, including a professional platform to manage project according to the GRADE approach; gradually, support will also be extended to project management. A call for expression of interest from medical librarians was issued, and we are happy that we now can rely on a network of librarians, expert in systematic reviews to involve in ESCMID guidelines projects.

Finally, the ESCMID Programme for guidelines development will be also one of the topics of the Educational Session taking place at ESCMID Global 2024, entitled Clinical Practice Guidelines on ID: Present and Future. The session will offer new insights on developing clinical guidelines for infectious diseases, from methodological and clinical perspectives, as well as addressing the critical role of ethics in guideline creation, and innovative methods for using AI in guideline development.

ESCMID as a society will need the contribution of all its members, to initiate a reflection on scope and impact of its guidance documents, to consolidate its role as a global player in all aspects related to infections.

José Ramón  
Paño-Pardo,  
ESCMID Guidelines  
Officer



We value the participation of the ESCMID community to the guidelines-related activities, and we will be happy to hear your comments and suggestions to create even more reliable, trustworthy, and effective guidelines. Contact us at [guidancedocuments@escmid.org](mailto:guidancedocuments@escmid.org).

### Medical Guidelines Subcommittee

- Luigia Scudeller, Italy (Chair)
- José Ramón Paño-Pardo, Spain (Guideline Officer)
- Effrossyni Gkrania-Klotsas, United Kingdom
- Miranda Langendam, Netherlands
- Molina Gil-Bermejo, Spain
- Tomislav Kostyanev, Denmark
- Sarah Tschudin Sutter, Switzerland
- Jean-Paul Stahl, France
- Blin Navaci, Kosovo
- Mical Paul, Israel

Guideline	Societies Involved	ESCMID Engagement	Status
Guideline on management of severe community-acquired pneumonia	ERS/ALAT/ESCIM/ESCMID	Endorsement	Published
Guideline on rituals and behaviours in the operating room	ESCMID/HIS	Owner	Published
Antibiotic surgical prophylaxis regimens among patients colonised with MDR-GNB	ESCMID	Owner	Published
Diagnosis and treatment of brain abscess	ESCMID	Owner	Published
Guideline on management of uncomplicated urinary tract infections	ESCMID/IDSA	Owner	Near publication
Antibiotic surgical prophylaxis regimens among patients colonised with MDR-GPB	ESCMID	Owner	In progress
ESCMID Consensus document for management of COVID-19 in immunocompromised patients	ESCMID	Owner	In progress
Guideline on management of Staphylococcus aureus bacteremia	ESCMID/IDSA	Owner	In progress
Guideline on microbiological diagnosis of blood-stream infections	ESCMID/ESA	Owner	In progress
Guideline on diagnosis and management of infective encephalitis	ESCMID/EAN	Owner	In progress
Antimicrobial stewardship in the emergency department	ESCMID	Owner	In progress
Influenza management and treatment	ESCMID	Owner	In progress
Update of the 2014 ESCMID guidelines for the management of the infection prevention & control measures to reduce transmission of multidrug-resistant Gram-negative bacteria in hospitalised patients	ESCMID	Owner	In progress
Vaccination in the immunocompromised patients: solid organ transplantation	ESCMID/ESOT	Owner	In progress
Approach to suspected antibiotic allergy	ESCMID	Owner	In progress
Dosing of antimicrobials in patient with renal impairment with or without RRT	ESCMID	Owner	In progress



# Education

**Emmanuelle Cambau**, ESCMID Education Officer



**Mary Horgan**, ESCMID Education Director



# ESCMID Educational Activities

ESCMID is proud to once again be offering a wide range of educational activities in more accessible formats than ever before. We look forward to you joining us online or onsite soon! And hearing your ideas and needs.

In response to the evolving landscape of educational needs, ESCMID recognised the imperative to enhance and adapt our educational activities to better serve our audience. With a commitment to continuous improvement, ESCMID decided to reinforce the educational initiatives through extension and restructuring of the Education Subcommittee.

In June 2023, the ESCMID Education Subcommittee welcomed Mary Horgan as the new Education Director. As the former President of the Royal College of Physicians of Ireland and

former Dean of the School of Medicine at University College Cork and currently Professor of Infectious Diseases at University College Dublin, Mary brings valuable experience and leadership to the team. The subcommittee looks forward to benefitting from her fresh perspectives and guidance!

As of mid-2023, ESCMID Education Subcommittee is divided into two working groups: ESCMID eAcademy Working Group led by Riina Rautemaa-Richardson and ESCMID Courses Working Group led by Jeroen Schouten.

Recognising the diverse needs of our audience, ESCMID Education Subcommittee expanded its scope to cover a wider range of educational activities. From traditional classroom settings to online learning platform, the subcommittee seeks to deliver content in diverse formats, making education accessible to all. This includes revamping existing programme and developing new educational activities catered to different learning styles and preferences.

Looking forward into 2024, we are again anticipating a mixture of online and onsite educational courses, covering not only well-established topics, but also more specialised areas that are well-served by the broader reach of online delivery.

Live education experiences will also be complemented by the introduction of the ESCMID eAcademy, a dedicated online learning environment to allow self-paced online learning across a variety of key topics in Clinical Microbiology and Infectious Diseases.

As always, these activities are not possible without the tireless work of the various ESCMID Study Groups, Affiliated Societies and Subcommittees, in particular the Education Subcommittee. A special thanks to the ESCMID Executive Office for their administrative support.

Each of the working groups consist of the following members:

### ESCMID eAcademy Working Group



**Riina Rautemaa-Richardson** (Chair)



**Onur Karatuna**



**Sarah Dellière**



**Özlem Kurt Azap**



**Seif Al-Abri**



**Balint Gergely Szabo**



**Dokos Charalambos**



**Lina Cavaco**



**Maeve Doyle**

### ESCMID Courses Working Group



**Jeroen Schouten** (Chair)



**Arjana Tambic**



**Shruthi Vasanth**



**Simona Ruta**



**Suzanne Aura Victoria van Asten**



**Siri Goepel**



**Chiara Iaria**



**Claudio Neidhöfer**

# ESCMID Courses and Workshops 2023/2024

## Hot topics of infectious diseases and clinical microbiology in Central and Eastern Europe

- 31 May – 2 June 2023
- Pécs, Hungary
- Organised by ESCMID Party Commission

## Last-line antibiotics against XDR/PDR Gram-negatives: Understanding phenotype-genotype correlations and PK/PD approaches

- 7–9 June 2023
- Athens, Greece
- Organised by ESGARS

## Diagnostic Microbiology: MALDI-TOF, Genomics, Metagenomics, Automation and Molecular Microbiology 2nd course

- 12–15 June 2023
- Lausanne, Switzerland
- Organised by ESGMD

## Transplant Infectious Diseases: Quality and Safety in Transplantation

- 16–17 June 2023
- Belo Horizonte, Brazil
- Organised by ESGICH

## Personalised phage therapy: from the lab to the patient

- 25–27 July 2023
- Brussels, Belgium
- Organised by ESGNTA

## Hands-on workshop on Pseudomonas aeruginosa resistance phenotypes and whole genome sequence resistome analysis

- 4–8 September 2023
- Palma de Mallorca, Spain
- Organised by ESGARS

## How to use genomic data for optimising the management of tuberculosis and other mycobacterial infections

- 6–7 September 2023
- Milan, Italy
- Organised by ESGMYC

## Publishing your clinical research: how to write strong study protocols and great manuscripts

- 21–22 September 2023
- Geneva, Switzerland
- Organised by Clinical Microbiology and Infection (ESCMID journal)

## Respiratory infections in the elderly

- 5–6 October 2023
- Bordeaux, France
- Organised by ESGIE

## Diagnostic and therapeutic approach to patients with CNS infections

- 5–7 October 2023
- Amsterdam, Netherlands
- Organised by ESGIB

## Optimised dosing of antibiotics – understanding PK/PD, clinical breakpoints, and therapeutic drug monitoring

- 9–10 October 2023
- Boston, US
- Organised by EPASG

## Advanced course on histopathology of parasitic infections: when the past becomes the future

- 10–11 October 2023
- Online
- Organised by ESGCP

## Better Methods for Clinical Studies in Infectious Diseases and Clinical Microbiology

- 24–26 October 2023
- Pague Czech Republic
- Organised by CMI, ESGIE, ESGBIES

## Antimicrobial susceptibility testing with EUCAST criteria and methods

- 28–31 October 2023
- Melbourne, Australia
- Organised by EUCAST

## An Introduction to Healthcare Associated Waterborne Infections: Ecology, Prevention, Mitigation and Control

- 31 October – 2nd November 2023
- Belfast, Ireland
- Organised by ESGLI

## Update on Infections in Immunocompromised Host

- 28–29 November 2023
- Online
- Organised by ICHS, EFISG, ESGICH, ESGREV

## Diseases of Poverty in the Modern Era

- 1st–2nd February 2023
- Online
- Organised by TAE, ESGVH, ESGITM

## Principles and Applications of FT-IR spectroscopy in Clinical Microbiology

- 7–8 February 2023
- Online
- Organised by ESGEM

## Neglected Parasitic Diseases & Malaria: Road Back from Molecular to Microscopy + AI

- 4–8 March 2023
- Madrid, Spain
- Organised by ESGCP

# 21st ESCMID Summer School 1st–8 July 2023, Seville, Spain

The 21st ESCMID Summer School took place from 1st–8 July 2023 in Seville. We enjoyed sunny weather for the entire week as we hosted 82 young physicians, microbiologists, and researchers from 26 countries from all continents.

↓  
The 22nd Summer School will be held from 29 June – 6 July in 2024 taking place in Utrecht, Netherlands. We hope to see you there!

As is usual, the scientific programme consisted of a week-long immersive series of presentations on a broad base of Infectious Disease and Clinical Microbiology topics, ranging from diagnosis, management, and prevention of bacterial, viral, fungal, and parasitic infections, as well as important considerations for specific groups such as immunocompromised patients. Small group workshops took a closer look at current hot topics, such as the building of an antimicrobial stewardship programme in their clinical centre, molecular typing for infection control, or clinical cases of osteoarticular infections, bacteraemia, and endocarditis.



Jesús Rodríguez-Baño,  
21st Summer School Director

The participants themselves also presented their own work, be it their research projects or a clinical case from their professional experience. These sessions provided a great opportunity for discussions between participants comparing practice and guidelines between different countries.

This rich academic timetable served as a wonderful backdrop for discussions between the participants and faculty members, with plenty of opportunities for networking, be it between sessions, at dinner on one of the evening events, or while visiting cultural sights in Seville!

In addition, we were able to provide an insight at the enormous Hospital Universitario Virgen Macarena and School of Medicine from the University of Seville, for the attendees to exchange their experience in the field with local specialists.

Overall, the “ESCMID flavour” facilitated a friendly networking atmosphere among attendees and faculty members. We look forward to hearing the results of the collaborations that eventuate from the connections made in Spain, and hope that the participants will continue to stay in contact at future ESCMID events and beyond.

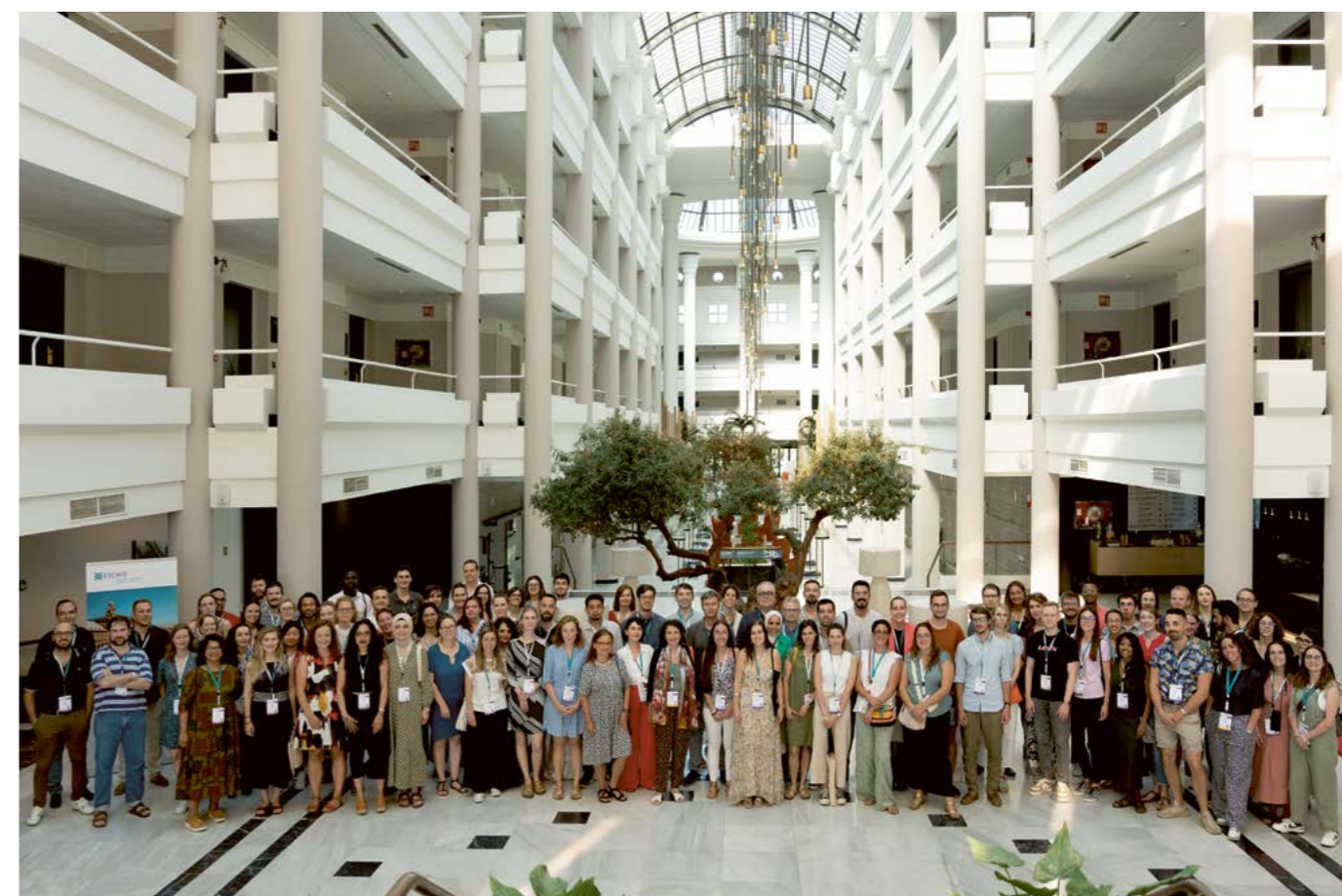
Special thanks must go to the ESCMID Executive Committee and Education Subcommittee for their tireless work in creating the academic programme, and for dedicating their time to participate as lecturers and moderators in their respective fields of expertise. We are also very grateful to the ESCMID Office for taking care of all logistic details, and to all speakers and chairs for their invaluable contributions to the Summer School. Of course, we appreciate the support of several entities for helping to organise all local affairs.



Small group workshops took a closer look at current hot topics



Summer School 2023 group picture





The scientific programme consisted of a week-long immersive series of presentations on a broad base of Infectious Disease and Clinical Microbiology topics.



# Antimicrobial Stewardship Certificate 2022–2024

**Bojana Beović,**  
Antimicrobial Stewardship Certificate Programme Coordinator



**Jeroen Schouten,**  
Antimicrobial Stewardship Certificate Programme Coordinator



Antimicrobials are the most important drivers of antimicrobial resistance, which are prescribed by virtually all physicians involved in direct patient care. The improvement of antimicrobial prescribing and the decrease in their use are essential for the control of antimicrobial resistance. Antimicrobial stewardship (AMS) has developed as a set of interventions that aim to improve antimicrobial use. Over time, it has become apparent that the interventions should be undertaken by teams of specialised experts with dedicated time to carry out antimicrobial stewardship interventions and support antimicrobial prescribing at various levels of healthcare. Current curricula of postgraduate training for physicians, pharmacists and other professionals involved in AMS do not provide all the knowledge and skills that are needed for an expert involved in antimicrobial stewardship. Educational opportunities for experts in AMS worldwide are scarce and partial. In addition to the knowledge on aetiology and pathogenesis of infections, the knowledge on pharmacology of antimicrobial agents, as well as practical skills in infection management and specific AMS interventions, an AMS expert should be familiar with surveillance of antimicrobial use and resistance, the position of AMS in healthcare structure, basic principles of infection prevention and control, and have an understanding of AMS as a part of quality management, behaviour change management, basics of informatics, and communication skills.

It was a huge step forward when the ESCMID Executive Committee supported the development of a comprehensive 2-year educational programme in AMS. The ESCMID AMS Certificate Programme is based on 14 domains, comprising the above-mentioned topics identified by the ESGAP Study Group. The first edition of the ESCMID AMS Certificate Programme was launched in June 2022. The programme consists of 11 activities: one Basic module, six (one online and five onsite) Ad-

vanced modules and three Elective modules (the participants should choose three Elective modules out of eight available modules on different AMS-related topics that deepen the knowledge in more specific areas of AMS). Students are allowed to exchange one of the Elective modules for a two-week Observership in a dedicated hospital, specialising in AMS. The courses take place in eight different European countries. In addition, each student should execute an AMS implementation project in their own healthcare setting over the 2-year period; the students are supported on their projects by international tutors. The group of 40 students that joined the first edition of the AMS Certificate Programme consists of enthusiastic, motivated, and hard-working physicians and pharmacists are now drawing close to their graduation at ESCMID Global 2024! Just a final exam to pass and a report on their project to deliver. They have done an incredible job, combining all the different elements of the programme whilst helping us – as programme coordinators and ESCMID staff – to improve the programme by providing feedback and suggesting alterations. Also, they now are a true source of reference and information for each other and have become – through the process – a group of friends. After their graduation we hope to keep everyone involved and they may also become tutors for future projects within the AMS certificate program! We are also happy to have started with a second cohort of enthusiastic participants in June 2023 and we have just recently finalised the registration for the 2024–2026 programme, showing an overwhelming interest of young professionals in the field of ID, microbiology and clinical pharmacy for this important topic.



AMS Crete



AMS Basic Module



AMS Homburg



AMS Seville

# Congress





# ECCMID 2023, Copenhagen

## Attendees

In 2023, ECCMID took place in Copenhagen, Denmark, from April 15th to 18th. Demonstrating a truly global appeal, the event drew over 16,000 participants, spanning both onsite and online platforms, from more than 140 countries worldwide. Underscoring the role of ECCMID in linking the scientific community and industry, the congress featured its most extensive exhibition to date. With a remarkable showcase of over 240 exhibitors, the event encompassed a sprawling 7,500 square meters of exhibition space, providing an unprecedented opportunity for networking, collaboration, and the exploration of cutting-edge developments in the field.

## Invited Scientific Programme

ECCMID 2023 featured an extensive scientific programme comprising 276 sessions, mostly on-site but also during pre- and post-ECCMID days. The invited programme encompassed diverse session formats, including 8 keynote lectures, 35 2-hour and 40 1-hour invited symposia, 19 educational workshops, and 27 meet-the-expert sessions. A key highlight of the scientific programme were eight Keynote speakers, each addressing crucial and contemporary themes, such as bioinformatics and diagnostics, epidemiology, bacterial infections, and public health. Thanks also to the well-appreciated "Fireplace sessions", renowned experts shared their insights, providing attendees with a deep understanding of the current challenges and opportunities in the field. Parallel sessions and symposia were organised across multiple tracks, creating a matrix of in-depth exploration of specialised areas. Topics ranged from the latest breakthroughs in antimicrobial resistance to advances in diagnostic technologies and innovative treatment modalities. Whilst COVID-19 remained a notable topic, 2023 symposia highlighted the renewed interest of

our attendees in a variety of areas across clinical microbiology and infectious diseases. A wide range of topics was also covered by educational workshops and meet-the-expert sessions, offering practical insights into emerging trends. Participants had the opportunity to engage with experts, enhance their skills, and gain valuable knowledge applicable to their clinical and research practices. Confirming the interest of previous years, Open Forum sessions provided a unique format for dynamic discussions on subjects like sustainability, parity in science, and the educational value of online platforms.

Noteworthy, the Global Leaders Group (GLG) on antimicrobial resistance (AMR) joined forces with ESCMID to organise a forum, that brought together government leaders, policymakers, and scientists from around the world, united in their mission to tackle one of the most significant health threats of our time – AMR. This high-level meeting emphasised the imperative for robust collaborations between policy and research to develop effective solutions in response to the challenges posed by antimicrobial resistance.

Furthermore, a substantial component of the scientific programme comprised over 50 Integrated Symposia, collaboratively arranged with industry partners, further enriching the overall experience of ECCMID 2023.

## The Abstracts Programme

We received a substantial number of submissions from 127 countries in 2023. From a pool of over 6,000 submitted abstracts, 74 % were selected for inclusion, and distributed in either 1,000 oral presentations or over 3,500 poster presentations. We renew our sincere gratitude to the hundreds of dedicated abstract reviewers for their unwavering effort and commitment.

## Highlights and New Formats

We reintroduced the ePoster flash presentations, offering a modern twist to the traditional poster presentation. Hundreds of abstract authors were offered the opportunity to present their work highlighting key findings, methodologies, or insights from their research, in a very dynamic and interactive setting at the arenas. For the first time in 2023, ECCMID virtual platform offered a personalised experience. The entire ECCMID content was tagged with featuring keywords, creating the bridge to match with attendees' preferences and interests.

The ECCMID Congress wasn't just about academic and professional development. Attendees enjoyed various engaging activities, including the Escape Room that proved to be a highlight, with all slots fully booked. The newly introduced Selective Pressure Quiz was highly attended. The Copenhagen-themed photo booth added a fun and friendly atmosphere, capturing 2,300 pictures over the event and eliciting many smiles and laughter. The opening ceremony was a grand affair, featuring inspiring speeches and the stunning performance of the Copenhagen drummers, leaving everyone in high spirits for the congress days that followed.

## Outlook

The next congress is set to take place in Barcelona, Spain, still adopting a hybrid format to cater to a broad audience. We anticipate a congress in the magnitude of ECCMID 2023 and beyond. Our goal is once again to provide a high-quality scientific programme enriched with new elements, in a joyful and vibrant atmosphere.



Jakob Moran-Gilad,  
ECCMID Programme Director

A heartfelt appreciation goes to the congress Programme Committee for their tireless efforts in crafting an exceptional programme. We extend our gratitude to the entire ESCMID Office Team for their outstanding support in both scientific management and event organisation. Looking ahead with great anticipation, we eagerly await the opportunity to meet all of you in person in Barcelona.



ECCMID 2023 took place in Copenhagen, Denmark



**ECCMID  
is now  
ESCMID Global**

**Our name  
has changed,  
our ambitions  
stay the same.**

Congress

## **ESCMID Global 2024, Barcelona**

Six years since the last congress was held in Spain, it is our great pleasure to welcome you back in the city of Barcelona. In this city of stunning architecture, art, history and sports, all eyes will be on ESCMID Global, from April 27th to 30th, 2024. Once again, we are happy to share some exciting news that will undoubtedly make the congress a memorable experience.

### **Scientific Programme and Keynote Speakers**

ESCMID Global will feature well over 300 scientific sessions, spanning the invited, abstract, and integrated programme. More than 450 renowned experts from well over 50 countries have been invited to encompass a wide range of featured topics, including the most recent findings in infectious diseases and clinical microbiology. In addition to the traditional session formats, like scientific symposia and educational sessions, we will uphold special sessions that have proven highly successful in previous years. Among them, four "Year In.." sessions, including the traditional Years in Microbiology, Infectious Diseases, and Infection Control, and the more recently introduced Year In Public Health session, will highlight the top published literature on the topic since the last congress. Nine keynote lectures from opinion leaders in their respective fields have been confirmed, covering cutting-edge topics such as malaria management, invasive group A streptococcal disease and sepsis, advances in the human microbiome, immunity and immune compromise. Also, this year, the Scientific Programme for ESCMID Global 2024 will feature four Pre-ECCMID Days conducted entirely online, focusing on infection control, sexually transmitted infections, special population and One Health. The congress will also feature the highly appreciated Clinical Grand Rounds session, organised in collaboration with the Infectious Diseases Society of America, where

seven challenging clinical cases will be presented by trainee physicians and discussed with senior professors.

### **ESCMID Global 2024 Abstract numbers**

This year, we are proud to announce a new record of submissions having been reached, with a total of 7,300 abstracts received from 120 countries worldwide. Approximately 70 % of abstracts have been accepted for inclusion in the congress, including almost 1,000 oral presentations and over 4,000 paper posters.

### **Special features**

Following the success of the ePoster Flash Sessions at ECCMID 2023, the oral abstract programme continues to expand in ESCMID Global 2024. Up to four ePoster Flash Sessions will run concurrently in the Arenas, allowing a greater number of delegates to present their work in Barcelona. We also expanded the number of case sessions which were highly attended last year, allowing young and experienced physicians to discuss challenging diagnostic and therapeutic dilemmas.

This year, Educational Sessions (formerly Workshops) have been re-branded towards a more interactive and dynamic format. These sessions are designed to incorporate review talks, case studies and interactive elements, such as polling, to facilitate robust discussions.

### **ESCMID Global Movie Session**

Immerse yourself in the suspense, drama, and scientific intrigue of an iconic masterpiece in infectious disease field: "Outbreak" directed by Wolfgang Petersen in 1995. Take your popcorn,

enjoy the show, and after stay tuned for a captivating discussion with two distinguished experts. Gain valuable insights into the real-world implications of the film's scenarios and delve into the latest advancements in infectious disease research.

### **Escape Room**

Unleash your inner Sherlock Holmes! Due to its considerable interest in 2022 and 2023, we are extending this initiative with a new and even more exciting enigma while allowing for a greater number of groups to participate and an enhanced and immersive experience. Participants in the Escape Room will need to apply their problem-solving abilities and draw upon their knowledge of clinical microbiology and infectious diseases to solve this year's puzzle within the allotted time successfully.

### **Not only science: yoga sessions and photo booth**

Be sure not to miss the yoga sessions, to find your inner peace and relax between one session and the other. Furthermore, take some time to stop by our photo booth in the exhibition area for a shoot with friends and colleagues.

We want to express our heartfelt thanks to everyone who contributed to the success of ESCMID Global 2024 – attendees, abstract submitters, presenters, industry sponsors, esteemed speakers, and dedicated faculty members. A special acknowledgment to the abstract reviewers, the esteemed Programme Committee colleagues and ESCMID Office colleagues. We eagerly look forward to welcoming you to Barcelona for an engaging and delightful congress.

← Caregiver Lounge

↙ Down to 3N

← Learning Resource

↗ Restrooms

# Professional Affairs



# Professional Affairs Overview



Anu Kantele,  
ESCMID Professional  
Affairs Officer

ECDC and Mayo Clinic, added an extra layer of prestige. As the autumn call unfolded, the response was remarkable, showcasing its high level of interest. A total of 83 eligible applications flowed in from 32 countries, underscoring the widespread global interest in ESCMID's initiatives. The allure of a special funded observership at Mayo Clinic, a coveted annual opportunity for one fortunate ESCMID member, was again a success. Meanwhile, the exclusive observership at ECDC in Stockholm sparked enthusiasm, drawing 57 eligible applications from eager participants. One of the highlights of the year was the immersive experience provided to 20 ESCMID observers in October 2023. Over five enlightening days, participants delved into a comprehensive program designed to introduce them to the organisation's vital activities, varied roles, and impactful mandates in global public health. Motivated by the success, positive feedback, and the sustained interest from ESCMID members in these programmes, we are currently designing a new type of Observership in collaboration with the education team. This will include a visit to LMICs and have a special emphasis on educational goals.

Observership would not exist without our ESCMID Collaborative Centres (ECCs), acknowledged as centres of expertise, playing a pivotal role in supporting programmes. With 123 active ECCs (84% European, 26% across other continents), we are privileged to offer our members valuable opportunities to enrich their knowledge and skills in CM, ID, and IPC and, simultaneously, contribute to fostering learning, organising services, and promoting international exchange.

## Mentorships

Despite increased advertising efforts in 2023, the Mentorship programme, available for applications year-round, is still not receiving the

attention it deserves. In 2023, there were only 11 applications, a modest increase from the seven received in 2022. This programme, accessible to ESCMID Full, LMIC, and Young Scientist Members, is designed to provide young or less experienced ESCMID members with an opportunity to receive guidance on career planning, scientific development, presentation skills, and data analysis from a senior ESCMID member at one of our ESCMID Mentorship Centers (EMCs).

Mentees have the flexibility to create their customised mentorship plan and can receive support for up to two years with a grant of EUR 2,000. This funding covers expenses such as a face-to-face meeting with the mentor, attendance at ESCMID events and congresses, and article publication fees for CMI and CMI Communication. We are dedicated to refining and enhancing this valuable programme, not only with the aim of attracting more mentee applications but also to inspire additional mentors to join and contribute.

## Trainee association of ESCMID

The Trainee Association of ESCMID (TAE) experienced a dynamic year in 2023, marked by notable success in enhancing CM and ID training, education and networking for medical trainees and young scientists. Key achievements included a thriving ECCMID 2023, a steadfast commitment to sustainability through the Green Team, the establishment of a working group focusing on trainee learning needs, and the publication of a commentary in CMI. For a more comprehensive overview of TAE's activities, please refer to the dedicated page in the yearbook.

## Parity Commission

The Parity Commission, established to address gender and geographic imbalances, has been actively working to enhance representation in Clinical Microbiology and Infectious Diseases. In 2023, half of the commission's members were new, and the team initiated its work with a focused brainstorming session, concentrating on developing impactful projects. We eagerly anticipate unveiling the most successful ideas next year, underscoring our commitment to innovation and inclusivity. In 2023, we expanded the ESCMID CAREer Grant to include part-time workers, providing support for individuals facing career challenges due to family responsibilities. Additionally, we demonstrated solidarity by granting 41 LMIC memberships to support specialists in Ukraine during the ongoing war.

For more details on the Parity Commission's projects, please refer to the dedicated page in the yearbook.

## Other activities

Several sessions proposed or co-organised by the Professional Affairs Subcommittee and TAE were accepted for ECCMID 2023, affirming the scientific and professional drive of our portfolio. Another noteworthy activity is the *collaboration with organisations at the forefront of medical training in Europe*, such as the Union Européenne des Médecins Spécialistes (UEMS). Both the UEMS sections of Infectious Diseases (ID) and Medical Microbiology (MM) have organised exams in their fields. In a continued collaboration with UEMS, ESCMID has opted to provide financial support to both the UEMS MM and ID sections, aiming to make the exams more financially accessible for individuals willing to participate. ESCMID is committed to encouraging the two sections to collaborate on overlapping areas, including those related to the exams. Moreover, there is a shared goal to cultivate educational initiatives that support individuals preparing for the examinations.

## Future vision

For the upcoming year, our aspiration is to make significant progress across various areas within our portfolio. We are excited about the impending launch of the new initiatives by the Green Team, focusing on sustainability issues, especially flight compensations. Additionally, we look forward to witnessing the implementation of the newly designed Observerships. We believe that everyone dedicated to the work in the Professional Affairs Portfolio has much to contribute, enhancing existing activities and collaboratively developing new initiatives as a team that welcomes suggestions from all ESCMID members. Lastly, we are enthusiastic about supporting both current and new ESCMID members in advancing their expertise and skills through the diverse array of the ESCMID activities!

We express our warmest thanks to our members, the ECCs, the EMCs, the Parity Commission, the Green Team, the young colleagues of the TAE, and, with special acknowledgment, our always cheerful and enthusiastic partner in the ESCMID Office. Their consistent and invaluable support has been instrumental in significantly enhancing the success of Professional Affairs activities. Their contributions, ideas, suggestions, and feedback were not only welcomed but warmly appreciated.



**Professional Affairs Subcommittee**

**Chair**

- Anu Kantele, Finland

**CM Members**

- Karl Gustaf Kristinsson, Iceland (leaving after ESCMID Global 2024)
- Olivier Denis, Belgium (leaving after ESCMID Global 2024)
- Makeda Semret, Canada
- Birgit Willinger, Austria

UEMS MM Section representative:  
Truls Michael Leegaard, Norway

Incoming members (after ESCMID Global 2024):

- David Ong, Netherlands
- Antti Hakanen, Finland

**ID Members**

- Özlem Kurt Azap, Turkey
- Anna Checkley, United Kingdom (leaving after ESCMID Global 2024)
- Siphon Kenneth Dlamini, South Africa
- Rita Murri, Italy

UEMS ID Section representative:

- Jean Paul Stahl, France

Incoming member (after ESCMID Global 2024):

- Sylvian Defres, United Kingdom

Professional Affairs Subcommittee at ECCMID 2023

# ESCMID Collaborative Centres (ECCs) and ESCMID Observerships

## Funded Observerships

In 2023, ESCMID upheld its commitment to providing two annual calls for funded observerships, each offering up to 50 opportunities, in addition to the special funded observerships at the ECDC and Mayo Clinic. While the spring ESCMID funded call resulted in a commendable 47 eligible applications, the autumn call proved immensely successful, attracting 83 eligible applications from 32 different countries across all continents. The top five countries by the number of applicants were Turkey, Italy, India, Brazil, and Iran. This not only underscores our international outreach but also highlights ESCMID's valuable role in facilitating exchanges, particularly for countries facing additional challenges in accessing funded observership opportunities. Similarly, ECCs that received applications for the autumn call were distributed in Eastern Europe (8%), Western Europe (74%), and non-European locations (18%). An important aspect to highlight is the prioritisation of gender and geographical balance during the final selection of observers – a crucial condition for achieving equity. Lastly, it is worth noting another valuable programme, the special funded observership at the Mayo Clinic (Rochester MN, United States), which welcomes one ESCMID member annually. The call for this year is scheduled for January.

## ECDC observership programme

A special acknowledgment is extended to the European Centre for Disease Prevention and Control (ECDC) for hosting ESCMID members during the ECDC/ESCMID observership at the ECDC headquarters in Solna, Stockholm (Sweden) from October 16 to 20, 2023. With a strong interest demonstrated through 57 eligible applications in 2023, ESCMID observers, joined by representatives from the European Committee on Infection Control (EUCIC)

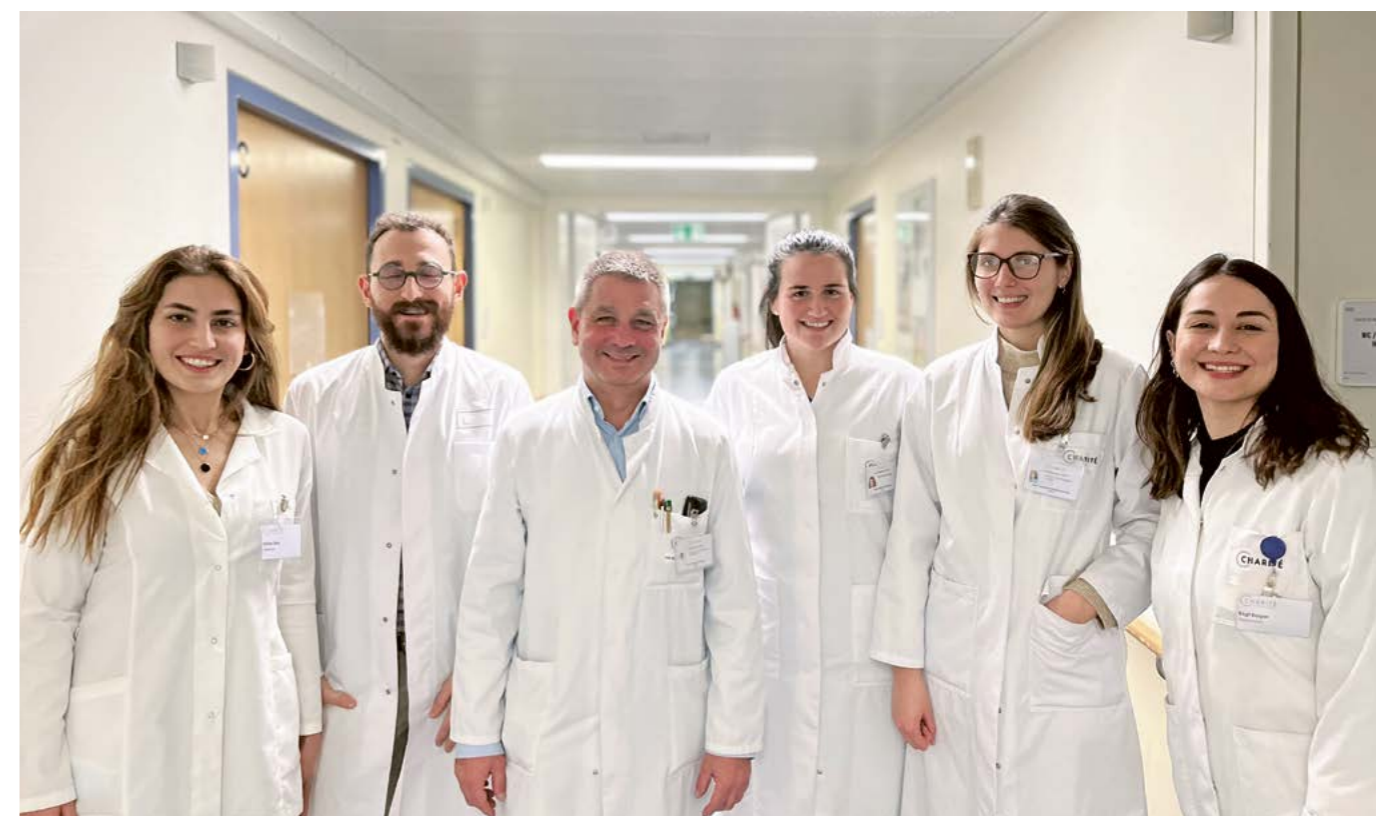
and the European Society for Clinical Virology (ESCV), participated in a comprehensive five-day program introducing ECDC activities, roles, and mandates in supporting global public health actions against infectious diseases. The programme, the ninth of its kind, facilitated interaction through presentations and hands-on exercises, providing practical experience in rapid risk assessments, genomic data analysis, and modeling to aid public health decision-making. Exceptional feedback from both ECDC staff and ESCMID observers underscores the success of this initiative, with visit reports and detailed information available on the ESCMID website.

## ESCMID Collaborative Centres

ESCMID Collaborative Centres (ECCs) are acknowledged as centres of excellence in CM, ID and/or IPC. These centres play a pivotal role as invaluable partners for observerships, extending invitations to observers to enhance their knowledge and skills in CM or ID. In 2023, ESCMID counts a total of 123 active ECCs, with 84% located in 23 different European countries, and the remaining 26% distributed among 15 countries across the other four continents. The ECCs attract and welcome ESCMID members, providing unique opportunities to gain insights into diagnostic and therapeutic procedures. Moreover, these centres organise services, facilitate the establishment of new contacts, and actively promote international exchange. We extend our gratitude to the ECCs for their ongoing support to ESCMID members, particularly Young Scientists. We highly value each collaboration and acknowledge the substantial time and resources invested in these visits.



ESCMID Observerships



# Trainee Association of ESCMID (TAE) 2023–2024 Year in Review

In an exciting year of progress and collaboration, the Trainee Association of ESCMID (TAE), representing the interests of over 3,700 ESCMID Young Scientist Members (YSM) and trainees worldwide, has significantly advanced the frontiers of Clinical Microbiology and Infectious Disease (CM/ID) training and research.

Reflecting on April 2023, we successfully organised sessions at ECCMID, uniting experts and enthusiasts from around the globe in a four-day experience of knowledge exchange. Notably, TAE co-organised 12 sessions of the scientific programme, and the TAE Day at ECCMID 2023 featured an improved and specialised Round Table Session, empowering trainees to engage directly with CM/ID leaders.

A key 2023 achievement was our involvement in ESCMID's Green Team, a pioneering initiative for sustainable practices within the organisation. The new generation of CM/ID scientists is aware of the environmental impact of conferences, hospitals, and laboratories and is increasingly interested in sustainable academic practices. This initiative underscores TAE's commitment to environmental responsibility.

#### TAE Steering Committee

- Petar Velikov
- Nicholas Power
- Giorgia Caruana
- Suzanne Van Asten
- Yousra Kherabi
- Christian Kraef
- Claudio Neidhöfer
- Casandra Bulescu

Our participation in improving education, networking and advocacy is highlighted by several achievements: Firstly, we are pleased to announce the successful launch of the TAE Working Group project, an initiative that allows us to undertake trainee-focused research. Secondly, our partnership with the Young Leaders Circle (YLC) of American Society for Microbiology (ASM), involving speaker exchanges, has been a standout accomplishment, enriching both our congresses and fostering an active community of young professionals. Lastly, the Virtual Round Tables and the National Representatives Meeting in January 2024 played a significant role in facilitating meaningful conversations and knowledge exchange within our global network. Finally, we are proud to have published a commentary in CMI, focusing on the essential needs of CM and ID trainees from our perspective, adding our insights to the scientific discourse and voicing trainees' views in shaping our field's future.

As we look forward to ESCMID Global 2024, we are thrilled to have five sessions approved, including a new edition of the TAE Day. This event promises unique learning opportunities and community-building among trainees and young scientists. TAE will also promote research and professional development, where we will present the next TAE Outstanding Trainee Awardees.

We extend our deepest gratitude to all TAE members and collaborators. Your dedication and support have been crucial in our achievements and continue to inspire our journey towards excellence in CM/ID. As we move towards ESCMID Global 2024, we welcome your input on improving our future activities. Please share your questions or ideas at [tae@escmid.org](mailto:tae@escmid.org) and stay connected on our social media for updates on our activities and ESCMID events for young scientist members.



TAE Day at  
ECCMID 2023



Round tables  
session at  
TAE Day 2023





## ESCMID Parity Commission

**Anu Kantele**  
Education Officer  
and Chair of the  
Parity Commission

The objective of the ESCMID Parity Commission is to assess and enhance the representation of scientific minorities, along with addressing gender and geographic imbalances within the fields of Clinical Microbiology (CM) and Infectious Diseases (ID). Since its establishment, members have focused on tutoring CM/ID specialists and young scientists from resource-poor countries and from minority groups and linking ESCMID and national societies to bridge the gap of gender, economic status, and ethnicity. In 2023, Parity Commission focused on updating current projects and creating new projects, which will be implemented in the coming years to respond to our members' needs.

### The ESCMID CAREer Grant

The ESCMID CAREer Grant is designed to provide support to members who face challenges in advancing their scientific careers due to responsibilities such as childcare or unexpected situations preventing them from working full-time (illness, caring for elderly parents, etc.). In 2023, eligibility criteria were expanded to include part-time workers, resulting in a higher number of applications. This grant provides financial assistance to members who need to reduce their workload by 20 % or are already working part-time ( $\leq 80\%$ ) due to family care responsibilities. It does so by contributing 20 % of the recipient's gross salary towards the salary of a qualified support personnel, such as a scientific/technical staff member or assistant, providing members more time with their families while maintaining project productivity at 100 %. The recent call from November 2023 to January 2024 offered up to two grants, with ongoing revision and final selection processes.

### Support for medical trainees and professionals in Ukraine

To show solidarity with Ukrainian members and colleagues during these challenging times of the ongoing war, the ESCMID Parity Commission continued to grant up to 200 complementary LMIC memberships annually to Clinical Microbiology and Infectious Disease specialists continuing their work in Ukraine. This initiative aims to support their training, education, and professional development. In 2023, 41 LMIC memberships were granted.

For further information about this project and the Parity Commission in general, please visit the Parity Commission webpages [escmid.org/parity](https://escmid.org/parity).

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### Parity Commission

- Anu Kantele, Finland (Chair)
- Agnes Maria Sonnevend, Hungary
- André Fuchs, Germany
- Khetam Hussein, Israel



Parity Commission  
at ECCMID 2023



# Ethics Advisory Committee

## ESCMID Ethics Advisory Committee (EEAC)



Murat Akova,  
ESCMID Member-  
ship Counsellor

The ESCMID Ethics Advisory Committee has been functional and active since 2021. The EEAC members include Murat Akova (Ankara, Turkey), Aleksandra Barac (Belgrade, Serbia), Asma Nasim (Karachi, Pakistan), Elda Righi (Verona, Italy), Dafna Yahav (Tel Aviv, Israel).

2023 was a very productive and exciting. The EEAC actively participated in the 33rd European Congress on Clinical Microbiology and Infectious Diseases (ECCMID) held in Copenhagen, Denmark, between 15th and 18th April 2023.

A one-hour symposium was organised by the EEAC titled "Ethical dilemmas with antimicrobial therapy". Dr. Dafna Yahav and Dr. Asma Nasim were the Chairs of the session. A very thought-provoking discussion was generated regarding the dilemmas we face as a world in treating and managing extensively drug resistant organisms whether at end of life or in acute care. Then an open forum titled "Equal opportunity in publication and research?" was organised in collaboration with CMI Board of Editors, Trainee Association of ESCMID (TAE) Steering Committee, ESCMID Parity Commission and ESCMID Professional Affairs Subcommittee. Dr. Asma Nasim, representing EEAC, presented an interesting debate on why researchers from low and low middle income countries may not get the opportunity to present their work freely. It was a great success.

The EEAC has contributed to reviewing and updating the ESCMID Code of Conduct (CoC). We also brainstormed and reviewed the Study Group SOPs to ensure that they are in line with ESCMID CoC and support ESCMID diversity and transparency, for example clearly disclosing any conflict of interest.

There are two ambitious projects for the EEAC during 2023–2024. The first one is the ongoing OPENING project for "Incorporating Ethics in Clinical Guidelines". The purpose of this project is to generate an evidence-based framework to incorporate ethics principles, such as equity, justice, and autonomy, into ESCMID clinical guidelines. Currently, the EEAC is systematically reviewing hundreds of guidelines from different societies to analyse how and if ethics principles are currently reported or discussed. The results, along with a review of the literature on guidelines and ethics, will set the basis for our ethical guidance in clinical guidelines.

The second project is the organisation of an ESCMID online Postgraduate Course regarding ethics in Infectious Diseases (ID) and Clinical Microbiology (CM), open to clinicians and researchers who are directly involved, or have an interest in the field of ID and CM. This comprehensive course will include multiple topics such as research ethics, conflict of interest, and good clinical practice (GCP) principles to help increase awareness and knowledge about ethical principles in clinical practice and research. The course will hopefully generate good discussion on diverse ethical dilemmas among participants.

Moreover, the EEAC is involved in a survey on scientific misconduct in ID, in which we aim to obtain data on the rates of misconduct performance or exposure to scientific misconduct in ID. The survey has been launched on the ESCMID website and published in the ESCMID newsletter. We are also finalising a manuscript summarising the data from our previous survey on ID/CM ethics.

Lastly, this year the EEAC will be involved during ESCMID Global 2024 in three different activities: one educational workshop on "Clinical Practice Guidelines on ID: Present and Future", and two open forum discussions in collaboration with other ESCMID committees. One open forum would discuss "Research integrity in clinical microbiology and infectious diseases" in collaboration with the CMI board of editors, and the other: "Research barriers and enablers in CM/ID", in collaboration with ESCMID Parity Commission.

In summary, 2023 has been a very busy and exciting year for the group. In 2024, the EEAC will continue striving to encourage education, research and other activities pertaining to the field of ID/CM ethics.

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### Ethics Advisory Committee

- Murat Akova, Turkey (chair)
- Aleksandra Barac, Serbia
- Asma Nasim, Pakistan
- Elda Righi, Italy
- Dafna Yahav, Israel



# International Networking

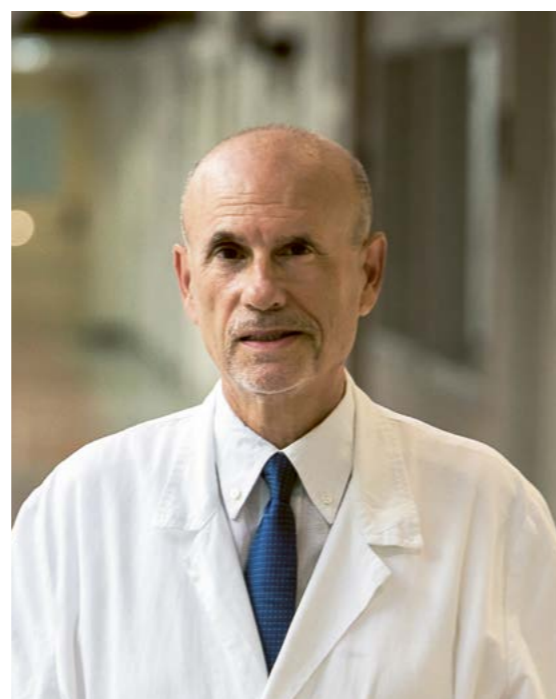
## ESCMID International Affairs Subcommittee (EIAS)

In 2023, the ESCMID International Affairs Subcommittee (EIAS) continued to promote ESCMID activities and partnership in all regions of the world. One of the main commitments was to establish relationships with other ESCMID groups, international infectious disease and/or clinical microbiology societies and international organisations.

During ECCMID 2023, three symposia were co-organised by EIAS:

- A joint EIAS/ESGMD 2hr symposium "Syndromic testing for infectious diseases in LMICs settings: challenges and opportunities" chaired by Mauricio Farfan and Monica Slavin. Topics: "Syndromic testing for the diagnosis of respiratory infections", "Syndromic testing in patients hospitalised with severe respiratory illness", "Use and interpretation of syndromic testing for public health surveillance", "Performance of a rapid diagnostic test for the detection of enteric pathogens in children admitted to hospital with diarrhea".
- A joint EIAS/British Infection Association 2hr educational Workshop "Eosinophilia in migrants and travellers: challenging cases and common pitfalls" chaired by Anna Checkley and Nicola Petrosillo. Topics: "2023 UK guidelines for the investigation and management of eosinophilia in migrants and travellers: the new, the challenging and the controversial", "Diagnosis and test of cure in schistosomiasis: challenges and changes", "Interactive cases: when to test, when to treat"
- And a 1hr symposium on "Preventing influenza and its complications: why randomised studies matter" chaired by Nicola Petrosillo and Ann Falsey.

In September 2023, during the XXI Congress of the Pan-American Association of Infectious Diseases (API) held at Buenos Aires, Argentina, EIAS organised a joint session titled "Stewardship in low- and middle-income countries and vulnerable populations" which was chaired by Nicola Petrosillo and María Eugenia Gutiérrez Pimentel. The session covered the topics of "Antimicrobial Stewardship Programs (ASP) in the time of COVID-19", "Antimicrobial resistance and ASP in LMICs and vulnerable populations" and "Strategies of IPC in LMICs and vulnerable populations". The session and participation in the congress was a great success for the EIAS and ESCMID's reach in Latin America.



Nicola Petrosillo, EIAS Chairperson



EIAS at ECCMID 2023

In 2023 the collaboration with the Emerging Infection Task Force of ESCMID continued. In the Outbreaks News, EIAS collaborated in the following topics:

- COVID-19 in China and travel restrictions and variant XBB.1.5
- Enhanced surveillance of severe avian influenza virus infections in hospital settings
- Unusual upsurge of respiratory illness in children

Additionally, a correspondence was published in Lancet Infectious Diseases that addressed the Ukraine war and the possible effects that this was having on the global AMR problem. (Petrosillo N, Petersen E, Antoniak S. Ukraine war and antimicrobial resistance. Lancet Infect Dis 2023;23(6):653-654)

Moreover, for ESCMID Global 2024, EIAS is organising a 1hr symposium "Antimicrobial resistance among displaced populations", chaired by Adrian Brink and Jon S. Friedland covering the following topics "Challenges of antimicrobial stewardship in countries with expanding displaced populations in the Middle East" and "Ukraine war and antimicrobial resistance challenges".

Finally, in 2024 there will be a joint ESCMID/Australasian Society for Infectious Diseases (ASID) symposium during the ASID 2024 Annual Meeting (Wellington 7-9 March 2024), titled "Challenging Dogma in Infectious Diseases" with the participation of Angela Huttner and Nicola Petrosillo for EIAS.

This joint symposium with ASID will be the last activity of EIAS, as the subcommittee will come to close at ESCMID Global 2024 with a reorganisation within ESCMID. ESCMID on behalf of Nicola Petrosillo wishes to heartily thank the members of EIAS and all those who have supported its activities to date. This Subcommittee was a fantastic and engaging experience in the spirit of growing our community in the world and exchanging experiences, knowledge, friendship and science. ESCMID would also like to respectfully thank Nicola Petrosillo for his dedication to the leadership of the EIAS and for his work in expanding ESCMID's reach across the globe. Thank you!

### ESCMID International Affairs Subcommittee

- Nicola Petrosillo, Italy, Chairperson
- Adrian Brink, South Africa
- Svetlana Rachina, Russian Federation
- Mauricio J. Farfan, Chile
- Ramasubramanian Venkatasubramanian, India
- Seif Al-Abri, Oman
- Yunsong Yu, China
- María Eugenia Gutiérrez Pimentel, API, Panama
- Adalat Abdullayev, Azerbaijan



# Awards & Grants



**Evelina Tacconelli**  
Director of the  
Infectious Diseases  
Section at Verona  
University Hospital,  
Italy

## Lifetime Achievement award

Evelina Tacconelli is the Director of the Infectious Diseases Section at Verona University Hospital, Italy, and serves as the Senior Consultant on Antimicrobial Resistance at the Department of Internal Medicine, DZIF Clinical Research Unit at the University of Tübingen, Germany. Former ESCMID Guideline Officer, she is the Chair of the European Committee for Infection Control (EUCIC) and since 2023 the Chief Scientific Officer of ECRAID, the largest European clinical research network on research in the field of infectious diseases. Prof. Tacconelli coordinated with WHO the 2017 Priority Pathogen List for new, effective antibiotics for R&D and served as consultant for WHO and ECDC (European Centre for Disease Prevention and Control) in the field of antimicrobial stewardship and

infection control. She currently coordinates the CTS OPERA Working Group on optimising antibiotics' prescriptions for AIFA, the Italian Medicine Agency. She is the chief author of several ESCMID guidance documents for management of antibiotic-resistant infections. She coordinates the Cohort Coordination Board, linking major European projects with a cohort design assessing infectious diseases with pandemic potential. Her teams participated and coordinated several European projects and networks focused on clinical and epidemiological aspects of antimicrobial resistant infections and SARS-CoV-2 infection as the ORCHESTRA project. Major research achievements are summarised in more than 300 peer-reviewed publications.

## Young Investigator Awards



**Nathan Brendish**

Nathan Brendish is a NIHR Clinical Lecturer and Specialist Registrar in Infectious Diseases and General Internal Medicine in Southampton, UK. He studied medicine at University College London, graduating with distinction in 2010. He completed his PhD with his "Molecular point-of-care testing for respiratory viruses" thesis at the University of Southampton in late 2019, just in time for the pandemic. He is committed to improving patient outcomes through research into innovative diagnostic approaches.

Nathan's research focuses on molecular point-of-care testing for respiratory viruses and other infections in hospitalised adults. Nathan has spearheaded four landmark trials within Professor Tristan Clark's group in Southampton. These have shown that molecular point-of-care testing has multiple benefits, including improved detection of respiratory virus infection, improved antiviral use for influenza, improved use of isolation facilities, and decreased length of hospital stay.

**Award lecture title:**

Getting to the point of point-of-care testing.  
(27 April 2024. 11:00–12:00, Hall B)



**Pieter de Cock**

Pieter de Cock is a clinical pharmacologist and antibiotic stewardship pharmacist, an assistant professor with a strong interest in improving antibiotic treatment outcomes for special patient populations. Although we live in the era of precision medicine, especially children and geriatric patients with serious comorbidity remain therapeutic orphans. His translational research aims to understand the impact and interplay of growth, development, ageing and pathophysiological changes on antibiotic pharmacokinetics and pharmacodynamics, while his clinical research focuses on implementing model-informed dosing precision tools for anti-infectives.

Pieter started his research pathway ten years ago and has worked as a clinician-scientist throughout. During his early research career, a major achievement was his work on augmented renal clearance of antibiotics in critically ill children, leading to a substantial risk of underdosing. Several newly developed dosing regimens were cited in premium paediatric drug formularies. Pieter supervises eleven higher degree students and acts as principal investigator on >ten academic observational and interventional antibiotic trials. He has been awarded over 3 million € in grants over the past few years for his studies.

**Award lecture title:**

Antibiotic disposition in children: are we under or overdosing our most vulnerable patient population (27 April 2024. 11:00–12:00, Hall B)



### Henning Grüll

Henning Grüll is a physician/scientist integrating basic and translational research with clinical work in infectious diseases. While studying medicine at the University of Münster, he joined Michel Nussenzweig's lab at Rockefeller University to work on HIV-neutralising antibodies. Upon completing medical school, he trained in Internal Medicine at the Division of Infectious Diseases of the University Hospital Cologne. Subsequently, Henning joined the Institute of Virology in Cologne, where he completed his residency in clinical microbiology and virology, currently acts as an attending physician, and conducts research as a postdoctoral fellow in the laboratory of Florian Klein.

Henning's research focuses on the humoral immune response to infection and vaccination. In the laboratory, he aims to decipher the interactions between pathogens and antibodies to develop effective antibody-based antiviral strategies. To translate his findings, Henning designs and conducts early-phase clinical trials of antibodies targeting viruses such as SARS-CoV-2 and HIV-1.

**Award lecture title:**

Antibody-mediated treatment and prevention of viral infections (27 April 2024. 11:00–12:00, Hall B)



### Rasmus Leistner

Rasmus Leistner is an infectious diseases specialist working as a clinician in the Department of Gastroenterology, Infectious Diseases and Rheumatology at Charité Universitätsmedizin Berlin, Germany. He is also board-certified in hospital epidemiology and heads a research group for infectious diseases epidemiology at the Institute of Hygiene and Environmental Medicine at Charité and a cross-departmental interdisciplinary research group.

His research focuses on the epidemiology, treatment and prevention of infections caused by multi-resistant pathogens and nosocomial infections. He focuses on skin and soft tissue infections caused by Panton-Valentine Leukocidin (PVL)-producing *Staphylococcus aureus*.

Rasmus believes that infectious diseases in clinical medicine and research should be networked nationally and internationally through practicable standardisation of clinical data. He sees the future of clinical epidemiology in AI-supported research, combining and analysing microbiological and clinical data to improve infection prevention, diagnosis and treatment with a minimum time delay.

**Award lecture title:**

Use cases of artificial intelligence in clinical epidemiology in infectious diseases (27. April 2024. 11:00–12:00, Hall B)

## Emerging Young Investigator Award



### Ira Praharaj

Ira Praharaj is a public health microbiologist and virologist at the Indian Council of Medical Research, with experience in capacity building for the detection and characterisation of emerging and re-emerging pathogens currently working on the genomic epidemiology of SARS CoV2, Influenza virus, Respiratory Syncytial virus (RSV) and arboviruses such as Dengue virus. She leads a public health virology laboratory involved in vaccine-preventable disease surveillance, including Measles, Rubella laboratory surveillance and Diphtheria Pertussis surveillance.









Ira's research interests include the genomic epidemiology of respiratory viruses and arboviruses such as Dengue virus. She also works on the human gut microbiome and its role in health, disease, and transmission of antimicrobial resistance in Indian settings.











**Award lecture title:**









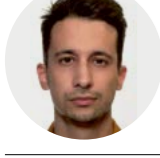

Genomic Surveillance of Viruses of Public Health Importance in Low and Middle-income Settings: Opportunities and Challenges (27 April 2024. 11:00–12:00, Hall B)













# ESCMID Research Grants

Name/Department	Institution	Project title
 <b>Damian Lobato-Marquez</b>	Microbial Biotechnology, Centro Nacional de Biotecnología	Identifying bacterial factors that subvert cell-autonomous immunity to promote infection
 <b>Carl Boodman</b>	Infectious Diseases and Medical Microbiology, University of Manitoba	Investigating Bartonella quintana as a neglected infection among individuals experiencing poverty using active case finding, novel sampling techniques and bacterial sequencing
 <b>Emily Stevens</b> Biology	University of Oxford	Investigating the role of host microbiota in the transition of Staphylococcus aureus from benign commensal to major human pathogen
 <b>Consuelo Micheli</b> School of Medicine	University of Minho (ICVS – Life and Health Sciences Research Institute)	Unveiling tuberculosis susceptibility: the key role of alveolar macrophages
 <b>Liliana Oliveira</b>	I3S-Institute for Research and Innovation in Health	CD5L as a new therapy for bacterial sepsis
 <b>Nasreen Hassoun-Kheir</b> Infection control and prevention	Geneva University Hospitals	How to measure the association between appropriateness of antibiotic treatment and clinical outcomes of patients with drug-resistant bloodstream infections
 <b>Sue Chin Nang</b> Microbiology	Monash University	Advancing personalised bacteriophage therapy with “One-stop” Digital PCR Integrated Cell-free Platform
 <b>Carolina Silva Nodari</b> Global Health	Institut Pasteur	Evaluation of the potential use of intimin and flagellar antigen types as molecular markers for the diversity of enteropathogenic Escherichia coli (EPEC) populations

Name/Department	Institution	Project title
 <b>Inês Loureiro</b>	i3S – Institute for Research and Innovation in Health, Oporto University	Bioengineered photobacterium OMVs as a platform for producing multivalent fish vaccines
 <b>Michael Savin-Hoffmeyer</b> Institute for Hygiene and Public Health	University Hospital Bonn	Clinical wastewater as a surveillance tool: a study on Cefiderocol-resistant bacteria resistance dissemination via transformation
 <b>Victor Næstholt Dahl</b> Department of Infectious Diseases	Aarhus University Hospital	Tuberculosis 2.0: The clinical significance of nontuberculous mycobacteria isolation in Denmark
 <b>Rita Pombinho</b> Group of Molecular Microbiology	i3s/IBMC	Single-cell spatiotemporal analysis of Listeria monocytogenes virulence gene expression during infection
 <b>Eliza Gil</b> Microbiology	University College London Hospital	Deciphering the determinants of virulence in Streptococcus intermedius
 <b>Kaitlin Winter</b> Pediatrics	University of British Columbia	Addressing antimicrobial resistance through a Klebsiella pneumoniae vaccine
 <b>Marta Silva</b> Immune Regulation	i3s	Tuberculosis hide and seek: lessons from M. tuberculosis L4 and L6 mixed infections
 <b>Beaumont Anne-Lise</b>	Institut Pasteur	Plasmid-mediated vertical transmission of ESBL-producing Enterobacteriaceae in a bicentric mother-neonate cohort (Madagascar and Cambodia)
 <b>Anne Kathrin Lösslein</b> IMMH/IHK	University Medical Center Freiburg	The role of stromal cells in mycobacterial infections
 <b>Elsa Feredj</b> Infectious Diseases	Henri Mondor Hospital	Understanding susceptibility to tuberculosis through the identification and functional characterisation of novel genetic etiologies

Name/Department	Institution	Project title
 <b>Thomas Kesteman</b> Hanoi unit	Oxford University Clinical Research Unit	Adapting MSF's mini-lab to the local context to provide access to remote hospitals in Vietnam
 <b>Rachel Clifton</b> School of Veterinary Medicine and Science	University of Nottingham	The role of interspecies bacterial interactions in ovine footrot
 <b>Anna Griego</b> Pharmaceutical Science	University of Milan	Unraveling the intricate dance: TLR2 signaling in Mycobacterium tuberculosis infection
 <b>Alina Karoline Nussbaumer-Pröll</b> Clinical Pharmacology	Medical University Vienna; General Hospital	Investigating the genotypic and phenotypic properties of ATCC-29213 quality control strain in ten European laboratories
 <b>Palmira Barreira-Silva</b>	IBMC/i3S	Characterisation of the AHR-responsive cellular profile during Mycobacterium tuberculosis infection
 <b>Zaynab Mousavian</b> Department of Medicine, Solna	Karolinska Institute	Biomarker discovery in tuberculosis using high-throughput protein profiling and systems biology
 <b>Julia Garcia Fernández</b> Microbial Biotechnology	CNB-CSIC	Unveiling the interplay of mutagenesis metabolism, and competence in Staphylococcus aureus Pathogenesis
 <b>Shakeel Mowlaboccus</b> Microbiology	UWA and Murdoch University	Elucidating the molecular mechanism of transiently silent vancomycin resistance in Enterococcus faecium
 <b>Roberto Vázquez</b> Department of Biotechnology	Ghent University	Development of phage-inspired coupled diagnostics and targeted antibacterials against streptococci
 <b>Frédéric Goormaghtigh</b> Louvain Drug Research Institute	UCLouvain	Interrogating the transcriptional histories of antibiotic-persistent S. aureus in macrophages using a molecular recorder

Name/Department	Institution	Project title
 <b>Ana Fernández Bravo</b>	Rovira i Virgili University	The genus Aeromonas as a model of polymicrobial infections: impact on pathogenesis, host immune response and antimicrobial therapy.
 <b>Elif Eren</b> Molecular Biology and Genetics Department	Bahcesehir University	Identification of a new host protein-hijacking mechanism used by salmonella typhimurium
 <b>Sacha Sarfati</b> Biology of Infection	Institut Pasteur	Impact of the gut microbiota on Listeria monocytogenes intestinal carriage
 <b>Sónia Almeida</b> Laboratory of Molecular Microbiology of Human Pathogens	Instituto de Tecnologia Química e Biológica António Xavier	CAPSMi – Characterisation of the diversity of Streptococcus pneumoniae-like capsules expressed by other streptococci and impact on pneumococcal diagnosis and epidemiology
 <b>Filippo Vascon</b> Dipartimento di Biologia	Università degli Studi di Padova	Nanobodies blocking Shiga toxin production in enterohemorrhagic Escherichia coli
 <b>Ana Luísa Abrantes de Matos</b>	University of Coimbra	Diving into Rickettsia's immune-evasion arsenal: unveiling the moonlighting role of the retropepsin APRc
 <b>Eva Gato</b> Infecciones Intrahospitalarias	Instituto de Salud Carlos III – Centro Nacional de Microbiología	Preclinical development of plasmid DNA-based vaccine against intestinal colonisation caused by Klebsiella pneumoniae.
 <b>Johanna Strobl</b> Department of Dermatology	Medical University of Vienna	Tick saliva facilitates Borrelia burgdorferi transmission to human skin – a role for tolerogenic Langerhans cells?
 <b>Eleni Vergadi</b> Department of Paediatrics	University of Crete, Medical School	Unravelling the role of antibacterial autophagy in the host defense response to Group B Streptococcus
 <b>Sabine Wagner-Lichtenegger</b> Diagnostic & Research Center for BioMedicine	Medical University of Graz	Improving nanopore sequencing based core genome MLST for global infection control

## ISF Sepsis award

The International Sepsis Forum (ISF) is a non-profit public American charity with the mission to improve outcomes for patients with sepsis. Its award gives the recipient 500 USD and the opportunity to present their work during a session jointly organised by ISF and ESCMID.



**Bieke Tack**  
Leuven University, Belgium

Bieke Tack graduated as a Medical Doctor at KU Leuven University (Belgium) in 2017 and continued her medical training as a paediatric resident at the same university. As a paediatric resident, she started in a Belgian general hospital and is now working in the paediatric and neonatal wards of the University Hospitals in Leuven (Belgium).

From 2018–2023, Bieke was affiliated as PhD candidate to the Unit of Tropical Bacteriology of the Institute of Tropical Medicine Antwerp (Belgium) and the department of Microbiology, Immunology and Transplantation of KU Leuven (Belgium). Her PhD research was focused on invasive non-typhoidal Salmonella (iNTS) infections in children in sub-Saharan Africa with field work in Kisantu general referral hospital (DR Congo). She has published on the (seasonal) epidemiology of bloodstream infections and malaria co-infections, on the prehospital trajectory and recognition of children with severe febrile illness, on the clinical presentation of bloodstream and iNTS infections, and on antimicrobial susceptibility testing, resistance and treatment of iNTS infections. As member of the VacciNTS consortium and co-author of a WHO Vaccine Value Profile for iNTS, she actively participates in advocacy programs for development of an iNTS vaccine. During her

field work and research, she experienced the challenges of paediatric febrile illness care in low-resource settings and continues to collaborate with stakeholders from the field, academia, R&D, health authorities, and supranational organisations to improve the quality of diagnostic and therapeutic management of severe febrile illness in children in low-resource settings.

In the awarded abstract, she demonstrated that children under-five admitted to a district hospital in DR Congo with culture-confirmed bloodstream infection were frequently (27–55 %) missed by clinical WHO criteria for hospital referral (IMCI) and suspicion of bloodstream (GLASS)/serious bacterial infection (PSBI). Revised criteria are needed to accelerate sepsis care.

## ESCMID TAE outstanding trainee award

The TAE Outstanding Trainee Award is intended to recognise and reward multi-skilled trainees with extracurricular activities in teaching, networking and collaboration in Clinical Microbiology (CM) and Infectious Diseases (ID).



**Akshatha Ravindra**  
Jodhpur, India

Dr. Akshatha Ravindra is an ID resident at AIIMS Jodhpur, India with a strong background in Clinical Microbiology from JIPMER. She excels in managing diverse infectious diseases, including MDROs, HIV, fungal infections and TB. Her educational contributions are highlighted by her YouTube channel 'Learn with Dr Akshatha', where she demystifies antibiotics and infectious diseases. A respected speaker at national conferences, she extends her expertise through active X engagement, promoting infectious disease education. Her contribution in research is evident in the form of impactful chapters in "Essentials of Antimicrobial Stewardship" and peer-reviewed articles. She has represented her institute at various national level ID quizzes & brought laurels to the institute. She was a recipient of the "Young Researcher Award" in 2020. She has completed her observership in transplant infectious diseases in CHUV, Switzerland. She has also pursued advanced training in phage therapy in Belgium and India. Her vision is to utilise her expertise to make meaningful contributions to the advancement of medical research, teaching, and patient care.



**Marija Kusulja**  
Zagreb, Croatia

Marija Kusulja is an infectious diseases trainee in the University Hospital for Infectious Diseases in Zagreb, Croatia. Her personal education spans from attendance at various postgraduate courses and observerships across Europe to a PhD degree from School of Medicine, University of Zagreb. Besides clinical work, she participates in various educational, scientific, training and networking activities, as the President of Trainee Association of the Croatian Society for Infectious Diseases, an associate teacher in Zagreb School of medicine, a member of the Editorial Board of Croatian Journal of Infection and a local board member of the Croatian Medical Union. In her spare time, Marija periodically employs her medical skills as a Civil Protection volunteer and at sporting events. She hopes to keep learning and improving as a clinician, as well as maintain her enthusiasm in various endeavours in order to positively impact her patients, colleagues and students.

A stack of approximately 12 petri dishes containing agar cultures with various colors (yellow, red, orange, pink, brown) is shown in a laboratory setting. The dishes are stacked on a dark surface, and a metal rack is visible to the left. The background is blurred, showing laboratory equipment and a person in a white lab coat. The word "Finances" is overlaid in large white text on the right side of the image.

# Finances



**“I am happy to present you the report on one more successful financial year of our society. Our decision of investing in new strategic fields as well as increasing our budget for our core activities shows a great success.”**

Alex W. Friedrich, ESCMID Treasurer

## Looking back on the 2023 financial year

The COVID-19 pandemic showed to the world the importance of clinical microbiology, infectious diseases as well as infection prevention and control. Our community is growing in this spotlight, and we are dedicated to strengthening our membership in the continuous fight against infections through our new strategy. Pandemic preparedness along side AMR and emerging infections combined with Education comprise the three pillars which define the ESCMID strategy.

This growing community is reflected in the record number of ECCMID attendees, over 16,000 in 2023 compared to 13,000+ in 2022, making ECCMID 2023 one of the most successful in our history. ECCMID generated again significant revenue that can be seen in the gross income compared to the previous year and the years before COVID in the graph below (Fig. 1).

This positive trend and the solid income from ECCMID allow us to further invest in our main activities and in our members. As education is not only a key function of ESCMID and now one pillar of our strategy, we were again able to increase the investment for our education portfolio. Figure 2 shows the increased investment in our Post Graduate Educational Courses (PGEC), AMS Master programme and the successful Observership programme by 1,170 k EUR compared to 970 k EUR in 2022 (increase by 20.8 %). For 2024 we budgeted again 1,147 k EUR for our education programmes and remain with this at a very high level.

Figure 1: Gross revenue ECCMID 2021–2023 (in EUR)

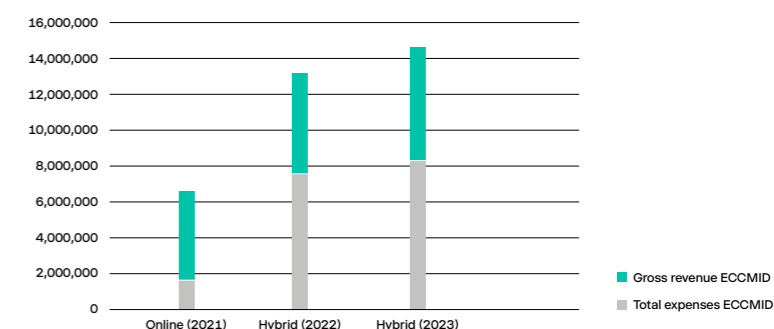


Figure 2: Costs Educational Programmes 2021–2024 (in EUR)

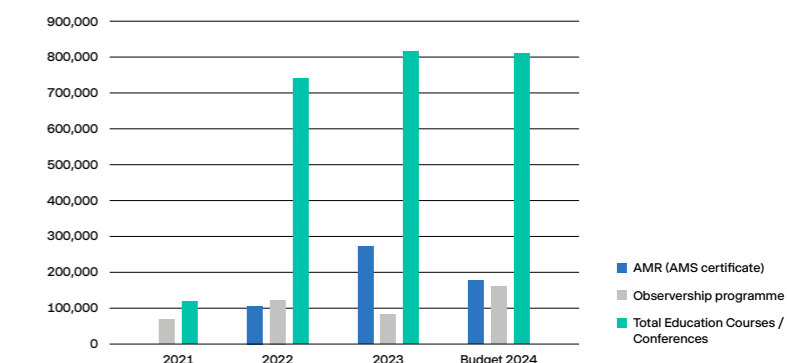
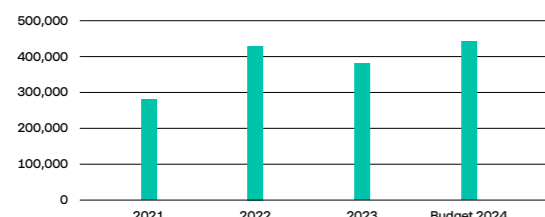
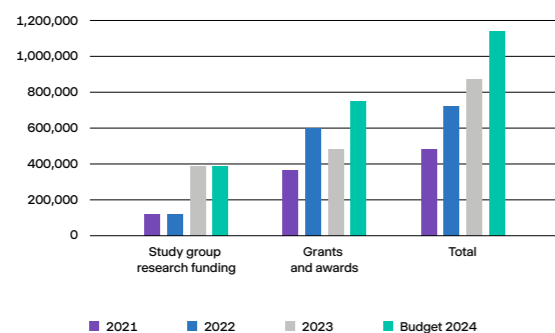


Figure 3: Investment in EUCIC/EUCAST (in EUR)



Alongside education, the fight against AMR and emerging infections are another important pillar of our strategy and with this our two standing committees EUCAST and EUCIC under the same umbrella. To further support their activities, investment in both committees is increasing steadily and we decided to increase the budget for 2024 (Fig.3).

Figure 4: Research Funding 2021–2024 (in EUR)



ESCMID is dedicated to support its members in their research and to develop their scientific excellence. This is shown in the record sum of research grants that were awarded this year, going above and beyond the already record-breaking funding from 2022. There was a 18 % increase in the total funding of scientific research projects as compared to previous years, also thanks to the contributions of the ESCMID Förderverein which supported additional projects relating to AMR and Emerging Infections. This is coupled with the continuation of the Study Group Collaboration Grant which had its second successful call this year. As shown in the graph below (Fig. 4) we increased the budget for scientific research projects in 2024 again by 24 % compared with 2023. We are eagerly awaiting the results of your research projects and how they will influence our fields.

**Not only a new look**

Thanks to our solid financial situation we could invest in a rebranding that allows us to “dress for the occasion” and rise after the pandemic even stronger than before with a more cohesive brand that will allow ESCMID to stand out as a leader in the field. As a part of this, more investments were made in communication to support us in keeping our members well informed.

Increasing our outreach and fostering innovation are some of our top priorities and therefore we invested in developing the Guidelines programme, improving our underlying IT structure and most of all we launched a brand-new journal, CMI Communications.

Launching a second ESCMID journal that is fully open access is a dream that has finally come true for us. Through the journal, we enable our members to publish their work in a fully open access space with a different scope and new features that allows ESCMID to stay ahead of the curve and give our members more options than ever before to have their voices heard and promote their latest research findings in the scientific community.

Preparing for the future means investing in effective technology. Consequently, ESCMID started with investing in AI expertise to better understand the current climate, improve our IT systems and explore how AI could be used today or in years to come. This includes creating a more user-friendly interface and creating a safer, and more efficient infrastructure (Fig 5.).

**Outlook**

Over the past years the equity of ESCMID has been built up to 16.66 m EUR in 2023 (see Fig. 6). Due to the robust finances and the diligent economic decisions, we were able to compensate for most financial risks over the last years. Preparing for the future in uncertain times allowed us to create a solid financial background which is then supported by the unique life broadcast hybrid format of ESCMID Global (formerly known as ECCMID) which has continued to be the main source of income for the society. Consequently, we will be able to serve our members during the coming years, whatever they may bring.

We are dedicated to increasing our investments in our core activities as well as for our members. This includes the various Education programmes, ESCMID Summer School, new virtual learning systems with the first EUCAST online course being launched in 2024. The support for the EUCIC certificates and AMR master programmes is also ongoing as we round out the incredible opportunities for enlarging our members’ access to knowledge and career development.

Figure 5: IT Investments (in EUR)

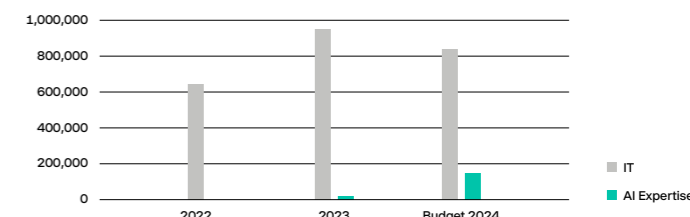
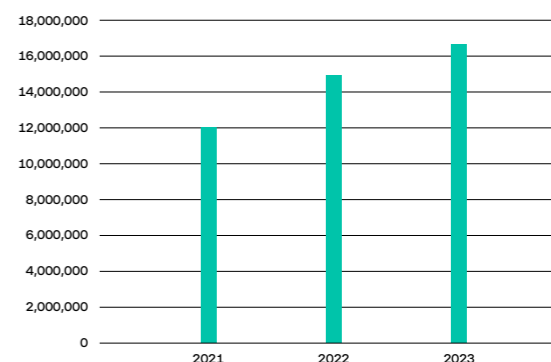


Figure 6: Increase of free capital (in EUR)





**Acknowledgement**




# Honoring the Commitment of Our Reviewers


















































































- Abstract reviewers
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























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
































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