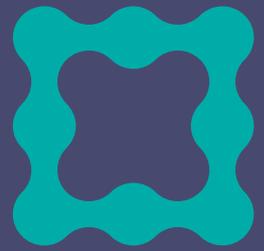


CELEBRATING  
40 YEARS  
OF ESCMID



ALL THE WAY  
FROM 1983  
TO 2023

# Yearbook 22/23

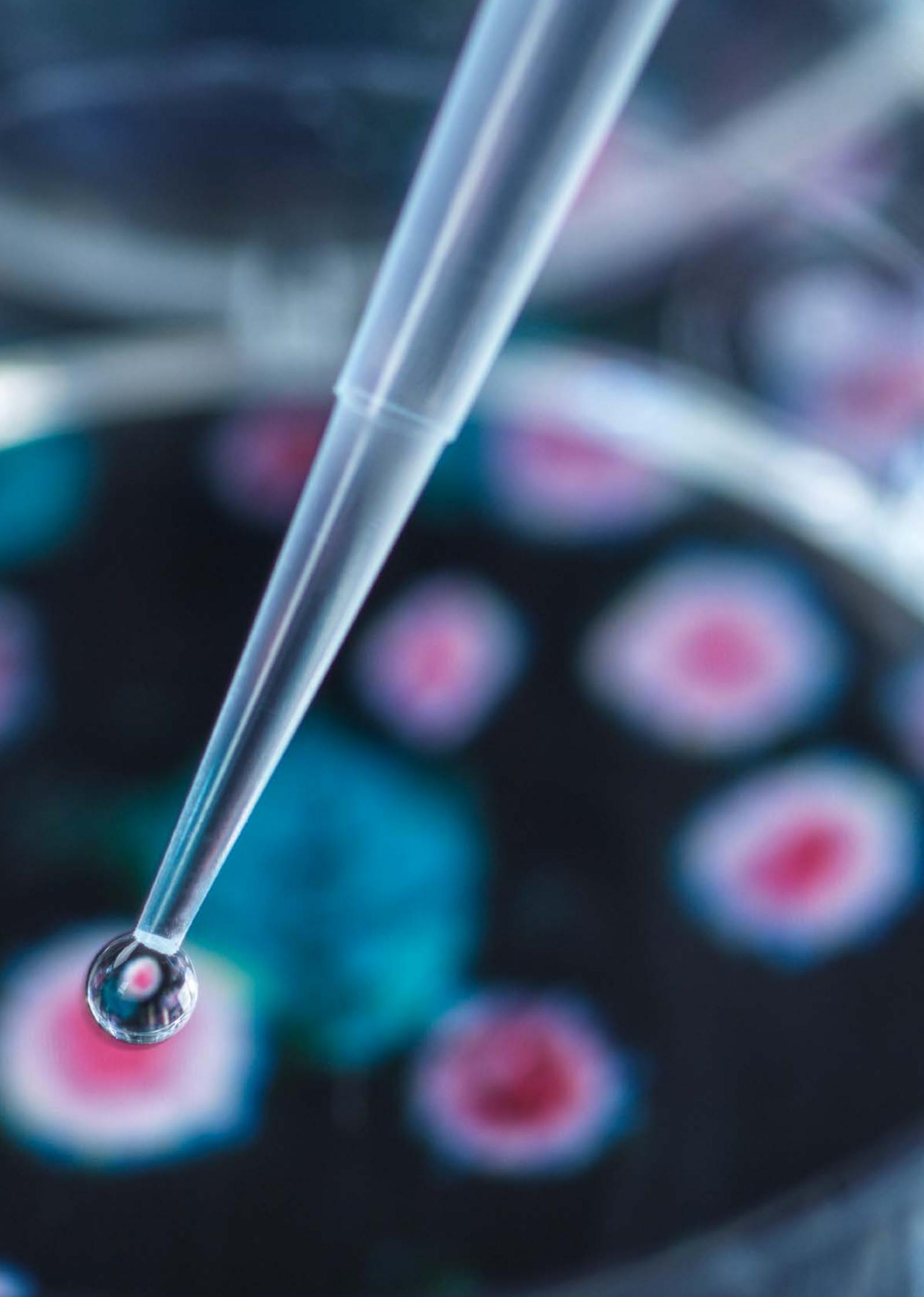
European Society of Clinical Microbiology  
and Infectious Diseases





**QUALITY  
MEANS DOING  
IT RIGHT,  
WHEN NO ONE  
IS LOOKING.**

Henry Ford



# Content

## 06

---

### Society

- 8 Message from the presidents
- 14 Organisational Chart
- 16 Executive Officers
- 22 Ad Hoc Executive Officers

## 30

---

### Science

- 32 Interview Jon S. Friedland
- 34 Scientific Affairs
- 36 How Study Groups performed
- 46 EUCAST – From breakpoints to global scale
- 52 EUCIC – Infection prevention and control: an ESCMID priority
- 56 EITaF will continue its mission
- 58 Milestones

## 88

---

### Awards & Grants

- 90 Interview Gunnar Kahlmeter
- 92 Report ESCMID Excellence Award in Science
- 94 Young Investigator Awards – Jacob Bodilsen
- 96 Young Investigator Awards – Belén Gutiérrez-Gutiérrez
- 98 Young Investigator Awards – Anne Wyllie
- 100 Young Investigator Awards – Oliver Van Hecke
- 102 ISF Awardee – Claire Dahyot-Fizelier
- 103 Chat-Interview – TAE Outstanding Trainee Awardees
- 106 Research Grants – Young. Outstanding. Resolute.
- 112 Awardees: 40 years of excellence

## 114

---

### ECCMID

- 116 32<sup>nd</sup> ECCMID Lisbon
- 124 33<sup>rd</sup> ECCMID Copenhagen
- 126 ASM-ESCMID joint Conference – Challenge of Antimicrobial Resistance
- 128 IMMEM – The profession of networking among microbiologists

# 60

---

## Education

- 62 Interview Emmanuelle Cambau
- 64 Rewarding work
- 66 Summer School – A week full of energy
- 70 Courses and Workshops 2022
- 71 Courses and Workshops 2023
- 72 AMS Certificate: A huge step forward

# 76

---

## Professional Affairs

- 78 Interview Anu Kantele
- 80 Learning new things, exchanging knowledge
- 82 Parity Commission – On networking and participation
- 84 ESCMID Collaborative Centres and Observerships
- 85 Ethics Advisory Committee
- 86 Trainee Association of ESCMID – Major projects in focus

# 130

---

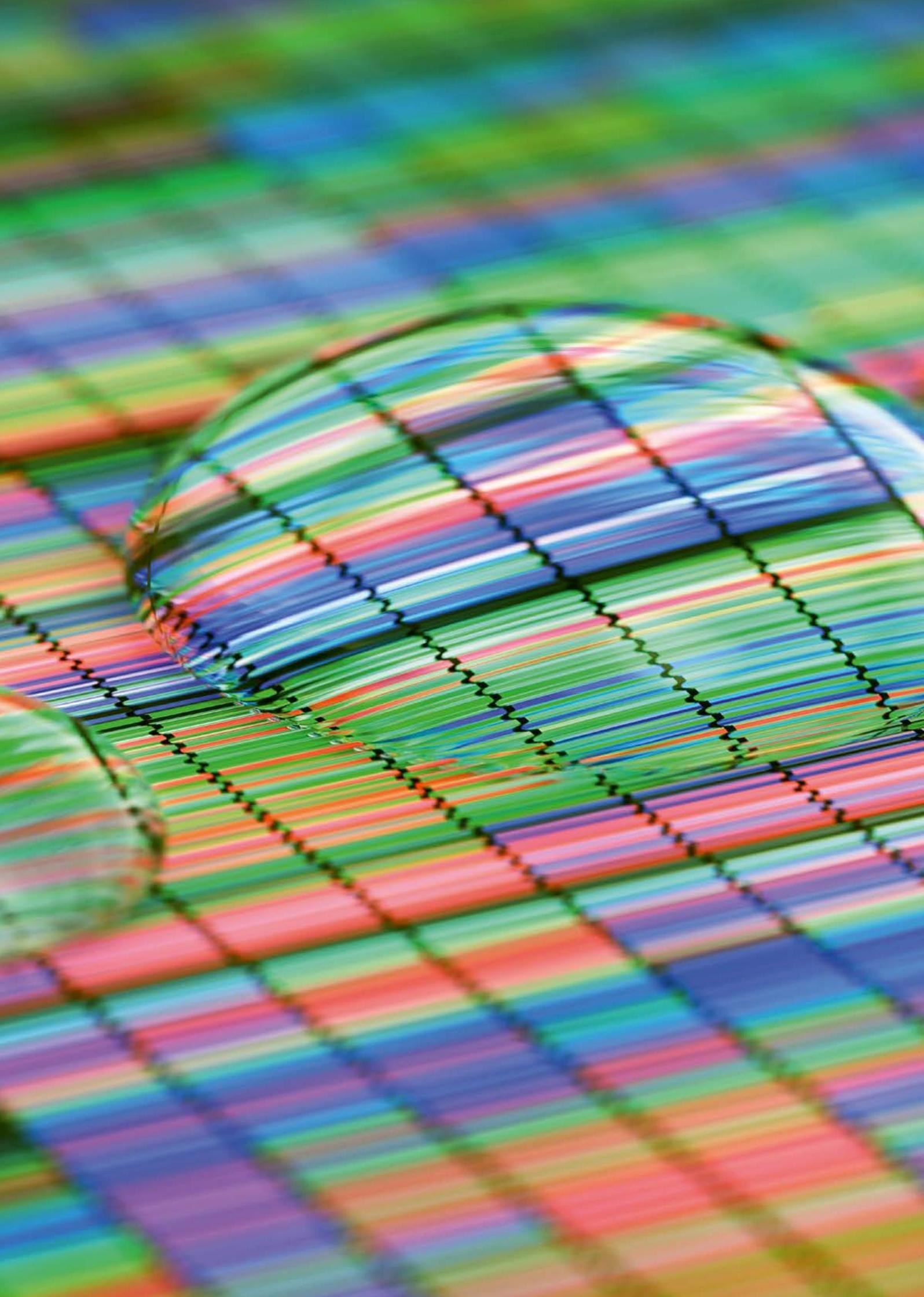
## Writings, Finances and Tribute

- 132 Interview José Ramón Paño-Pardo
- 134 CMI: one of ESCMID's flagships
- 136 ESCMID Publications
- 140 Guidelines – A favourable feedback
- 142 Clinical Microbiology and Infection (CMI)
- 144 Interview Alexander W. Friedrich
- 146 Finances
- 148 International Affairs – Time to start over
- 150 Acknowledgement of Reviewers
- 156 Facts & Figures
- 158 Wishes for the future: ESCMID aims high
- 159 Imprint



# SOCIETY IS UNITY IN DIVERSITY.

George Herbert Mead



# Discovering a worldwide society

It's not just about being professional,  
but also about making friends.

The three ESCMID presidents join us to talk about last year's accomplishments, togetherness in the society, and the normal madness of the obviously enriching ESCMID officers' workdays. Let's hear what they have to say.

#### **How to start a working day**

*Robert:* My wife and I start the day with breakfast together and then we both take our bikes and go to work. At the office it's all about settling down to get ready for the day's tasks i.e., starting the computer, making tea, getting acquainted with the programme for the day and going through the day's emails. I have a lot of office work so most of my time is spent behind a desk when I'm not in an airplane. .

*Annelies:* We start the day with a family breakfast. The girls even get up early so that we can all have breakfast together and if possible, we always try to have dinner together. For me, those are definitely the best times. Going to work, I like to ride my bike to see

what the day is like, hear the birds singing or see what flowers are in bloom. Then I usually switch my computer on at 7.15 AM and respond to emails for an hour. Afterwards, I am on the go. I work as a physician, so I'll often be in the hospital to see patients and consult with the residents.

*Maurizio:* My hospital is quite nice, and there's a lot of greenery. It's very difficult to go to work by bike in Rome because of the traffic, which makes it not worth the risk. My wife Brunella is also a microbiologist working with me in the same lab, and over the past year we have walked to work together as it only takes about 14 minutes. It's an inspiring time of the day - being able to walk through Rome and take in the city, and watching people go to work. I arrive around 7 AM every day and for the past three years, the first thing I have done is upload COVID data to the regional database. This is an important activity and I do it myself because it is something that a senior member of the hospital should take care of.

#### **What does your average working day look like?**

*Maurizio:* After checking my emails, I take a few



Annelies Zinkernagel, Maurizio Sanguinetti and Robert Leo Skov (left to right)

moments to sit and think about work, strategy, the activity of the lab, and the society until around 9 AM. This period is very precious because it's not easy for me to find extra time to address all these activities. I find that my mind takes a few moments to get started and it is important to take the time to fully think things through. Afterwards, I check the emails concerning ESCMID. At 9 AM I leave my office for my first round in the lab to speak with my colleagues. It's mostly only to say hello but if there's a problem, they will report it to me. This usually takes me up to 10 or 10.30 AM as the lab is quite large and I need some time to be able to see to everyone. The idea is to always be there as a reference point. They deal with the problems of the lab themselves, so most of the time it is nothing too exceptional but, as they like to say, my experience is very important to them. It is also good for me to get the information directly from them. On top of my duties in the lab, I teach at least three hours per day but it's one of my favourite activities and I really enjoy it.

*Annelies:* To give an example, on Thursday mornings I see hospitalized patients together with the staff

physicians, which I cherish a lot. I always find it inspiring to discuss patients with my colleagues, translate clinical problems and look for solutions with the scientists. For me, that really combines the best of both worlds. I don't have a standard routine because every day is different depending on what I'm responsible for on the day. However, I do have a lot of group meetings or one-to-one meetings where we can really look at issues in depth and work towards solutions.

#### **It's all about the people around you**

*Maurizio:* We have a lot of meetings. I regularly visit the hospital and the other labs with the university because we also have important collaborations to work on, for instance, we are starting to manage a medical surgery course in Bolzano in the north of Italy. At 3 PM I have lunch with my wife Brunella in the hospital restaurant, as we do every day. This is important for us, and it really helps, because we can discuss any issues we have utilising our different points of view. After lunch, I meet with the clinically focused individuals in the lab and then I meet separately with the researchers. They report on all the progress made



“Everything is about the people.”

Annelies Zinkernagel, President

and any new ideas for a diagnostic workflow, as well as discussing any problems that have arisen. I usually finish work at around 6 or 6.30 PM. and have dinner with Brunella and her sister Patricia. After dinner, I usually take the time to investigate and catch up on the general news of the past day.

**How have things developed over the past year in terms of work?**

*Robert:* My last year has been very much influenced by my position as President-elect of ESCMID. It's quite a lot of work to get to know all the different aspects of ESCMID and it has taken me quite some time to get used to the routine of working with Maurizio and Annelies as leaders on the committee. It is extremely interesting because you learn what it takes to get ESCMID up and running on a daily basis, which has added a very exciting development in my work duties and responsibilities. At my regular job heading the International Centre for Antimicrobial resistance Solution (ICARS), where we are partnering with low- and middle-income countries on creating sustainable AMR mitigation, we are still in the initial phase and expanding. It is challenging work given

that we are operating with ministries as well as universities and have to ensure they both work together. However, when it succeeds, it is extremely rewarding. Combining these efforts with the responsibilities of my position at ESCMID has made this a very fruitful and interesting year for me.

**How does it work interacting as a team?**

*Annelies:* In the end, it's all about organisation and fitting all the various demands into a day, which can be challenging. Every second month the ESCMID Executive Committee meets in person, which is great for tackling the major decisions. I love meeting great people and as the Executive Committee is made up of great people, it is always a pleasure to bounce ideas back and forth. We have good discussions and by having different points of view, you can really change your way of seeing something. Another bonus for me is that when I'm travelling to a meeting, I get quite a bit of work done because nobody can interrupt me on an airplane. Robert mentioned that change depends on the position you hold in the Executive Committee, and so for me as President, it's clearly very demanding as you are more present than with the other roles.

“The last year has been a very fruitful und very interesting year for me.

Robert Leo Skov, President-elect



It starts with being President-elect, where you get much more responsibility, and that carries over into the presidency. After your term has ended, you hand over a lot of the work when you become Immediate Past President. These three roles help to manage the responsibilities as you all work together and rely on each other's experience. Another important aspect of the ESCMID team is the ESCMID Executive office. I greatly appreciate the work of the office, where Simone Brüderli is doing a fantastic job. Since she came on board, it has been amazing. She leads a great team of highly motivated and inspiring people. This is something we often forget to mention in our everyday work. We do have calls with the office on a very regular basis and these provide many inspiring moments.

#### **A last sentence about COVID-19?**

*Annelies:* We are not in emergency mode anymore and have returned to a new normal in our everyday work, which I really appreciate. We can start reconstructing, building, and implementing our new ESCMID strategy which is very satisfying as well.

#### **The achievements of the last 40 years?**

*Maurizio:* I am a very practical person, so I think that one of the most important achievements of ESCMID is EUCAST. It was developed as the European standard for antibiotic susceptibility, which is fantastic in my opinion and quite incredible that with time it has become a global point of reference in clinical microbiology. The second point is simpler. I think the strategy of the study groups is fantastic because it makes it possible for all members of the society to participate in the society's scientific activities. We have a large number of study groups to try to cover all interests, and they contribute by organising projects, proposing sessions for ECCMID and are, in general, very active in the life of the society.

*Annelies:* I absolutely agree with Maurizio and would like to add two things. We are currently the number one society for infectious diseases and clinical microbiology worldwide, and I think this is an incredible achievement. Considering that many different countries are involved, introducing different flavours while combining clinical microbiology and infectious disease, we have really achieved

“*I need time to think about things.*”

Maurizio Sanguinetti, Immediate Past President



something special here. The other fact is that COVID-19 has made everybody focus on and become a “pro” in infectious diseases when it comes to prevention and infections. I think we should build on this in the future as it is really something that our society reflects.

*Robert:* I think it’s important to mention networking here. Our activities, including the study groups, really help create strong networks due to people interacting across national borders and continents to establish good relationships. At ESCMID we bring people together from all over the world through our large educational programmes and scientific initiatives. We come together to build international, professional networks, and we often leave as friends. I personally have several friends I would never have made if it had not been for the ESCMID educational and study group activities. Furthermore, following the COVID-19 pandemic, we have all learned to use new ways of reaching out to our members via online and virtual technologies. This new way of remote networking and learning is also leading us into a future of possibilities and challenges, with ESCMID

now overseeing a worldwide community in terms of education and research. One of the biggest challenges now is to identify good opportunities and how to expand our activities for the society and our members.

**Major points to look out for in the near future?**

*Annelies:* There will always be emerging infections. The COVID-19 pandemic as well as the Ebola and Mpox outbreaks have just underlined this again. We are, therefore, strengthening this angle with particular focus on how to improve communication with the public and guide professionals better. One of the difficulties we encountered during the COVID-19 pandemic was that we were all based in different countries with different environments and regulations. Communicating clearly across borders is extremely important to provide guidance for professionals. Another action we are taking forward is the problem of antimicrobial resistance, the silent pandemic. Finally, we need a strong education system in place to train the leaders of the future with an emphasis on role models. This is what we shall focus on over the next five years. We have begun this

process already, successfully starting leadership training workshops last year and rolling out more courses in 2023 and 2024.

*Maurizio:* Yes, this is a fantastic initiative. Thanks to Annelies, Robert and Simone for doing so much because this approach to leadership is really original. I have received some very nice feedback from the people who participated in these courses. It is a strategic activity that is really oriented towards the future. The idea to build new leadership, not specifically scientific, is very important for our society. ESCMID is a vision, and I am very proud to be part of it.

*Robert:* We are addressing the increasingly complexity of infectious diseases and the need for collaboration with other specialties such as behavioural science and economic science. If you don't understand why people do what they do, how will you change their behaviour in the long run? Furthermore, the pandemic has taught us that it is not sufficient to communicate between professionals. We need to be able to both speak the language of the policy makers

as well as the ordinary language that people understand. The cross-border nature of infectious diseases requires that we look at infectious diseases and clinical microbiology from a One Health perspective. The One Health approach is critical especially when it comes to AMR, because change in the big picture can only be realised through collaborations beyond borders and specialties. We need to face these challenges and as a profession we need to work better together. This is a professional issue, as well as an ESCMID issue. ■

# The Organisation

## EXECUTIVE COMMITTEE (EC) MEMBERS



Annelies Zinkernagel

GENERAL AFFAIRS

President



Robert Leo Skov

GENERAL AFFAIRS

President-elect &  
Secretary General



Alexander W. Friedrich

FINANCES

Treasurer &  
Financial Support Officer



Jon S. Friedland

SCIENCE

Scientific Affairs Officer

ESCMID Council

International Affairs  
Subcommittee

Scientific Affairs  
Subcommittee

Study Groups



Emmanuelle Cambau

EDUCATION

Education Officer



Anu Kantele

PROFESSIONAL AFFAIRS

Professional Affairs  
Officer



José Ramón Paño-Pardo

PUBLICATIONS & GUIDELINES

Publications, Communica-  
tions & Guidelines Officer



Maurizio Sanguinetti

GENERAL AFFAIRS

Immediate Past President  
& ECCMID Officer

Education Subcommittee

Professional Affairs  
Subcommittee

Publication Subcommittee

Guidelines Subcommittee

Parity Commission, Trainee  
Association of ESCMID (TAE)

## AD HOC EC MEMBERS



**Jacob Moran-Gilad**

ECCMID

Programme Director



**Leonard Leibovici**

CMI

Editor-in-Chief



**Luigia Scudeller**

GUIDELINES

Director



**Christian Giske**

EUCAST

Chairperson



**Evelina Tacconelli**

EUCIC

Chairperson

ECCMID Programme  
Committee

Guidelines Subcommittee

## EXECUTIVE OFFICE



**Simone Brüderli**  
Chief Operating  
Officer



**Monica Melville**  
Executive Assistant



**Carla Seiler**  
Head of Event  
Organization



**Benjamin Schirra**  
Project Manager  
(Events)



**Erik Wennström**  
Event Coordinator



**Magdalena  
Krzyzaniak**  
Science Manager



**Piotr Kardas**  
Science & Publications  
Manager



**Chiara Speziale**  
Science & Guidelines  
Manager



**Patrick Kudyba**  
Associate Science  
Manager



**Majella Ding**  
Science Programme  
& Education  
Coordinator



**Melinda Muller**  
Scientific Intern



**Alessandro Piroso**  
Professional Affairs  
Manager



**Nicolas Burri**  
Education  
Coordinator



# The society needs to be pushed by members

Emanuelle Cambau, France  
Education Officer

**What are the main challenges of an international executive committee?**

Being international, not thinking only about the place and country you know and come from, but thinking about very different ways of working as CM/ID. Thinking out of the box, suggesting new activities that will please ESCMID members. Being able to anticipate problems that may arise within ESCMID (finances, personal conflicts, drift towards insecure attitudes, etc.)

**What does it take to be a good executive officer?**

You need to know the field (CM/ID), to be able to liaise with many others, and to be passionate about what you want to achieve.

**Where do you see the greatest needs at ESCMID for a successful future?**

More involvement of members in all the activities. The Society needs to be pushed by members. Today, we offer activities, but in the future we need to respond to the demands of members for activities.

**From an executive perspective, which ESCMID group has made the most surprising, perhaps the most far-reaching contributions in recent years?**

I think the EUCAST group is famous in all countries today, thanks to the hard work made by their members for standardizing antimicrobial susceptibility testing. The EUCIC group has also delivered some fascinating work by organising a multi-module course on infection control. I don't want to miss out all the ESCMID study groups, which are making our Society so active and brilliant in medical sciences. Finally, our decision subcommittees (Education, Professional affairs, Scientific

affairs, Parity commission, Ethical, international affairs...) are doing a lot for the Society, often in the background, but they are definitely important (we could not work without them!).

**The executive officers change cyclically. What are the advantages and disadvantages of a permanent change in personnel?**

Advantages: Getting new ideas, new ways of thinking, proposals for activities, different visions of the world depending where you are from, where you are living. Disadvantages: you need a few weeks/months to learn how ESCMID is organised and to get to know other members of the executive committee and the staff at the ESCMID office. Also, at the beginning, you may not really know what you are supposed to be doing for your portfolio and how committed you need to be.

**Imagine ESCMID in the future. You have the opportunity to share something groundbreaking with the executives. What is it?**

ESCMID in the future is a society composed of members, who share their specialisation in CM/ID with colleagues from all over the world. ESCMID will provide its members with knowledge and education, help in their career and professional life, tools and grants for increasing their research, ways to share their results, find innovation.

**What does a day look like when you are not working?**

Staying at home to enjoy time with the family. Walking in Paris, going to bars and restaurants, going to the Alps to ski and to the Atlantic coast to go walking, fishing and swimming in summer. ■



# It takes many people to make a successful society

Jon S. Friedland, United Kingdom  
Scientific Affairs Officer

**As a professor of infectious diseases, what are the main challenges of an international executive committee?**

To be international in perspective and to make change actually happen so that the Society can continue to evolve.

**What does it take to be a good executive officer? Personality? Education? Enthusiasm? In your opinion, which is the most important?**

Enthusiasm and commitment.

**Where do you see the greatest needs at ESCMID for a successful future?**

Ensuring that we continue to link basic science with the latest progress in clinical practice for the many different populations across the globe.

**From an executive perspective, which ESCMID group has made the most surprising, perhaps the most far-reaching contributions in recent years?**

I do not think that you can single out one group – many people and groups come together to make a successful society.

**The executive officers change of cyclically. What are the advantages and disadvantages of a permanent change in personnel?**

The advantages are an influx of new ideas and new ways of considering old problems. The disadvantage for the Executive members is that you do not regularly see old friends since strong bonds are made working closely together over long periods.

**Imagine ESCMID in the future. You have the opportunity to share something groundbreaking with the executives. What is it?**

We have our first members from the adjoining galaxy! :)

**One last point: what does a day look like when you are not working?**

Different to yesterday and not the same as tomorrow, involving family and/or friends and maybe theatre, music, chess or supporting my football team. ■



# The big picture of the field

Anu Kantele, Finland  
Professional Affairs Officer

**What are the main challenges of an international executive committee?**

One of the chief challenges for an EC is to see the big picture of the field and anticipate future developments. The committee should grasp the needs of the members and seek to respond, without forgetting the global responsibility of the field. The EC needs to put their best efforts into working as a team and encourage each other to applying their minds to the task.

**What does it take to be a good executive officer? Personality? Education? Enthusiasm? In your opinion, which is the most important?**

I wish I knew. But let's try .... I think it is the ability to see the big picture and envision how ESCMID can be developed as a society to serve its members and the greater global needs. To actively engage in the task, keeping your mind open, and, whenever needed, thinking outside the box. More than anything, I see us as team players who should actively interact and respectfully consider each others' viewpoints and suggestions. And at all times keep in mind the good of future generations.

**Where do you see the greatest needs at ESCMID for a successful future?**

The world is changing rapidly. This applies to the fields of ID and CM (increasing antimicrobial resistance, emerging infections, and epidemiological changes brought on by global warming, poverty, population growth etc.) per se but even more to numerous other developments and turns of events, such as wars, humanitarian crises, and migration. For ESCMID, these daunting prospects entail a requirement of constant renewal, so as to be able to respond to the various needs that arise.

**The executive officer changes cyclically. What are the advantages and disadvantages of a permanent change in personnel?**

To be able to make an actual contribution, you need to perceive the ESCMID world as a whole, but since that takes time, the work tends to begin with a delay. The advantage is that new officers bring in novel ideas and perspectives. The touch stays fresh. Therefore I'd say the pros outweigh the cons.

**Imagine ESCMID in the future. You have the opportunity to share something groundbreaking with the executives. What is it?**

We will take a major step forward in sustainability and global responsibility.

**One last point: what does a day look like when you are not working?**

Truth be told, most of my days are working days. That is why the first image that pops into my head is a Christmas tree in my family's living room. But let's look towards summer instead, and the other few days I know I'll get off over the year. It's Midsummer at our family cottage on an island in the archipelago of the Gulf of Finland. The sun is shining, it's warm, we are gathered with friends and the family for a relaxing time, cooking together, enjoying some wine, guitar playing and singing, savouring each moment in the midst of birds, rocky shores, blue skies, the sea, the silence. This peaceful day grows long, for the sun doesn't set. Together we relish the charm of Finnish summer, the glorious midnight sun, all filled with gratitude for life. ■



# Enthusiasm, curiosity, resilience and perseverance

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

## **The main challenges of an international executive committee?**

The main challenge is to comprehend the evolving landscape of Infectious Diseases and Clinical Microbiology and to anticipate and address the present and future needs of both society and professionals in these fields. To achieve this goal, the EC needs to work as a team, in close coordination with ESCMID Office.

## **What does it take to be a good executive officer?**

I joined the EC during last ECCMID and I am still learning. In my opinion, an EC officer should be enthusiastic about what ESCMID means as a project and its purpose. He/she should be curious to grasp how the fields of Clinical Microbiology and Infectious Diseases are evolving. Cooperation with the rest of EC members and ESCMID office is essential, too. Finally, an EC officer needs to be resilient and perseverant to be able to cope with EC duties, that come on top of own's clinical and research responsibilities.

## **The greatest needs at ESCMID for a successful future?**

ESCMID has become the most prominent scientific society in the field. Its membership is also growing, with increasing contributions from all over the world. The EC is currently working to delineate the strategy for the next few years, which will include strengthening guidance, education, and training and enhancing ESCMID support for science in these fields. An integral approach to antimicrobial resistance and preparedness for emerging and reemerging infections will be a priority, too. To accomplish these goals, we might need to also consider organisational changes.

## **From an executive perspective, which ESCMID group has made the most surprising, perhaps the most far-reaching contributions in recent years?**

ESCMID is so multidisciplinary that it is difficult, if not impossible, to select a single contribution from a single group, subcommittee, or activity.

## **The executive officers change cyclically. What are the advantages and disadvantages?**

We benefit from bringing in talented and motivated people with novel ideas who are willing to move the society forward. However, with every new person who joins, someone else must leave, which can be sad because it means losing experienced team members who have become friends. It may also take time for the new team to work together seamlessly and adapting to changes in personnel can be challenging.

## **Imagine ESCMID in the future. You have the opportunity to share something groundbreaking with the executives. What is it?**

I would suggest enhancing the experience of the members by making it easier for them to access and utilise the organisation's resources, including guidance, education, and training that best fit their needs and preferences. Additionally, it's crucial to incentivise active participation in the society, study groups, subcommittees, and grant proposal reviews. ESCMID will only be as successful as its members make it.

## **What does a day look like when you are not working?**

In my spare time I like reading and playing tennis. I also enjoy watching movies and series. Unfortunately, there are not so many days when I am completely off work. ■



# Dedicating time

Alexander W. Friedrich, Germany  
Treasurer and Financial Support Officer

**What are the main challenges of an international executive committee?**

The EC is comprised of experienced scientists and as such, we are all used to collaborating on an international level. However, there are for sure some challenges. Firstly, you need to bring the various top experts together and find the moments and time to align the different visions and ideas. Beyond this, often you need more time to then find consensus within the board. However, the common values and goals with respect to CM/ID build a bridge between the different board members and allow for successful leadership for the society.

**What does it take to be a good executive officer? Personality? Education? Enthusiasm? In your opinion, which is the most important?**

You need to have not only a scientific, but a strategic view on CM/ID. It is important to have a flexible personality as you need to be able to find compromises and solutions. Enthusiasm is always helpful in order to inspire for a common goal, but as an executive officer of ESCMID I get inspired easily by our society, the international network of colleagues and our unique activities, such as ECCMID.

**Where do you see the greatest needs at ESCMID for a successful future?**

In my opinion ESCMID needs to invest in strategic fields such as smart data science, fostering the international network through collaborative research grants and education opportunities. In a future with

global migration and mobility as well as plenty of crises, preparedness against infectious threats becomes more relevant than ever. Here, ESCMID as a non-profit and science-driven organisation with our vast international community is an important pillar in finding answers for current challenges and building up capacity for the future.

**From an executive perspective, which ESCMID group has made the most surprising, perhaps the most far-reaching contributions in recent years?**

From my viewpoint there is not just one group to be mentioned. There have been so many fantastic achievements in science and education realised and I applaud all colleagues dedicating their time to ESCMID. I would like to mention especially all the colleagues who have dedicated time and energy to study groups, subcommittees and committees, as well as the many educational events and the activities in developing evidence-based guidelines. ESCMID would not exist without the time spent on all these activities. Last but not least, one most important ESCMID group should not be forgotten: the ESCMID office in Basel. Without Simone Brüderli and her fantastic team, all we envision as an executive committee and ESCMID members would not be realised in the highly professional way we are used to.

**The executive officers change cyclically. What are the advantages and disadvantages of a permanent change in personnel?**

*“There is a constant generation change and so it is good that the leadership cycles, so new colleagues can follow into the executive positions.*

Alexander W. Friedrich

I believe that it is good that there is personnel change. Compared to other organisations, the period of being an executive officer in ESCMID is not too short, but there is a limit. On the other hand, executive officers can change portfolio during their time on the executive board and get in close contact with the different aspects and responsibilities as well as networks of the society. However, there is a constant generation change and so it is good that the leadership cycles, so new colleagues can follow into the executive positions.

I would advise everybody who is interested in some day taking responsibility on the executive committee to use the variety of activities within ESCMID's study groups, committees and subcommittees to prepare for such a responsibility.

**Imagine ESCMID in the future. You have the opportunity to share something groundbreaking with the executives. What is it?**

Next to our ever-successful ECCMID as the most important congress on CM/ID worldwide, I envision more activities such as EUCIC and other board certificates for international training. In this way, our members everywhere in Europe and beyond can offer their expertise which can be brought under one common umbrella. Finally, one important reason behind ESCMID's success is the combination of clinical microbiology and infectious disease, as basic pillars of our field. This example could in the future be realised also in national societies in all countries

around Europe and be more and more matched with ESCMID's role model.

**One last point: what does a day look like when you are not working?**

I love doing sports, such as cycling, running and cross skating. Whenever there is time, I go for sightseeing and trekking tours together with my wife Simona. Then we discover historically interesting places and dive into nature and the past. When we have time for travelling, we are happy to visit our families in Central Italy and Southern Greece. ■



# New friendships that go far beyond

Jacob Moran-Gilad, Israel  
ECCMID Programme Director

**Coffee and a newspaper... a walk... quickly put on your shoes and off you go... How does a normal working day begin for you?**

My work-related activities are quite diverse, to the extent that I find it impossible to define a “normal working day”. I feel very privileged to have such a dynamic work experience, spanning clinical and research work, management, consultancy, and entrepreneurship. Regardless of my agenda on any given day, proper coffee with my wife is always a good start to the morning. Preparing sandwiches and lunch boxes for my family members is a must; and I usually can't resist a quick first look at my inbox...If my schedule allows, walking the dog or going out for a run is a definite bonus.

**ESCMID aims high. What does it mean for you as a person and in your position to be involved?**

I believe everyone involved in ESCMID leadership activities is competitive by nature and we strive for excellence across everything we do. Therefore, the activities within ESCMID are no exception. I personally enjoy the fact that ESCMID aims high and that my colleagues in the Society's leadership share the enthusiasm for maintaining ECCMID as the premier congress in the field of infection. This helps us to create impact in our field and fulfil our

commitments to our community members. It creates numerous opportunities to further develop ECCMID with respect to scientific content, education and organisation in the years to come. Leading ECCMID in this kind of environment, with so many colleagues who aim high, including our faculty, attendees and industry partners, and the outstanding ESCMID Office team, is a great experience and a real pleasure.

**How does working for ESCMID affect your private life? What limitations are there, how is it enriched by this work?**

The work for the planning and delivery of ECCMID is an enormous endeavour which takes place year-round and for certain aspects, more than a year in advance. For me, working for ESCMID is a daily task and as such, it certainly competes with many other commitments and affects my work-life balance. Fortunately, my family recognises the importance of this effort and is very supportive. I am also fortunate in that my work in ESCMID circles has created friendships that go far beyond professional collaboration, and this is an enriching aspect of my role.

**If you could go back 40 years, what would you like to tell people about upcoming scientific developments in your field?**

“*In 40 years, the ECCMID Programme Director might actually be some super fancy artificial intelligence entity.*”

Jacob Moran-Gilad, ECCMID Programme Director

Well, I could tell them that in 40 years' time we will be able to sequence full pathogen genomes in just a day or two, test samples for numerous pathogens bedside in just a few hours and that we will be facing untreatable super-bugs causing numerous deaths. They probably would not believe me. I'd also tell them that contrary to common belief (at the time), pathogens are here to stay, and that clinical microbiology and infectious diseases will remain super-relevant for the decades to come, and among the most challenging and professionally-rewarding disciplines in medicine and science.

**And a journey through time into the future: what advice would you give to the ESCMID executives in 40 years' time?**

To be honest, I am not sure if I can give them too much advice. In 40 years, the ECCMID Programme Director might actually be some super fancy artificial intelligence entity, running congresses across multiple dimensions while communicating with distributed neural networks that self-analyse laboratory data (a.k.a new-age microbiologists). Perhaps the most important message for future leaders, is that one of the Society's key assets is professional networking. That is, being able to bring together experts and trainees from all around the

world and facilitate the exchange of information and knowledge and scientific collaboration across disciplines and across borders. Regardless of how technology shapes up the future of our field, it is important to continue investing in the human resource and in fostering the ESCMID collaborative approach. ■



# I am addicted to ESCMID

Luigia Scudeller, Italy  
ESCMID Guidelines Director

**Coffee and a newspaper... a walk... quickly put on your shoes and off you go... How does a normal working day begin for you?**

Easy: sifting through emails. The sun never sets on ESCMID: emails also arrive while I'm sleeping.

**ESCMID aims high. What does it mean for you as a person and in your position to be involved?**

I confess to being addicted to ESCMID. Participating in ESCMID activities helps me to rise above the daily routine and to have a longer-term, broader perspective. It is a challenge to maintain the high standards required by working with so many extremely qualified colleagues, but the invaluable prize is learning something new every day. Also, I feel the responsibility of training the new generations of ESCMID clinicians and scientists.

**How does working for ESCMID affect your private life? What limitations are there, how is it enriched by this work?**

On top of institutional work, it requires some extra time. However, I consider ESCMID part of my private life, not of my work life. For instance, it's normal for my two teenage sons and my husband for me to be away for ESCMID activities. I could even suspect they are happy... if it were not for the fact that a few times they followed me to ESCMID. I also hope that they realize, like I do, the importance of good science in modern life, the ease of work when it's done together with nice and competent colleagues, and (why not) the happy chance of having friends all over the world.

**If you could go back 40 years, what would you like to tell people about upcoming scientific developments in your field?**

I have two "scientific souls": one is infectious diseases and the other is clinical research methodology. Both fields have undergone huge developments in the past 40 years. If I could go back, knowing what the scientific community knows now, I would urge infectious diseases scientists to be proud of the advancements they will introduce in improving patients' lives, but also... I would beg them: Don't give in to the "publish-or-perish" curse! Good research is what changes peoples lives, not what gets more citations: do less research, but better research! The theme of "research waste" is strongly felt among methodologists, but underappreciated in other fields of medicine. When it comes to ESCMID guidelines production, the poor quality of the evidence base is the main challenge. The past 40 years, though highly productive, could have been even more so, and ESCMID guidelines could have been even better than they are now!

**A journey through time into the future: what advice would you give to the executives in 40 years' time?**

May you stay forever young... by feeling accountable to the younger generations of scientists. Do not lower your guard against infectious diseases: antimicrobial resistance will not be over, climate change will impact infections in many, now unpredictable, ways, new One Health threats will challenge us... but at ESCMID you can take advantage not just of great multidisciplinary expertise but also of large cultural diversity (countries, languages, health care systems etc.). ■



# Contribute to a better world

Evelina Tacconelli, Italy  
EUCIC Chairperson

## **Coffee and a newspaper... a walk... How does a normal working day begin for you?**

Italian cappuccino and a lot of biscuits and/or a slice of "ciambellone" (big bundt cake)! No way can I start a good day without a substantial amount of sugar, carbohydrates, and caffeine. I'm fully aware that my morning habits are "nutritionally incorrect" but this is a rule learned from my grandmother and has worked perfectly until now. No need to say that coffee and biscuits must be from the south of Italy to work.

## **ESCMID aims high. What does it mean for you as a person and in your position to be involved?**

I always thought that being involved in the ESCMID EC was a tremendous honour. Since I was a child, I always dreamed of being a medical doctor, because I wanted to contribute to a better world. ESCMID gave me an incredible opportunity to "think big" and translate best evidence in research and policy at a global level.

## **How does working for ESCMID affect your private life? What limitations are there, how is it enriched by this work?**

For all colleagues involved in the ESCMID scientific and educational activities, the work has always been on the top of daily clinical and research work. This means that the work-life balance comes continuously into question. In my case, I have tried to reduce as much as possible the impact on my family using several tricks (leaving very early in the morning, avoid leaving the evening before to save family dinner, working late in the night or during travelling).

When my son, Davide, was a child I told him he had a unique power in the world. He was the only one who could ask me to stop working whenever he wanted and I promised I would have done that immediately with no questioning. And that's definitely what I would have done. Luckily enough he never asked.

## **If you could go back 40 years, what would you like to tell people about upcoming scientific developments in your field?**

The best thing about infectious diseases is that they are often unpredictable, usually exciting, and incredibly rewarding in terms of impact on health. 40 years ago was a completely different world (and just to say I was still a child so no real scientific experience at that time). Not only the impact of new discoveries in the field of genomics and genetics, but also new concepts of data sharing and analyses of big data changed substantially the way infectious diseases are handled. Today, approach in the clinic is patient-centered with a personalised approach, not only to the treatment of infectious syndromes but also for the implementation of infection control measures. In 2023, managing infectious diseases means abandoning the local perspective and working on a global, interconnected level.

## **A journey through time into the future: what advice would you give to the executives in 40 years' time?**

I strongly believe the ECCMID EC will be composed of 8 women and 1 man (40 years ago it was 8 men and 1 woman). I feel confident then to reassure the only man to relax and contribute. ■



# Embrace possibilities

Christian Giske, Sweden  
EUCAST Chairperson

**Coffee and a newspaper... a walk... quickly put on your shoes and off you go... How does a normal working day begin for you?**

I wake up, start with two double espressos and crisp bread with pickled herring. Then I pick up my computer and answer some e-mails that arrived during the night. After this I go to one of my offices (one close to central Stockholm and one in southern suburb of Stockholm).

**ESCMID aims high. What does it mean for you as a person and in your position to be involved?**

I have been involved in ESCMID long enough to fully appreciate the major development of the society into a highly successful organisation with a very high impact on what happens in clinical microbiology and infectious diseases in Europe and beyond. ESCMID is the go-to meeting in CM/ID globally in my opinion, and I am proud of being a part of the ESCMID organisation. It is a powerful platform and will continue to be so for decades to come.

**How does working for ESCMID affect your private life? What limitations are there, how is it enriched by this work?**

My work as EUCAST chair is completely unpaid volunteer work which is done on top of my regular work, which is a combined position as professor in clinical bacteriology and chief consultant physician in bacteriology and mycology. I spend too many hours to count on EUCAST business and a lot of it in the evenings and at weekends. I guess you can say it

becomes a lifestyle or an all-consuming hobby. It certainly enriches a lot of my other work and provides me with plenty of new ideas, but on the downside it probably takes my weekly working hours up to 70 hours.

**If you could go back 40 years, what would you like to tell people about upcoming scientific developments in your field?**

I think I would tell them about the emergence of multiomics with major possibilities to understand how microbial communities interact in health and disease. I would also tell them about the need for non-traditional antimicrobials to complement the regular antimicrobials, since it is clear that antimicrobial usage is so closely related to the unsustainable development of antimicrobial resistance.

**And a journey through time into the future: what advice would you give to the ESCMID executives in 40 years' time?**

I would embrace possibilities and always be curious about new developments. Never get too attached to certain patterns of thinking – try to be fluid and flexible in your approach and less attached to just a few perceptions and theories. Expect that things can change a lot and usually in unpredictable ways. Do not fight against upcoming changes – embrace them, but always with an ounce of healthy scepticism. Believe in the power of the society and the importance of diversity and the broad engagement of professionals all over the world. ■



# Bugs are better than you think

Leonard Leibovici, Israel  
CMI Editor-in-Chief

**Coffee and a newspaper... a walk... quickly put on your shoes and off you go... How does a normal working day begin for you?**

Greet the cat, feed the cat, breakfast, take the dog for a walk. Two years ago, before I retired from clinical work, every day started and ended with worries about patients.

**ESCMID aims high. What does it mean for you as a person and in your position to be involved?**

We are trying to position CMI as a leading journal: by publishing research that matters to patients and practitioners; and is free of bias.

**How does working for ESCMID affect your private life? What limitations are there, how is it enriched by this work?**

A large part of the weekend is work, not always welcomed by my family. Working with excellent colleagues as editors is a real boon.

**If you could go back 40 years, what would you like to tell people about upcoming scientific developments in your field?**

I would like to warn them: bugs are better than you think in developing resistance to drugs. Don't waste the antibiotics that you have for no good reason. Think about new ways to develop antibiotics and use them in a rational way. Think about new ways to prevent the spread of resistant bugs.

**And a journey through time into the future: what advice would you give to the ESCMID executives in 40 years' time?**

Be better than we were. ■



# Public health matters

Murat Akova, Turkey  
ESCMID Membership Counsellor (EMeC)

**Coffee and a newspaper... a walk... quickly put on your shoes and off you go... How does a normal working day begin for you?**

A typical working day will start around 7 AM with a light breakfast (and with lemon tea, not coffee!) with my wife and chat about the day ahead of us (since we shall not be seeing each other until late evening). No more printed newspapers, I am afraid... News from mobile phone and also early WhatsApp messages... Walking or running are usually postponed until later in the evening. I arrive at the hospital around 8:30 and until 10 AM the main tasks are quick responses to e-mails accumulated over the night and planning the day ahead. One weekly small group discussion with medical students also occupies this time slot. Ward rounds start at 10 AM which require a bit of walking in the big campus (this is the first exercise of the day!). Around 1 PM is one of the most joyous time of the day; dine and chat with other friends from the hospital around the lunch table. The whole afternoon is usually devoted to medical students and assistants for training and discussion for research. 5 PM and onwards is usually spared for non-teaching business, including Zoom meetings for a variety of (scientific) work, manuscript reviews, preparing presentations etc. The day will be closed with an 45-min walk after arriving home and a light dinner.

**ESCMID aims high. What does it mean for you as a person and in your position to be involved?**

This makes me extremely proud of being a part of a scientific society with great ambitions. Currently my position, as I consider it, is an honorary one which is seldom needed. Most of our members still have a misperception about “membership counsellor”, thinking that I’m responsible for issues concerning

registering and paying dues to the Society (this is all about becoming a member!). So, I exchange a lot of emails with the ESCMID Office for those complaining about their registration issues (Thanks Ben! Those of you who are not aware that Benjamin Schirra from ESCMID Office is the responsible person for membership issues). However, as the Ombudsman of the Society, I am deeply honoured to be adviser to the Executive Committee when a complaint comes from the members including ethical issues, an allegedly mismanaged situation inside the organisation, etc. So, I am the “wise man” who examines the problems, talks to the parties involved and comes up with a conclusion and advice to be submitted to the Executive Committee for the final decision. It is not very common for scientific societies around the world to hold such a position and perhaps this is why ESCMID members are frequently confused about the responsibilities of EMeC. However, this is a classic example of an “aiming high” situation, which clearly differentiates ESCMID from others.

**How does working for ESCMID affect your private life? What limitations are there, how is it enriched by this work?**

The time I spend for ESCMID has clearly been much less as compared with four years ago and before when I was an acting member of the Executive Committee for 11 years from 2007. But I still spare some of my private time for ESCMID including responsibilities of my ad-hoc position, study groups in which I am involved, representing the Society in a variety of international and European projects and contributing to educational activities. But this is all for great pleasure. Even if I can contribute a minus-

“*Even if I can contribute a minuscule amount for the society’s good, this makes me extremely happy.*”

Murat Akova

cule amount for the Society’s good, this makes me extremely happy.

**If you could go back 40 years, what would you like to tell people about upcoming scientific developments in your field?**

A small group of scientific visionaries created ESCMID 40 years ago and what started as a small-scale scientific club has become a global society. It was a time when most infectious diseases were under control with many antimicrobials entering into the armamentarium. Antimicrobial resistance existed, but when compared to today’s situation it was manageable. HIV infection was emerging, but severe immunosuppression, cancer and infection had only a basic understanding. Emerging epidemics, particularly wildlife origin, were a distant concern and merely included an influenza pandemic expected anytime soon. And above all, advancing technologies in both clinical microbiology involving particularly rapid diagnostics and internet-based communications, which allow prompt information from the most remote parts of the world and connecting scientists on a global scale, were only on the horizon. So, all of these are now our current problems or opportunities we have. Talking about them 40 years ago would make one a real wizard today.

**And a journey through time into the future: What advice would you give to the ESCMID executives in 40 years’ time?**

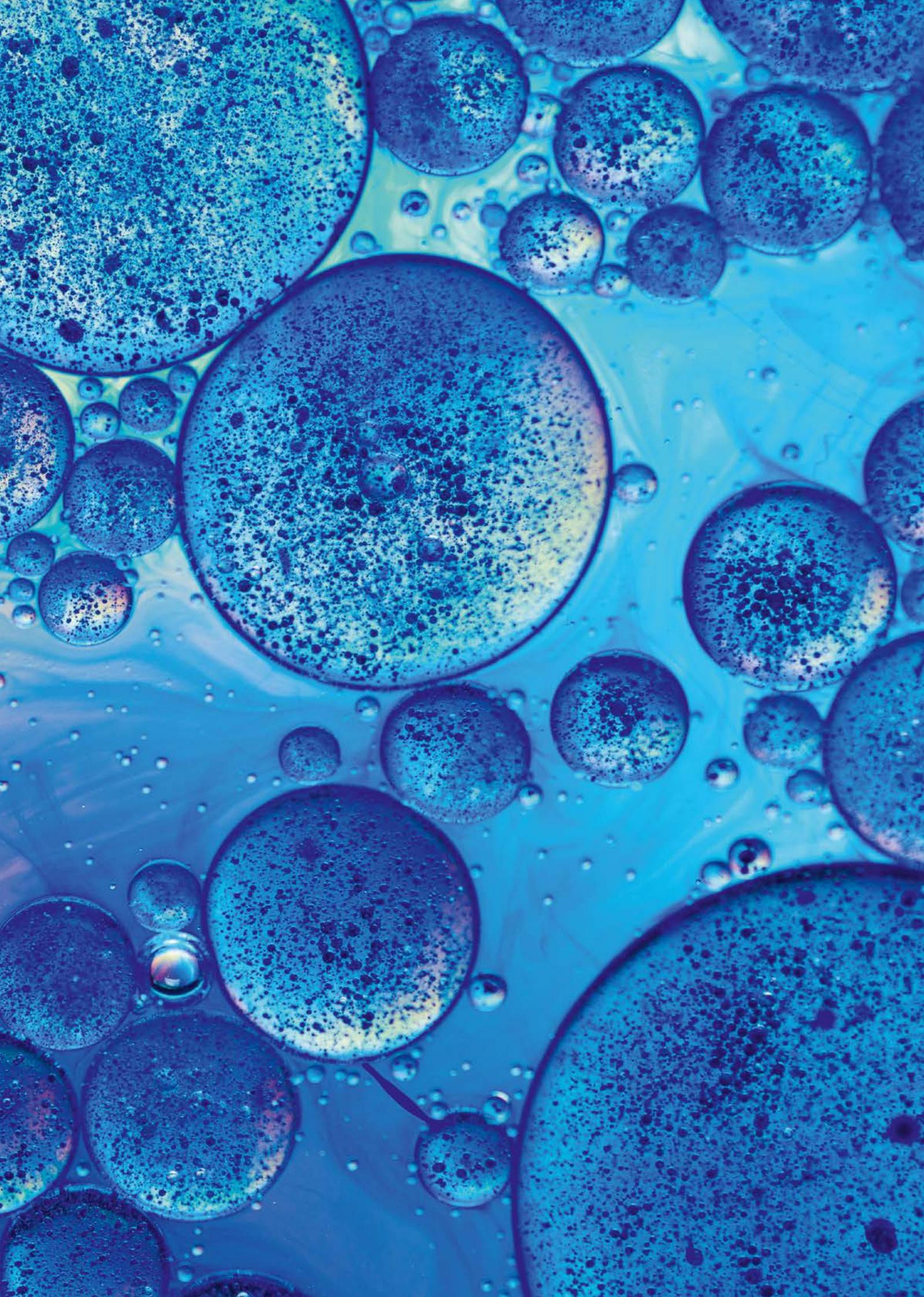
Apart from being scientifically excellent, the Society should be prepared to assume the role of scientific adviser for policymakers. This would require it to get organised to make prompt reactions with creative solutions to emerging problems in its portfolio. More

public health issues should be on the agenda, including OneHealth concept and public health matters, which would certainly require interdisciplinary collaboration. The Society can have a leading role to diversify research fundings from the EU and from other sources and may be the leading scientific authority dictating priorities for scientific research. Since we cannot accurately predict the future, but we can make acceptable assumptions by analysing continuously accumulating data, executives may wish to create a special task force for such predictions by means of AI and related technologies and give feedback to the Society for future planning. ■



# SCIENCE IS MAGIC THAT WORKS.

Kurt Vonnegut



A working day in the life of ...



# Jon S. Friedland

Scientific Affairs Officer



## The people make a successful society

### **How do you start the day and when do you call it a day?**

I start the day slowly and speed up! I do many different things so do not call it a day before midnight usually.

### **What scientific gap would you like to close in the future?**

The routine use of host- as opposed to pathogen-directed therapy in the management of infection.

### **What ESCMID trends have you noticed in recent years?**

ESCMID has become the dominant international infection society with an increasingly broad membership.

### **You studied medicine at Cambridge University and London University.**

#### **What do you think has changed since then – universally, as well as in your field of science in general?**

Where do I start? It is hard to believe that we did not have mobile phones when I was training and I first acquired an Apple Mac when I graduated. Computers only put in a proper appearance in academia when I was doing my PhD – mine had what was considered a large hard drive of 4 Mbytes! Science advances have been very significant, with possibly the application of the molecular revolution and understanding of host and pathogen genetics being one of the most significant scientific advances. ■

# Scientific Affairs

## Strengthening Science in ESCMID

ESCMID science is yet again on the rise and the focus has widened to return to non-pandemic research without taking our eye off important developments in SARS-CoV-2. Overall, ESCMID has had a fruitful year in terms of research grants, Study Groups and our fantastic SAS as you will read about on the next pages. Now more than ever, it is important to remember that ESCMID is a scientific society aiming to improve the diagnosis, treatment and prevention of infection-related diseases. As such, we must look to support our members and promote and develop the research activities that they lead. I am happy to report that ESCMID has continued to reaffirm its dedication to this mission in many ways both old and new.

The decision to expand our Research Grants has continued as we award funding for more excellent projects than in previous years and develop brand new grant opportunities such as The Study Group Collaboration Grant to meet the needs of our community and to address growing issues like antimicrobial resistance. We are also keen to promote collaboration amongst the ESCMID community.

Antimicrobial resistance has been a growing concern across the globe with specific focus during World Antimicrobial Awareness Week, a WHO initiative that takes place every November. ESCMID was proud to participate again this year for the third time under the theme “Preventing Antimicrobial Resistance Together” calling all sectors to work collaboratively strengthening preventative measures. ESCMID organised a highly successful virtual event focused on enhancing antimicrobial stewardship with speakers from around the world and in collaboration with the WHO. ESCMID is committed to supporting awareness on this global issue and calls for everyone to be champions of antimicrobial stewardship.

## Supporting Young Investigators

Next, I would like to bring your attention to the Young Investigator Awardees for 2023. This year we introduced a number of changes to the application process including encouraging self-nominations and not having to rely on a mentor. The result was more applications than ever, but we have also increased the number of awards available. I do want to emphasise that we are keen to receive applications from you whether you are an emerging clinical or non-clinical scientist. I am happy to announce that the 2023 awards went to Jacob Bodilsen, Belén Gutiérrez-Gutiérrez, Oliver Van Hecke and Anne Wyllie for their outstanding scientific achievements. The awardees have truly exceptional achievements, and I am very much looking forward to hearing them speak at ECCMID 2023.

## 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 90 submitted proposals within the theme of Fungal/Viral/Parasitic Infections and Diseases. For the 2023 ESCMID Research Grant call, 21 research grants were awarded. This is 6 more from the previous Fungal/Viral/Parasitic 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.

The decision to increase the amount of research funding continued with the introduction of the Study Group Collaboration Grant which had its inaugural call this year. This large-scale research grant of €180,000 focused on collaboration between at least 3 Study Groups to promote scientific innovation and translational research. All submissions were excellent, and many congratulations go to Prof. Frederic Laurent who was awarded the first Collaboration Grant on behalf of ESGS, ESGIAI, ESGB and ESGNTA. We will continue to organise this grant call annually to promote innovative and exciting research projects.

The Collaboration Grant was in addition to our normal Study Group Research Grants that are awarded every year. We received 11 submissions in total coming from 13 different Study Groups either individually or in collaboration with each other. After careful consideration and review from the SAS members and external expert reviewers, the Executive Committee decided to give 4 awards this year once again. The awarded SGs were: the ESCMID Study Group for Implant-associated Infections (ESGIAI) with the ESCMID Study Group for Biofilms (ESGB), the ESCMID Fungal Infection Study Group (EFISG), the ESCMID PK/PD of Anti-Infectives Study Group (EPASG) and the ESCMID Study Group for Mycoplasma and Chlamydia Infections (ESGMAC). You can see that the chances of an award are much higher than in previous years so do get your Study Group to submit in the next round. 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: collaboration leading to growth

The ESCMID Study Groups are a central source of participation available to all ESCMID members and with 32 available 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.

“It is a great privilege to work across the ESCMID scientific and research community, who maintain high levels of commitment, curiosity, enthusiasm and excellence as we all strive to discover and implement new and innovative developments in the field of infection.”

Jon S. Friedland, ESCMID Scientific Affairs Officer

A major theme for the past year has been collaboration and we are happy to see them working together to create more diverse and translational content and research. This is reflected in the new Study Group collaboration grant outlined above. We received applications engaging almost 70 % of all 32 Study Groups indicating just how much science relies of the cooperation of different specialties to address the big picture issues facing our world.

I am delighted that our Study Groups have been growing in size and activity. We have more Study Groups over critical mass now more than ever before with sizable member growth in all 32 groups. After the highly successful start to the ESCMID Study Group Webinars, I am happy to report that they have continued these activities, organising over 30 virtual events over the course of 2022. This includes the successful ECMCR 2022, a full-day online conference for early career researchers in the mycoplasma and chlamydia group ESGMAC. This, along with the many publications, research projects, guideline development and external collaborations organised through the Study Groups, they are leaders promoting ESCMID across all sectors. We look forward to seeing how they will continue to develop and what they will achieve.

### Thank you to the Scientific Affairs Subcommittee!

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 below) 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 maximizing their scientific activity. The SAS also contributes to the main ECCMID 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.

Three members of the current SAS are coming to the end of their 4-year terms namely Holger Rhode, Zeno Bisoffi and Mary Horgan and I thank them very much indeed for their years of service and support. They have been dedicated servants for ESCMID and we very much hope that they will continue to support ESCMID activities in the future. We also say goodbye to Katharina Last as the TAE representative on the SAS after ECCMID 2023. She will exit her role as Science Officer, and we wish her good fortune in the next role she will take on. I also want to take this opportunity to welcome in their replacement members: Colin MacKenzie taking over in the theme of bacteria, Christine Kelly for viruses and Kurt Hanevik in the theme of parasites. They were selected from a field of excellent candidates, and we are excited to see what they will bring to the position and the committee as a whole. Congratulations and good luck!

For more information contact us at [science@escmid.org](mailto:science@escmid.org) ■



Scan QR-Code to find all publications and further informations

## SCIENTIFIC AFFAIRS SUBCOMMITTEE

### Bacteria & Bacterial Diseases

Holger Rohde (Germany) exiting after ECCMID 2023  
Colin MacKenzie (Germany) entering after ECCMID 2023

### Fungi & Fungal Diseases

Alexandre Alanio (France)

### Parasites & Parasitic Diseases

Zeno Bisoffi (Italy) exiting after ECCMID 2023  
Kurt Hanevik (Norway) entering after ECCMID 2023

### Viruses & Viral Diseases

Mary Horgan (Ireland) exiting after ECCMID 2023  
Christine Kelly (Ireland) entering after ECCMID 2023

### 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)

### TAE representative (Ad hoc)

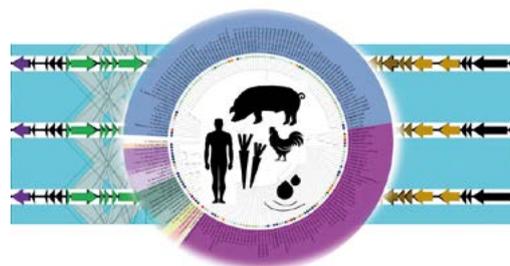
Katharina Last (Germany) exiting after ECCMID 2023

# How Study Groups performed

Here we look back over the many activities performed by our Study Groups in 2022. The following pages show a selection of major achievements or ongoing activities of the individual Study Groups. In general, the Study Groups strongly contribute to the ESCMID scientific programme by proposing symposia, educational workshops and meet-the-expert sessions. They organise the majority of courses/workshops for the ESCMID education programme and publish a number of scientific articles in ESCMID's name. These Study Groups are a major part of ESCMID's continue mission in promoting and supporting 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.



*Aspergillus flavus* growing in a malt extract agar plate



Microbial communities and their close connection with humans, animals, and the environment (by Carla Novais, UCIBIO-FFUP, Porto, Portugal)

## EFISG

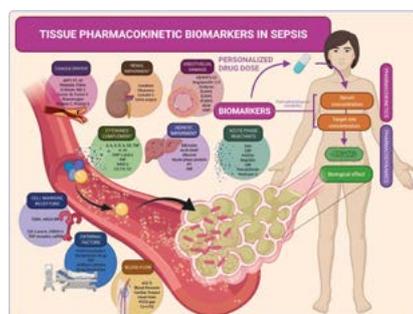
ESCMID Fungal Infection Study Group

- Publication of the article “Performance of existing clinical scores and laboratory tests for the diagnosis of invasive candidiasis in critically ill, nonneutropenic, adult patients: A systematic review with qualitative evidence synthesis” Giacobbe *et al.* *Mycoses*. 2022
- Co-organiser of the ESCMID post-graduate course “Training for an effective outbreak response: design your own tabletop exercise” to take place in 2023
- Collaborated with WHO on the WHO fungal priority pathogens list to guide research, development and public health action publication.

## EFWISG

ESCMID Food- and Water-borne Infections Study Group

- Supported the IMMEX XIII conference in Bath, UK 14–17 September 2022 with the session “One Health or Public Health in the case of AMR?”
- Co-organiser of the Post-graduate course “An Introduction to Healthcare Associated Waterborne Infections: Ecology, Prevention, Mitigation and Control” to take place in 2023
- Organised 4 online webinars reaching almost 100 participants on topics like: food safety assessments, genomic surveillance and antibiotic resistance in water.



Suboptimal antimicrobial exposure leads to treatment failure and the development of resistance. In order to fully optimise the antimicrobial dosage, various biomarkers can help predict antibiotic concentrations in tissue and at the target site



ESGAI at ECCMID 2022

## EPASG

ESCMID PK/PD of Anti-Infectives Study Group

- Publication of the article “Research priorities towards precision antibiotic therapy to improve patient care”, Bulman *et al.* *Lancet Microbe*. 2022
- Organised the ESCMID Post-graduate course “Optimised dosing of antibiotics – understanding PK/PD, clinical breakpoints, and therapeutic drug monitoring” 21–22 April 2022, Lisbon, Portugal
- Ongoing organisation of the ESCMID Guidelines project “Dosing in patients with renal impairment with or without RRT”

## ESGAI

ESCMID Study Group for Anaerobic Infections

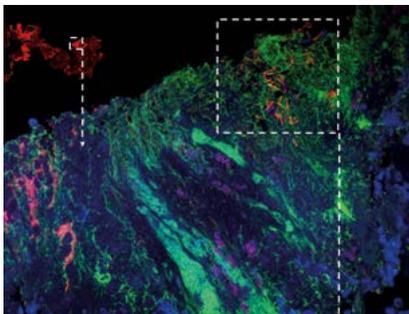
- Publication of the article “A comparison of the antimicrobial resistance of fecal *Bacteroides* isolates and assessment of the composition of the intestinal microbiotas of carbapenem-treated and non-treated persons from Belgium and Hungary”, Soki *et al.* *Anaerobe*. 2022
- Co-leading organiser of the Anaerobe 2023 conference to take place 12–14 July 2023
- Ongoing ESGAI co-operation: ReSubBacFrag. Pan-European disc diffusion susceptibility survey of *Bacteroides fragilis* from 2022 blood cultures



## ESGAP

ESCMID Study Group for Antimicrobial stewardship

- Six publications produced in 2022 including article “Survey of delivery of parenteral antimicrobials in non-inpatient settings across Europe” Emilie *et al.* Int J Antimicrob Agents 2022
- Organiser of the Pre-ECCMID Post-graduate course on Antimicrobial Stewardship; 21-22 April 2022, Carcavelos, Portugal
- 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



A tissue-invasive phenotype characterises mixed-species biofilms in colorectal cancer [Lasse Kvich, Costerton Biofilm Center, University of Copenhagen, Denmark]

## ESGB

ESCMID Study Group for Biofilms

- Publication of the article “Exploiting phage-derived carbohydrate depolymerases for combating infectious diseases”, Oliveira *et al.* J. Trends Microbiol. 2022
- Co-organiser of the Post-graduate educational workshop “The challenge of persistent biofilm-related bone and joint infections” in May 2022, Zürich, Switzerland
- Organiser of the Eurobiofilms 2022 Congress that took place 31 August–03 September 2022, Mallorca, Spain. Also collaborated on a special edition publication based on the event.

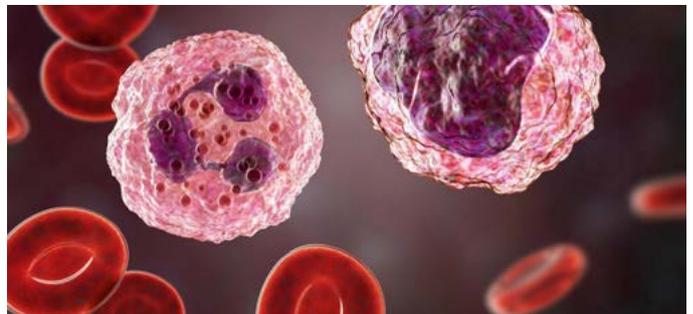


ESGARS. Created with Word Art Courtesy

## ESGARS

ESCMID Study Group for Antimicrobial Resistance Surveillance

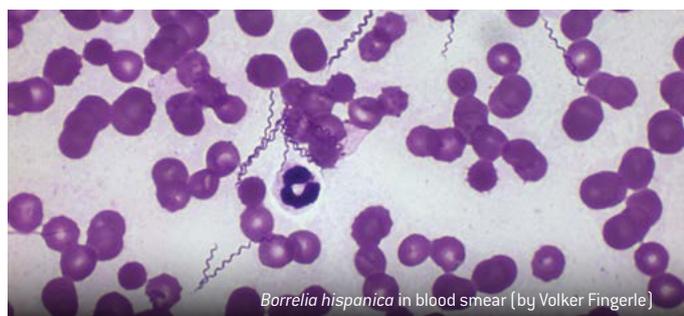
- Publication of the original article “Susceptibility profiles and resistance genomics of *Pseudomonas aeruginosa* isolates from European ICUs participating in the ASPIRE-ICU trial” Torrens *et al.* Journal of Antimicrobial Chemotherapy 2022
- Co-organiser of the Eurobiofilms 2022 Congress that took place 31 August – 03 September 2022, Mallorca, Spain
- Ongoing research project as part of the JPIAMR 2022 network call “Improving survival of *Pseudomonas aeruginosa* antibiotic resistance in Europe”



## ESGBIES

ESCMID Study Group for Bloodstream Infections, Endocarditis and Sepsis

- Publication of the article “Impact of neutropenia on clinical manifestations and outcome of *Staphylococcus aureus* bloodstream infection: a propensity score-based overlap weight analysis in two large, prospectively evaluated cohorts” Camp *et al.* CMI 2022
- Publication of the article “Impact of adherence to individual quality-of-care indicators on the prognosis of bloodstream infection due to *Staphylococcus aureus*: a prospective observational multicentre cohort” Escrinhuela-Vidal *et al.* CMI 2022
- Proposed and confirmed 3 sessions to take place during ECCMID 2023.



## ESGBOR

ESCMID Study Group for Lyme Borreliosis

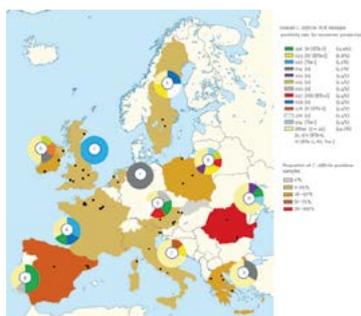
- Publication of “Evidence of taxonomic bias in public databases: the example of the genus *Borrelia*”, Margos *et al.* *Ticks and Tick-borne Diseases* 2022
- Co-organiser of the 16th International Conference on Lyme Borreliosis and Other Tick-Borne Diseases; 4–7 September 2022, Amsterdam, Netherlands
- Collaboration on the ongoing research project “A LAMP Assay for Cost-Effective Surveillance of Tick-Borne Pathogens” for detection of multiple tick-borne pathogens that would benefit surveillance and diagnostic activities.



## ESGCIP

ESCMID Study Group for Critically Ill Patients

- Publication of “Treatment of ventilator-associated pneumonia due to carbapenem-resistant Gram-negative bacteria with novel agents: a contemporary, multidisciplinary ESGCIP perspective”, Giacobbe *et al.* *Expert Rev Anti Infect Ther* 2022
- Publication of “Risk Factors for Intra-Abdominal Candidiasis in Intensive Care Units: Results from EUCANDICU Study”, Basetti *et al.* *Infect Dis Ther* 2022
- Ongoing support for the research project JIR-ICU study which is a retrospective multicenter study on positive pneumococci PCR in ICU.

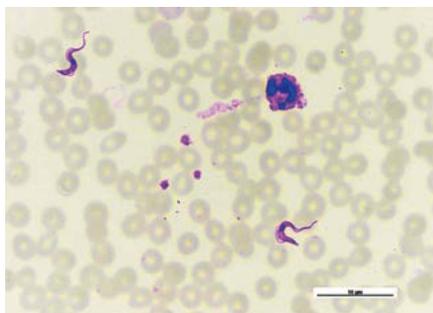


Positivity rate in retail potatoes and the geographical distribution of PCR ribotypes and toxinotypes of *Clostridioides difficile*, 12 European countries, 2018 (Tkalec *et al.*, *Eurosurveillance*, 2022)

## ESGCD

ESCMID Study Group for *Clostridioides difficile*

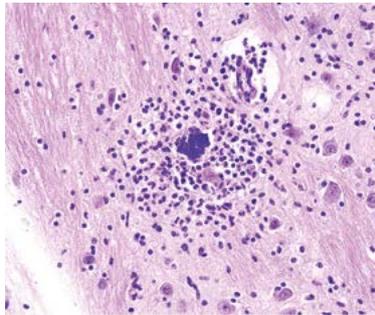
- Published 7 articles in 2022 including “A point-prevalence study on community and inpatient *Clostridioides difficile* infections (CDI): results from Combatting Bacterial Resistance in Europe CDI (COMBACTE-CDI), July to November 2018” Viprey *et al.* *Eurosurveillance* 2022
- Supported the organisation of the *Clostridioides difficile* infections in Ireland, *Clostridioides difficile* Symposium, Teagasc Food Research Centre, Dublin, Ireland, October 2022
- Organised 3 virtual webinars throughout the year on various topics surrounding *C. difficile*.



## ESGCP

ESCMID Study Group for Clinical Parasitology

- Outstanding commitment to the ECCMID 2023 programme with 9 submitted proposals with 4 of them being accepted and turned into sessions in the scientific programme
- Prepared and distributed regular newsletters to the ESGCIP members detailing the latest updates on research projects and open calls
- Successfully renewed the Executive Committee in 2022 to lead the Study Group until 2024.



Bacteria filling the blood vessels in a case of Invasive Group A streptococcus.

## ESGEM

ESCMID Study Group for Epidemiological Markers

- Organiser of the 13th International Meeting on Microbial Epidemiological Markers (IMMEM XIII) 14–17 September 2022, Bath, UK
- Publication of the article “Next-generation sequencing in routine clinical microbiology and infectious diseases: an ESGMD-ESGEM ESCMID postgraduate course” Aamot *et al.* *New Microbes and New Infections* 2022
- Organiser of the ESCMID Post-graduate course “Moving beyond single species outbreaks: the role of mobile genetic elements”; 7–8 July 2022, Online
- Supported or coordinated 7 virtual events for ESGEM members ranging up to 250 participants.



## ESGHAMI

ESCMID Study Group for Host and Microbiota Interaction

- Publication of the consensus paper “How to: *Clostridioides difficile* infection in children”, Marcela Krutova *et al.* *Clin Microbiol Infect.* 2022
- Organised 3 virtual events in 2022 including “Beyond Faecal microbiota transplantation”, “Parkinson disease and the role of the gut microbiome”, and “The gut microbiome and liver disease”
- Ongoing collaboration on a research project “Investigating the influence of physiologically relevant cultivation conditions on biofilm formation by bacteria associated with catheter infections”

## ESGFOR

ESCMID Study Group for Forensic and Postmortem Microbiology

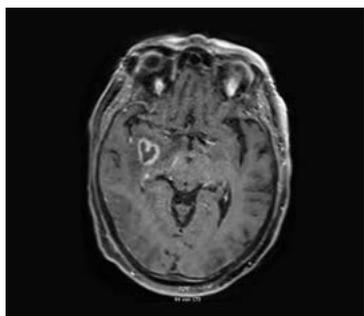
- Publication of the article “Positive airway pressure longer than 24 h is associated with histopathological volutrauma in severe COVID-19 pneumonia – An ESGFOR based narrative case-control review” Saegeman V *et al.* *Annals of Translational Medicine* 2022
- High level of support to other educational events including a technical workshop in Forensic Microbiology; 9–13 May 2022, Istanbul, Turkey
- Organised the First ESGFOR / SEPAF webinar “Postmortem casuistic during pandemic times”; 8 June 2022
- Collaboration on the ongoing E.U. Twinning project TR 16 IPA JH 03 18 on Forensic Trainings Towards Advanced examination Methods.



## ESGIAI

ESCMID Study Group for Implant-associated Infections

- Publication of 6 original articles including “Osteosynthesis-associated infection of the lower limbs by multi-drug and extensively drug-resistant Gram-negative bacteria: A multi-centre cohort”, Efthymia Giannitsioti, *et al.* *Journal of Bone and Joint Infections* 2022
- Organiser of the ESCMID Post-graduate course “The challenge of persistent biofilm-related bone and joint infections” Zürich, Switzerland, 28–29 May 2022
- Organised online case discussion meetings for the Study Group members on 6 occasions throughout the year (January, March, May, July, September and November)



Heart Shaped Brain Abscess



Picture of a Monkeypox lesion

## ESGIB

ESCMID Study Group for Infectious Diseases of the Brain

- Publication of 7 scientific articles including “The role of plasminogen activator inhibitor-2 in pneumococcal meningitis” Teske NC, Engelen-Lee JY, Dyckhoff-Shen S *et al.* ACTA Neuropathologica Communications 2022 which was funded by an ESCMID Research Grant
- Organiser of the post-graduate course “Hot Topics in Central Nervous System Infections”, 14 April, 28 April, 12 May, 19 May 2021, Online
- Publication of the Book Chapter 27 “Experimental meningitis by *Streptococcus pneumoniae* and *Neisseria meningitidis* in rodents” as part of the *Handbook of Animal Models in Neurological Disorders*



ESGIB at ECCMID 2022

## ESGIE

ESCMID Study Group for Infections in the Elderly

- Publication of the article “Predictors of survival in elderly patients with coronavirus disease 2019 admitted to the hospital: derivation and validation of the FLAMINCOV score” Tiseo G *et al.* Clin Microbiol Infect 2022
- Organiser of the ESCMID Post-graduate course “Vaccination of the elderly in COVID-19 times”, Venice, Italy, 12–13 September 2022
- Publication of the article “Caring for older adults during the COVID-19 pandemic” Prendki V *et al.* Clin Microbiol Infect 2022

## ESGICH

ESCMID Study Group for Infections in Compromised Hosts

- Organiser of the online ESCMID Post-graduate course “Safety of targeted and biological therapies: an Infectious Diseases perspective” 16–18 March 2022
- Co-leading organiser of the 22nd Symposium of the International Immunocompromised Host Society Annual Congress of the Swiss Society for Allergy and Immunology, Basel, Switzerland, 8–11 September 2022
- Collaboration on the Position Statement with ESOT and ESGICH on measures to reduce the risk of COVID-19 in solid organ transplant recipients by use of vaccination, immune testing and public health policies



Implementation of latent tuberculosis infection screening programmes, European Union/ European Economic Area countries and Switzerland, September 2019–February 2020

## ESGITM

ESCMID Study Group for Infections in Travellers and Migrants

- Published the article “Country-specific approaches to latent tuberculosis screening targeting migrants in EU/EEA\* countries: A survey of national experts, September 2019 to February 2020” Margineanu I *et al.* Eurosurveillance 2022
- Organised the ESCMID Postgraduate Education Course “Migration and Health: a world on the move”, 26–30 September 2022, Monte Isola, Italy
- Supported the EUPHA conference, Berlin, Germany in 2022 through the organisation of an ESGITM Workshop “Meeting the needs of migrants: initial assessments, catch-up vaccination, and health systems response”, 10 November 2022



## ESGLI

ESCMID Study Group for Legionella Infections

- Support to the “10th international conference on Legionella infection” that took place in Yokohama, Japan from 20–24 September 2022. ESGLI members were in attendance and selected to present during the conference
- Ongoing organisation of the technical workshop “An Introduction to Healthcare Associated Waterborne Infections: Ecology, Prevention, Mitigation and Control” to be conducted in 2023
- Sent regular newsletters to the ESGLI membership to inform on the active tasks and open calls for research opportunities and more.



## ESGMAC

ESCMID Study Group for Mycoplasma and Chlamydia Infections

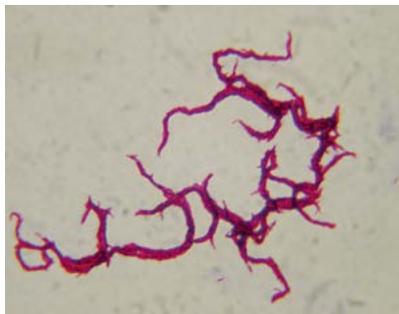
- Published the article “*Mycoplasma pneumoniae* beyond the COVID-19 pandemic: where is it?” Patrick M Meyer Sauteur *et al.* Lancet Microbe 2022
- Organised the Virtual ESGMAC Early Career Mycoplasma and Chlamydia Researcher (ECMCR) Conference 2022 on 18 October 2022, a day long research conference aimed at promoting the research of early career researchers in a virtual format
- Published the article “Phenotypic and genotypic antimicrobial susceptibility patterns of the emerging human respiratory pathogen *Mycoplasma amphoriforme* isolated from the UK and Denmark” Jessica Day *et al.* Journal of Antimicrobial Chemotherapy 2022



## ESGMD

ESCMID Study Group for Genomic and Molecular Diagnostics

- Published the article “Next-generation sequencing in routine clinical microbiology and infectious diseases: an ESGMD-ESGEM ESCMID postgraduate course” Hege Vangstein Aamot *et al.* New Microbes and New Infections 2022
- Supported the organisation of the International intracellular bacteria meeting 2022 with ESCCAR board, European chlamydia board, the American rickettsial society, ESGMD, ESGMAC that took place in Lausanne, Switzerland from 23–26 August 2022
- Organised a series of virtual webinars that took place over the course of the year covering topics like: IVDR, Spectroscopy, Quality control, Migrant health and Monkeypox



Acid-fast staining of *Mycobacterium tuberculosis* cords (1,000x)

## ESGMYC

ESCMID Study Group for Mycobacterial Infections

- Publication of the article “Rifapentine access in Europe: growing concerns over key tuberculosis treatment component” Lorenzo Guglielmetti *et al.* European Respiratory Journal 2022
- Organised the ESCMID Post-Graduate Educational Course “Diagnosis and treatment of mycobacterial infections” Nijmegen, Netherlands, 24–25 March 2022
- Publication of the article “Co-administration of treatment for rifampicin-resistant TB and chronic HCV infection: A TBnet and ESGMYC study” Simone Tunesi *et al.* Journal of Infection 2022

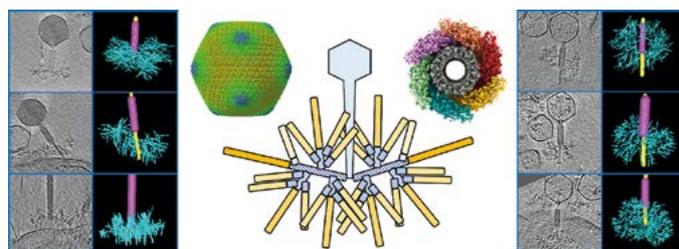


Technician working on sterile environmental samples

## ESGNI

ESCMID Study Group for Nosocomial Infections

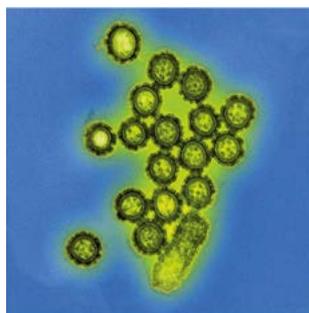
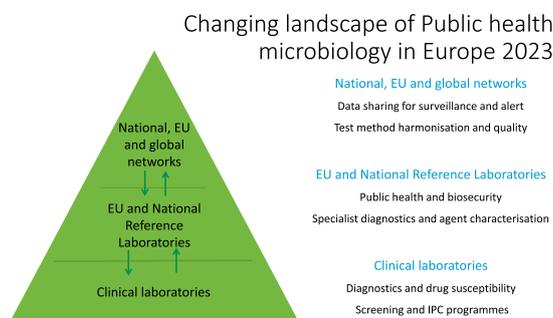
- Publication of the article “Environmental sampling of innate hospital surfaces: a survey of current practices and the need for guidelines” A S van der Schoor *et al.* *J Hosp Infect.* 2022
- Organised the online ESCMID Post-graduate course “Health-care-associated infections and their prevention and control” 7–8 October 2022
- Publication of the article “MRSA surveillance programmes worldwide: moving towards a harmonised international approach” Baede VO *et al.* *Int J Antimicrob Agents.* 2022

Reconstruction of polyvalent *Klebsiella* jumbo phage infecting capsulated bacteria using hyperbranched tail fibers

## ESGNTA

ESCMID Study Group for Non-traditional Antibacterial Therapy

- Publication of the article: “High-resolution reconstruction of a Jumbo-bacteriophage infecting capsulated bacteria using hyperbranched tail fibers” by Ouyang *et al.*, *Nat Commun.* 2022 Nov 24;13(1):7241.
- Organised the online ESCMID Post-graduate course “Personalised phage therapy: basic principles of monitoring and treatment” 7–10 June 2022
- Organised the first round of “Global Clinical Phage rounds” a virtual confidential discussion for phage clinicians on de-identified cases undergoing considerations for phage therapy to be repeated every 1–2 months



Produced by the National Institute of Allergy and Infectious Diseases (NIAID), this digitally colorized transmission electron microscopic (TEM) image, depicts numbers of H1N1 influenza virus particles.

## ESGPHM

ESCMID Study Group for Public Health Microbiology

- Organised ESGPHM websymposia “New roles of microbiology laboratories in public health surveillance and epidemic response”
- Supported the organisation of the websymposia “Diphtheria: a recurring clinical & IPC challenge”
- Collaborating on the ESGPHM-ESGEM Position paper: Ushering the post-pandemic integration of real-time genomic surveillance for enhanced control of infectious diseases and antimicrobial resistance to be published in 2023

## ESGREV

ESCMID Study Group for Respiratory Viruses

- Co-leading organiser of the 22nd Symposium International Immunocompromised Host Society 8–11 September 2022; Basel, Switzerland
- Publication of the article “Performance of point-of care molecular and antigen-based tests for SARS-CoV-2: a living systematic review and meta-analysis” Paraskevi C. Fragkou *et al.* *Clin Microb Infect* 2022
- Organised the ESGREV Websymposium “The Interplay of Respiratory Viruses and COVID-19: Re-emergence of Respiratory Viral Seasonality and the New Normal After the Pandemic” 17 November 2022



## ESGS

ESCMID Study Group for Staphylococci and Staphylococcal Diseases

- Publication of the article “MRSA surveillance programmes worldwide: moving towards a harmonised international approach” Baede VO *et al.* *Int J Antimicrob Agents.* 2022
- Organised the ESGS websymposium “Evolutionary history and zoonotic transmission of mecC-MRSA: the role of hedgehogs and antibiotic-producing dermatophytes” 25 March 2022
- Ongoing European Quality Control Assessments for identification, detection of resistance, virulence and molecular typing of Staphylococci

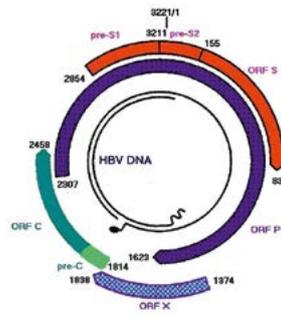


Melting pot of tick-borne zoonoses: European hedgehog (*Erinaceus europaeus*) infested with Ixodes ticks

## ESGVM

ESCMID Study Group for Veterinary Microbiology

- Organised the online ESCMID Post-graduate course “Emerging laboratory and point-of-care technologies for detection of AMR and bacterial infection in veterinary medicine” 9 March 2022
- Supported the organisation of the 4th International Conference of the European College of Veterinary Microbiology (ICECVM) with a session on “Antimicrobial stewardship in veterinary medicine” 16–17 September 2022, Bari, Italy
- Organised the ESGVM Websymposium “Holomics and machine learning in pig (or animal) health research” 24 November 2022



Hepatitis B Virus gene structure with 4 overlapping open reading frames (ORF): C, P, S, X

## ESGVH

ESCMID Study Group for Viral Hepatitis

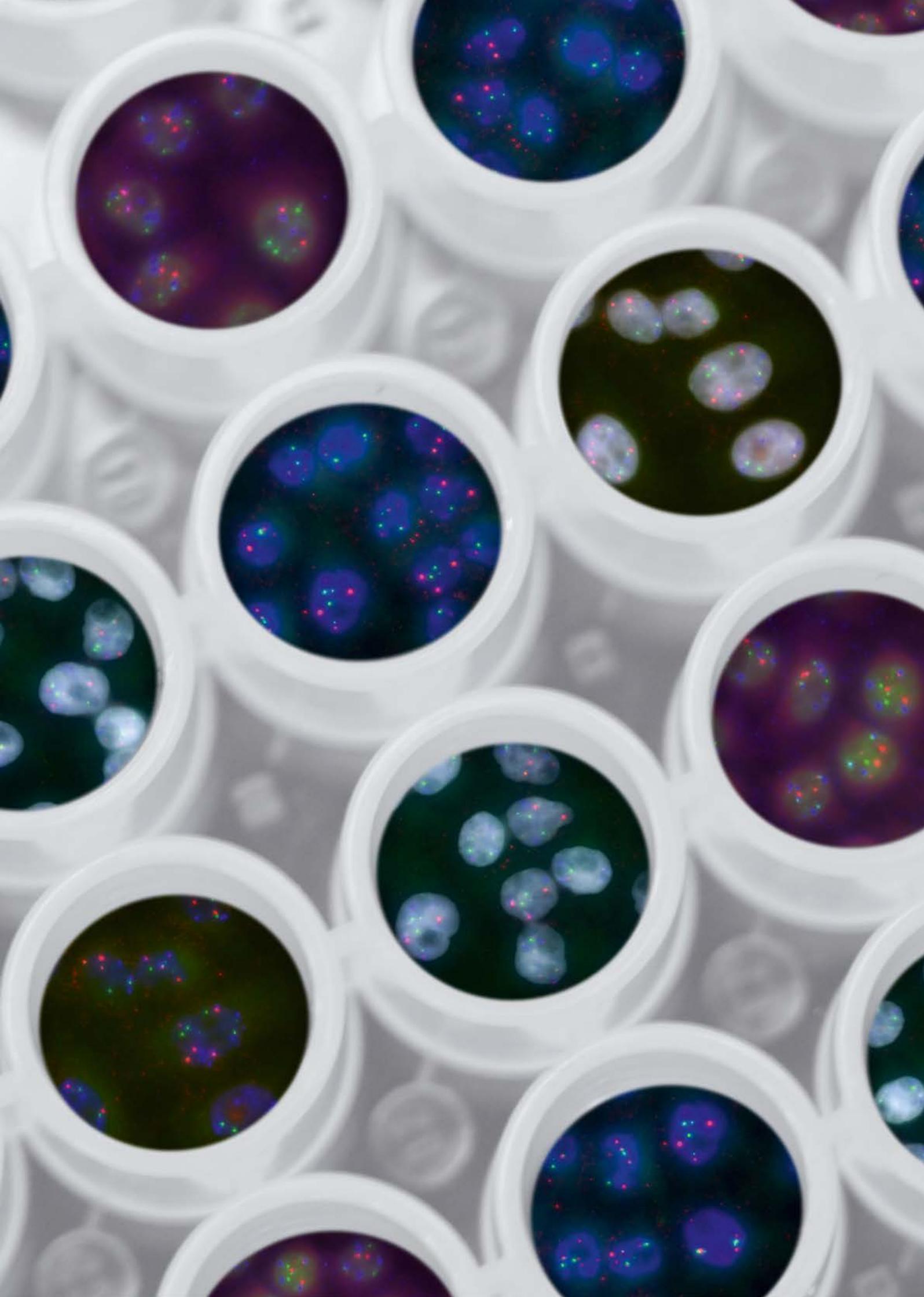
- Publication of 6 articles including “Acute severe hepatitis of unknown aetiology in children: a new non-A-E-hepatitis virus on horizon?” Özkaya Sahin G *et al.* *Clin Microb Infect* 2022
- Organised the online ESCMID Post-graduate course “Getting to Hepatitis B cure: Is it possible?” 3–4 November 2022
- Collaboration on the 18th Edition of the Scientific Days of the National Institute for Infectious Diseases organised by Romanian Clinical Microbiology and Infectious Diseases Society with the Keynote lecture: Management of hepatitis in low and middle income settings



## EVASG

ESCMID Vaccine Study Group

- Publication of the article “Impact of vaccination on the presence and severity of symptoms of hospitalised patients with an infection by the omicron variant (B.1.1.529) of the SARS-cov-2 (subvariant BA.1)” Guillaume Beraud *et al.* *Clin Microbiol Infect* 2022
- Co-organised the ESCMID Post-graduate course “Vaccination of the elderly in COVID-19 times” with ESGIE in Venice, Italy from 12–13 September 2022
- Ongoing organisation of the ESCMID Guidelines project “Vaccination of the immunocompromised host” with ESGICH. It will cover vaccination of solid organ transplant recipients, of people receiving biotherapeutics, of people who underwent chemotherapy, and potentially of people who underwent bone-marrow transplantation



EUCAST in 2022–2023: breakpoint revisions were carried out for several older antimicrobials – aminopenicillins, fosfomycin and chloramphenicol. Important work was done on antimicrobial susceptibility testing of endocarditis pathogens, and EUCAST (European Committee on Antimicrobial Susceptibility Testing) initiated a process for defining paediatric dosing regimens.

*Christian Giske, EUCAST Chair*

# From breakpoints to global scale

## Steering committee

The Steering Committee met five times during 2022 (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 several meetings.

In 2022, Christian Giske (Sweden) was the Chair, John Turnidge (Australia) the Scientific Secretary, 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 Joseph Meletiadis (Greece) and Shampa Das (UK) as PK/PD experts.

## General committee

The annual on-site meeting for General Committee members and colleagues in general was held at the ECGMID Meeting in Lisbon in 2022. The General Committee representatives to the Steering Committee in 2022 were Jorge Sampaio (Brazil) and Gian Maria Rossolini (Italy).

## National antimicrobial susceptibility testing (AST) committees (NACS)

Nearly all European and many non-European

countries have established NACs. 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 continues to increase.

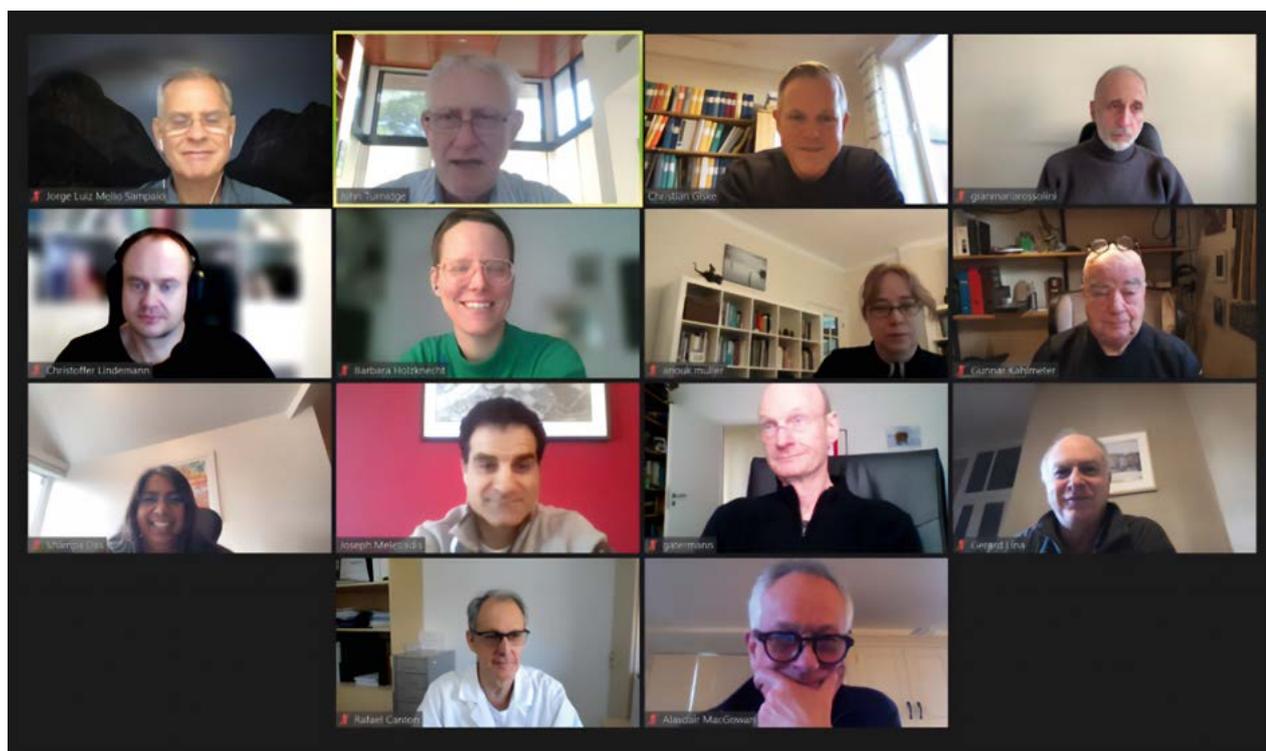
## Antifungal susceptibility testing subcommittee (AFST)

1 Jan–31 Dec 2022: The AFST is chaired by Maiken Arendrup (Denmark), with Jesús Guinea-Ortega (Spain) as Scientific Secretary and Joseph Meletiadis (Greece) as Clinical Data Coordinator. The AFST continued with their work on breakpoints and methods for antifungal agents. The AFST General Subcommittee held the annual meeting on 28th April as a teleconference and the steering committee of the AFST Subcommittee held face-to-face meetings on the 25 April and 7–8 July. The following have occurred during 2022.

## Detection of molecular resistance mechanisms:

Published a document “Molecular mechanisms of acquired antifungal drug resistance in principal fungal pathogens and EUCAST guidance for their laboratory detection and clinical implications.”

The Breakpoint and ECOFF document: the “Overview of antifungal ECOFFs and clinical breakpoints



Steering Committee and visiting members representing the EUCAST General Committee, January 2023

for yeasts, moulds and dermatophytes using the EUCAST E.Def 7.3, E.Def 9.4 and E.Def 11.0 procedures” document, valid version 3.0, valid from 2022-01-18 has been released. In this version itraconazole ECOFFs against *C. albicans*, *C. guilliermondii*, and *C. lusitaniae*, have been revised and an ECOFF against *Saccharomyces cerevisiae* was established. Moreover, itraconazole ECOFFs against *A. nidulans*, *A. niger*, and *A. terreus* have been revised.

**The microdilution mould testing method document:** the “EUCAST method for susceptibility testing of moulds (version 9.4 valid from 1 April 2022)” has been released. In this fourth version of the mould testing document, spectrophotometric reading of azoles and amphotericin B MICs against *A. fumigatus* are used as an alternative to visual reading. Increasing data from separate laboratories has confirmed equal performance with respect to correct susceptibility classification, and spectrophotometric reading is objective and automated and thus requires less experience (13--15). Finally, new pictures illustrating echinocandin MECs reading have been included.

**The *Aspergillus* agar screening method document:** a new version of the “E.Def 10.2 Screening method for the detection of azole and echinocandin resistance in *Aspergillus* using antifungal-containing agar plates, exemplified by *A. fumigatus* (June 2022)”

document has been released. This second version 10.2 includes a corresponding agar-based screening method used to detect echinocandin non-99 wild-type (NWT) *Aspergillus* spp. isolates in addition to the one for the detection of azole resistance.

**The QC document:** a new version of the “Routine and extended internal quality control for MIC determination and agar dilution for yeasts, moulds and dermatophytes as recommended by EUCAST, Version 6.0, valid from 2022-05-04” document has been released. In this document, information on colony morphology for the QC strain ATCC 204305 on echinocandin resistance screening agar has been provided, and four new QC strains with and without echinocandin resistance (*A. fumigatus* DPL1035 homo/SSI-1794, ATCC MYA-1163, DPL32458 and DPL55985) have been added to facilitate quality control of the performance of echinocandin screening agar testing.

**Access to QC strains:** Submitted all remaining QC strains for antifungal susceptibility testing to the CCUG strain collection from where they are/will soon be available upon request. The AFST also undertook the following activities in 2022: review of the rationale documents for anidulafungin, micafungin and isavuconazole; preparation of the rationale document for rezafungin, review a number of major documents, examining different plastic

plates and brands used for broth microdilution, evaluating an agar screening test for terbinafine against *Trichophyton* spp., and determining break-points for rare yeasts.

#### **Veterinary antimicrobial susceptibility testing subcommittee (VETCAST) 1 Jan–31 Dec 2022**

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 Optimization of Veterinary Antimicrobial Treatment (ENOVAT). VetCAST undertook the following activities during the report period: Organised a joint study with 5 European laboratories to create QC criteria and MIC distributions (ultimately ECOFFs) for bacterial species of veterinary clinical relevance. Held a training school in Thessaloniki entitled “The basis of the pharmacokinetic/pharmacodynamics approach for antibiotics”. In collaboration with the EUCAST SC, agreed on a strategy to develop a table of ECOFFs and TECOFFs for surveillance of AMR in veterinary pathogens, and continued collecting and modelling PK and PD data. The most prioritized drug/host combinations for which rationale documents are currently being prepared include: doxycycline in pigs, aminopenicillins in dogs, oxytetracycline in cattle, benzylpenicillin in horses.

#### **Antimycobacterial susceptibility testing subcommittee (AMST) 1 Jan–31 Dec 2022**

The AMST continued with their work on breakpoints and methods for antimycobacterial agents. The Subcommittee met by virtual link on 17 January, 28 March and 25 October 2022, and at ECCMID Lisbon on 24 April 2022 (hybrid meeting). The AMST undertook the following activities during the report period.

#### **First multicentre study for the calibration of MIC determination in microdilution assays and Bactec MGIT against the EUCAST-AMST reference method**

The objective is to evaluate the inter and intra-laboratory reproducibility of the ThermoFisher microtiter plates and Bactec MGIT techniques for the MIC determination for bedaquiline (BDQ), clofazimine (CFZ), levofloxacin (LFX) and linezolid (LZD) with regard to the EUCAST protocol on *M. tuberculosis* isolates (reference is the strain H37Rv ATCC 27294).

Seven mycobacteriology reference laboratories are taking part in the project. The pilot phase and the phase 1 were done in 2022 and are finalised. Phase 2 will start in 2023.

#### **Creation of the EUCAST-AMST laboratory network for MIC-determination of *M. tuberculosis* (MTB) and non-tuberculous mycobacteria (NTM)**

In early 2022, the EUCAST-AMST laboratory network was formed including 14 mycobacteriology reference laboratories, which volunteered to perform MIC-testing on either or both MTB and NTM with the EUCAST-AMST reference method against clinically relevant antimicrobials.

All laboratories have agreed to perform MIC pilot studies with MTB H37Rv ATCC 27294 reference strain using a modified protocol for the DMSO soluble drugs delamanid (DLM), pretomanid (Pa), clofazimine (CFZ) and bedaquiline (BDQ). At the end of 2022, 6 laboratories had provided MIC-data for DLM and Pa and in 2 laboratories tests are ongoing.

AMST members have agreed to perform a multicentre study on *M. abscessus* ATCC 19977 and *M. avium* ATCC 700898 to evaluate the proposed reference protocol for MIC-determination of NTMs.

#### **Discussion with TB alliance about pretomanid breakpoints and ECOFF**

AMST met with TB alliance and EUCAST SC in order to answer to TB alliance request for having official Cut off value for pretomanid. Till now, pretomanid benefited from EMA of a provisory agreement in 2020, but without any MIC data generated with the

EUCAST reference method. Due to the importance of pretomanid in the treatment of tuberculosis and many clinical trials ongoing, EUCAST SC and AMST agreed to propose a cut off value of 2 mg/L on the basis of MIC performed using BACTEC MGIT 960 system. This value was included in the MIC breakpoint table on the EUCAST website.

**Formal presentations of the EUCAST-AMST work**  
European Network of the national reference centers for tuberculosis (ERLTBNet) supported by ECDC: May 2022 in Milan, presentation given by Jim Werngren. European Congress of Clinical Microbiology and Infectious Diseases (ECCMID): April 2022 in Lisbon, presentation given by Emmanuelle Cambau. Congress of the European Society of Mycobacteriology (ESM): June 2022 in Bologna, presentation given by Jakko van Ingen. Congress of the European Society of mycobacteriology (ESM): June 2022 in Bologna, presentation given by Emmanuelle Cambau.

**Discussion Q and A about the EUCAST reference protocol for MIC determination:** AMST responded to questions from several colleagues from the industry (Otsuka, Janssen, TB alliance, Becton Dickinson) and academia (South Africa, UK, Romania, ITM) and provided support on how to perform the EUCAST reference protocol to get accurate results. For answering questions about the preparation of the MTB inoculum used in the EUCAST reference method, a presentation was uploaded on the website with the practical steps pictured from Swedish NRC AMST laboratory (Jim Werngren).

#### **Subcommittee on antimicrobial susceptibility testing of anaerobes**

EUCAST conducted extensive work during 2021 and 2022 to develop the disk diffusion method for common rapidly growing anaerobes. This currently includes the following species: *Bacteroides* spp., *Prevotella* spp., *Fusobacterium necrophorum*, *Clostridium perfringens*, and *Cutibacterium acnes*. During 2022, the new methodology has been validated and further developed to include additional agents (ampicillin, amoxicillin, amoxicillin-clavulanic acid, ertapenem, imipenem and for *C. acnes* ceftriaxone and linezolid).

MIC and Zone diameter breakpoints for the above-named species were published in January 2022, with a further update of additional agents planned for early 2023.

#### **EUCAST development laboratory for antibacterial 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:

- Evaluation of gradient diffusion tests for anaerobes, together with colleagues from Cardiff
- Development of MIC and zone distributions for the viridans *Streptococcus* group together with colleagues in France. To be made available during 2022. The development of a *Pseudomonas* reference AST panel was published and made available in early 2022.
- Developing breakpoints for additional antimicrobial agents for anaerobe bacteria – to be available early 2023.
- Developing breakpoints for additional antimicrobial agents in RAST – to be available in 2023.
- MIC-determination of cefiderocol – comparison of media for reference MIC testing
- Evaluation of commercial BMD for testing cefiderocol against *Enterobacterales*, along with colleagues in France
- Developing a EUCAST disk diffusion method for *Neisseria gonorrhoeae*.
- MIC and zone diameter breakpoints for *Clostridioides difficile* with expert colleagues in Odense.
- MIC and zone diameter breakpoints for *Nocardia* spp. Together with colleagues in France and Australia.
- Investigation of suitable media for testing *Aggregatibacter* spp. together with colleagues from Denmark.
- Development of QC and MIC distribution data for veterinary pathogens, as one of 5 test sites.
- Investigation of MH agar performance in disk testing of aminoglycosides.

- Development of an SOP for testing the performance of different MH agar sources to be used for QC development, as part of the Joint CLSI/EUCAST working group.
- Development of disk contents and zone diameter breakpoints for several new agents.
- Development of zoom seminars, SOPs, instruction videos, scientific articles, and tutorial programmes.

#### **EUCAST network laboratories**

The work on developing the structure of “EUCAST Network Laboratories” continued in 2022. 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 helping 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 improving methods and/or assisting clinical breakpoint development by providing species-specific minimal inhibitory concentration (MIC) datasets. For more information and for laboratories interested in participating, please visit The EUCAST AST Network Laboratories on the EUCAST website ([www.eucast.org](http://www.eucast.org)). Currently, 22 bacteriology and 15 mycology laboratories have been integrated into the networks.

#### **EUCAST breakpoints**

Version 13.0 of the MIC and zone diameter breakpoint tables for bacteria was published on the EUCAST website in early December 2022 for consultation and in its final state on 1 January 2023. New and/or revised breakpoints, MIC and/or zone diameter, were published including those for aminopenicillins, chloramphenicol, meningitis pathogens, a range of agents for *Staphylococcus* spp., *Streptococcus* spp. and *Moraxella catarrhalis*. New Areas of Technical Uncertainty (ATUs) were published for imipenem-relebactam. 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 were reviewed for cefiderocol. The breakpoints

for several other new agents are in the process of being evaluated. 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.

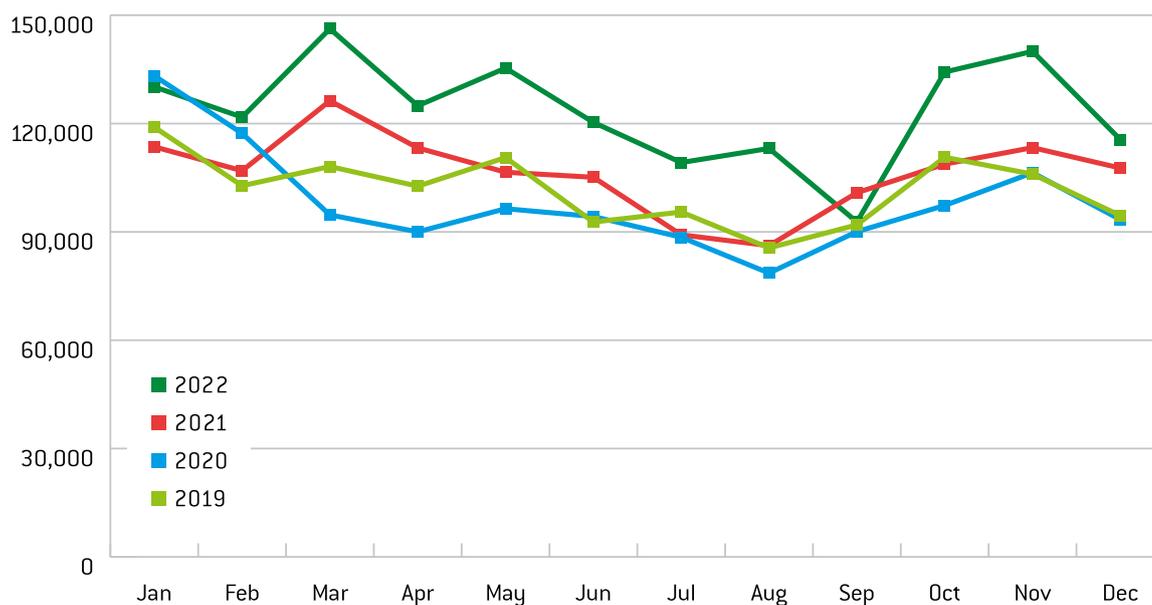
#### **EUCAST website**

The website and its contents are continuously updated. All significant changes are highlighted in the “News” section on the homepage and a list of all changes is available via the “Website changes” link below the contents list ([www.eucast.org/website\\_changes/](http://www.eucast.org/website_changes/)). A new feature is the “Automatic Newsletter” where all news items are summarised monthly and automatically distributed to all that have signed up (top bar first page). Documents updated in 2022 included breakpoint tables, QC tables, SOPs, files listing calibration and validation of disk diffusion testing vs. MIC, reading guides and method descriptions, frequently asked questions, guidance documents, intrinsic resistance, and unusual phenotypes.

#### **EUCAST consultations**

Many of the EUCAST documents on the website were updated in 2022 and this is an ongoing process. Rationale documents, giving background data and providing the rationale for EUCAST breakpoints continue to be developed. In 2022, the following consultations were undertaken.

- Changes proposed in breakpoints for bacterial meningitis. Closed 7 November 2022.
- *Staphylococcus* spp. vs. cephalosporins. Closed 7 November 2022.
- Proposed revision of chloramphenicol breakpoints. Closed 11 September 2022.
- Breakpoints for *Corynebacterium diphtheriae* and *Corynebacterium ulcerans*, Closed 11 September 2022.
- Fosfomycin IV breakpoints. Closed 27 September 2022.
- Aminopenicillin breakpoints for *Enterobacterales*, Closed 14 January 2022.



An overview of the unique page visits to the EUCAST website, indicating a steady increase over the years

### EUCAST warnings

In May 2022, the EUCAST development laboratory for fungi, noticed variable performance with several batches of VIPcheck (Mediaproducs BV) azole screening agar plates (see E.Def 10.1) for the detection of azole resistance in *Aspergillus fumigatus*. After thorough testing of multiple batches of plates, a warning of their use of these and future batches was issued. Problems with AST procedures and material are published on the EUCAST “Warnings!” website ([www.eucast.org/ast\\_of\\_bacteria/warnings/](http://www.eucast.org/ast_of_bacteria/warnings/)).

### EUCAST publications, consultations and documents

- All Publications in 2022 are listed here at page 136–139.
- All documents are freely available on the EUCAST website.
- A summary of consultations can be found on [www.eucast.org/documents/consultations/](http://www.eucast.org/documents/consultations/)

*Christian Giske*  
EUCAST Chair  
[christian.giske@escmid.org](mailto:christian.giske@escmid.org)  
[www.eucast.org](http://www.eucast.org)

Scan QR-Code to find all publications and further informations



## INFOBOX

### About EUCAST

EUCAST provides breakpoints and antimicrobial susceptibility testing methods on a global scale. ESCMID is the administrative, financial, and scientific framework for EUCAST. ESCMID ([www.escmid.org](http://www.escmid.org)) and the European Centre for Disease Prevention and Control (ECDC; [www.ecdc.europa.eu](http://www.ecdc.europa.eu)) supported EUCAST financially in 2022. 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 breakpoint proposals for newly registered agents



EUCIC General Assembly at ECCMID 2022, Lisbon, Portugal

# Infection prevention and control: an ESCMID priority

The pandemic showed the world painfully that collaboration among stakeholders and countries is essential for successful infection prevention and control (IPC). There is an urgent need for a new generation of IPC specialists trained in cross-country control measures and translational communication if the next pandemic is to be controlled better. EUCIC is addressing this need and, as the first pan-European training programme for IPC, aims to substantially contribute to reducing the burden of Infectious Diseases in Europe.

## EUCIC training programme

The first European Certification in Infection Control organised by EUCIC has completed its first training period and already started its second cohort! We started the pan-European training programme for the first time in 2018. Due to the hit of the pandemic, the final examination needed to be postponed but was successfully completed in 2021. The trainees have assumed positions in infection prevention and control (IPC) all over Europe and formed the first network of EUCIC alumni. Unfortunately, due to a long waiting list, we started the new cohort with 30 registered trainees from 15 countries in May 2022. Hence, there is still a 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 every year.

The current training programme comprises of basic/advanced local courses at 16 different training centres all over Europe. See the current modules here:

## ADVANCED MODULES 2022–2024

	City	Country	Module coordinators	Date
EUCIC basic module: Infection prevention and control	Groningen	Netherlands	Alex W. Friedrich	29 May–03 June 2022
Epidemiology and data analysis in infection control	Utrecht	Netherlands	Jan Kluytmans	31 Oct–03 Nov 2022
Making Peace with your Microbial Genomes: • Use of Whole Genome • Sequencing Data in Clinical • Microbiology and Hygiene	Münster	Germany	Natalie Effelsberg Karola Prior Alexander Mellmann Nico T. Mutters	13–14 March 2023
Antimicrobial Therapy and antimicrobial stewardship programmes	Ljubljana	Slovenia	Tatjana Lejko Zupanc	07–09 June 2023
EUCIC Advanced Module Infection Prevention and Control: focus on Hygiene	Vienna	Austria	Elisabeth Presterl	05–06 Oct 2023
Implementation in infection Prevention and control	Genève	Switzerland	Didier Pittet Walter Zingg	02–03 Nov 2023
Laboratory and clinical aspects of the surveillance of healthcare-associated infections: a theoretical and practical approach	Athens	Greece	Athanassios Tsakris	24–27 Jan 2024

## LOCAL MODULES 2022–2024

Training Professionals in Patient Safety	Matosinhos	Portugal	Isabel Neves	22–23 June 2022
Infection prevention and control: Surveillance and meta-competence	Nicosia	Cyprus	Constantinos Tsioutis	19–20 Sept 2022
Infection prevention and control	Madrid	Spain	Alejandro Quirós	12–13 Dec 2022
Biofilm-driven infections: research and clinical relevance	Bucharest	Romania	Oana Sandulescu	22–24 March 2023
Development and implementation of interventions in infection control	Catania	Italy	Annibale Raglio	10–12 May 2023
Improving Antibiotic Prescription and Infection Control in the Emergency Room	Lisbon	Portugal	Carlos Palos	22–23 June 2023
Infection and resistance prevention in the regional healthcare network	Groningen	Netherlands	Andreas Voss	11–12 Sept 2023
Achieving effective behaviour change in IPC and antibiotic stewardship	Sint Julians	Malta	Michael Borg	04–06 Dec 2023
Molecular and bioinformatic tools for infection control	Bucharest	Romania	Dragos Florea	2023

## PERSONAL CHART



**Evelina Tacconelli**  
EUCIC Chair



**Nico T. Mutters**  
EUCIC Scientific Coordinator



**Alexander W. Friedrich**  
EUCIC Clinical Coordinator

### EUCIC observership centers for infection control

Become an ESCMID Observership Centre for IPC and strengthen the knowledge in IPC among young trainees! The Observerships should primarily focus on real life application of IPC and the observers should use the observership to make improvements in their home institute (e.g., implementation of specific IPC measure).

### 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, 5 EUCIC trainees visited the ECDC in Stockholm for a weeklong observership in 2022. This opportunity will be repeated in 2023.

### EUCIC and UEMS/CESMA

EUCIC aims at accrediting the whole training programme within the UEMS (Union Européenne des Médecins Spécialistes) CESMA (Council of European Specialist Medical Examinations) programme. Together with the UEMS multidisciplinary joint committee on infection control (MJC IC), UEMS infectious diseases, and UEMS medical microbiology, the CESMA evaluation is expected to be completed this year.

### ESCMID publications

Besides training, EUCIC is also committed to developing guidance documents, guidelines and facilitate research via its network of members. The *ESCMID-EUCIC clinical guideline on surgical prophylaxis of patients colonised by multidrug-resistant bacteria before surgery* was recently and several members of EUCIC contributed to the *ESCMID guidelines on testing for SARS-CoV-2 in asymptomatic individuals to prevent transmission in the healthcare setting* (see page 138, ESCMID Publications list).

EUCIC started the update of the 2014 guideline on *infection control measures and procedures to reduce the spread of multidrug-*

*resistant Gram-negative infections in hospitalised patients*. The panel has been formed and search queries determined. The estimated completion of the Guideline is Winter 2023.

Furthermore, our communication officer, Gabriel Birgand, continues to provide sophisticated summaries of the current literature in IPC.

### EUCIC and WHO

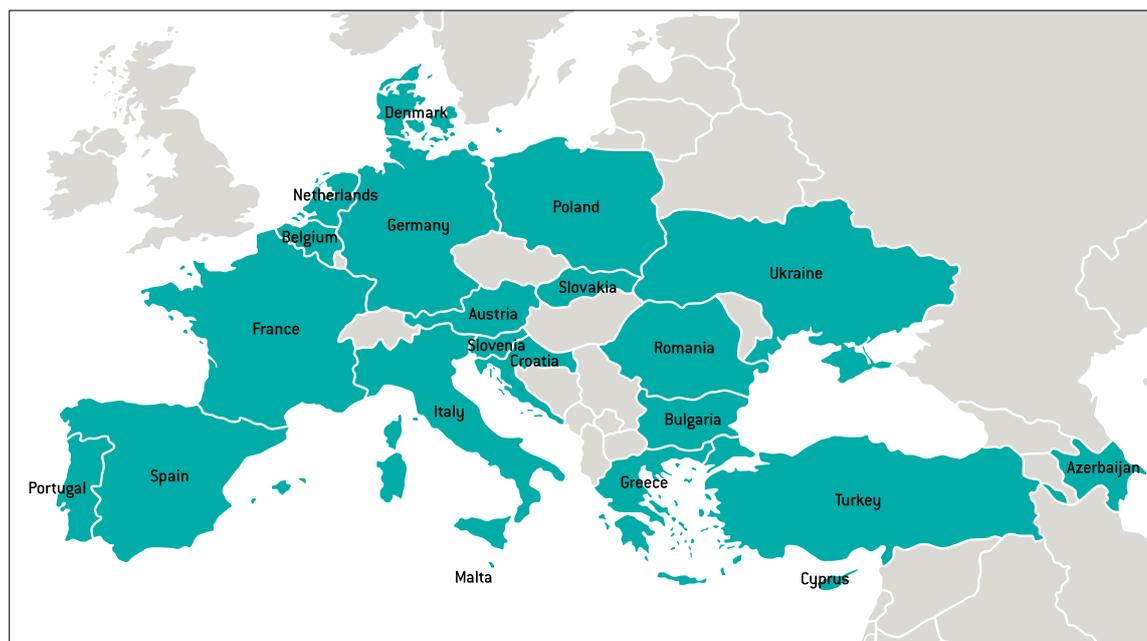
EUCIC was invited to join the WHO Public Health Emergencies Working Group (IPC PHEWG). Prof. Mutters is currently representing EUCIC in this group and has contributed to several WHO outputs and publications during his assignment.

### EUCIC and ECCMID

The EUCIC contributed substantially to the ECCMID programme development and as usual, the parts with a major focus on infection control and preventive measures are highlighted in the programme. Here are some of the main EUCIC sessions planned at ECCMID 2023. We would be delighted to see you there!

### EUCIC new initiatives

Improving guidance in IPC. We are developing a new plan to improve availability of guidance documents with a specific focus on practical documents (e.g., app development, translating the evidence from recommendations to implementation in different epidemiological and economic scenarios). Important is the selection of priorities and the possible link with educational activities on real life implementation. 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. Building network on IPC research. We are developing a platform to facilitate collaborative projects in infection control, to develop new research ideas, and to coordinate applications for European calls.



Coverage of  
EUCIC National Board

### ECCMID Stops

The future of infection prevention and control,  
Saturday 15 April 2023, 4:15–6:15 pm CEST, Hall K

All for one and one for all! Prevention, diagnostic, and antibiotic  
stewardship to reduce the burden of AMR: guidance in real  
cases, Monday 17 April, 8:30–10:30, Hall K.

You are very welcome to join the EUCIC General Assembly,  
planned on Sunday 16 April, 4:30–6:00 pm, Meeting room 180.

### Thanks

Our thanks go to our communication officers Constantinos  
Tsioutis (Cyprus) and Gabriel Birgand (France), who are con-  
stantly working to increase EUCIC's internet and social media  
presence. Follow us on twitter, LinkedIn, ResearchGate, etc.

A special thanks also to Chiara Speziale, Alessandro Piroso,  
Benjamin Schirra and Simone Bruderli from the ESCMID  
Office, and Henna Holband from the EUCIC Office, who have  
helped significantly with all EUCIC activities. ■

Scan QR-Code to find all  
publications an further  
informations



## INFOBOX

**Check the video summarising EUCIC's activities at:**  
<https://online.eccmid.org/media-224-european-committee-for-infection-control-eucic?&fartype=cat&farval=36>

**Interestet in becoming part of the EUCIC network of excellence?**  
Contact us at [eucic@escmid.org](mailto:eucic@escmid.org) or visit [www.escmid.org/research\\_projects/eucic](http://www.escmid.org/research_projects/eucic).

**More information on the application procedure can be found on the ESCMID website:**  
[https://www.escmid.org/eucic/eucitraining\\_programme/](https://www.escmid.org/eucic/eucitraining_programme/)

**More information to EUCIC Observership Centers for Infection Control can be found at:**  
[https://www.escmid.org/profession\\_career/observerships\\_collaborative\\_centres/observerships/about\\_observerships](https://www.escmid.org/profession_career/observerships_collaborative_centres/observerships/about_observerships)

**The literature review are available here:**  
[https://www.escmid.org/eucic/relevant\\_literature\\_summaries](https://www.escmid.org/eucic/relevant_literature_summaries)

If you are interested in **contributing to the design and development** of the research network, contact us at [eucic@escmid.org](mailto:eucic@escmid.org).

**Suggestions for new activities are very important for us! Contact your country 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:**  
[https://www.escmid.org/eucic/national\\_antimicrobial\\_committees](https://www.escmid.org/eucic/national_antimicrobial_committees)

# EITaF will continue its mission



Eskild Petersen

Emerging Infections Task Force, EITaF 2022: emerging infectious diseases are defined as having newly appeared in a population or have existed but are rapidly increasing in incidence or geographic range. Emerging infections are emerging as long as control strategies are still incomplete. While we were dealing with the COVID-19 pandemic, the EITaF had to deal with many other emerging infections such as monkeypox (mpox), acute liver disease, vaccine-derived poliovirus type 2, group A streptococcus infection, H5N1 avian influenza and Marburg virus.

*Eskild Petersen, Onder Ergonul*

## The COVID-19 pandemic is not over

The evolving SARS-CoV-2 has resulted with different variants. The vaccines that were based on the ancestral virus from January 2020, have proved effective in reducing severe disease and mortality. However, there is a lack of consensus on when and how to use the 4th or 5th dose and when to use second generation vaccines that are based on the Delta and Omicron variants. The evolution of the virus is also not certain. The Omicron variant was not a further development of the Delta variant but was introduced from a reservoir, most probably immunocompromised people who could not clear the virus. Still, we have the problems of infection among immunocompromised hosts and development of therapeutic and preventive strategies including effective drugs and vaccines.

Antimicrobial stewardship was neglected during COVID-19 pandemic and therefore antimicrobial resistance increased in many countries.

## Vaccines against smallpox

Monkeypox was detected among men who have sex with men (MSM) and in about nine months it surprisingly reached about 80,000 cases at the end of 2022. Vaccines against smallpox also protect against monkeypox, but the vaccine efficacy has never been estimated against sexually transmitted infections. Drug treatment exists (tecovirimat), but is unfortunately not available everywhere.

## Vaccine derived polio virus type 2

VDPV2 has been emerging in Africa over the past years and has recently been found in London and New York. VDPV2 can cause acute flaccid paralysis and shows a genetic instability in the currently used Sabin monovalent type 2 vaccine. A novel attenuated OPV2 has been developed and has superior genetic stability compared with the Sabin monovalent type 2.

### Vector-borne infections

Vector-borne infections with high fatality continued to increase in many countries. West Nile virus increased in numbers in Italy and Greece, and the physicians in the neighboring countries should be alarmed and informed. Crimean-Congo Hemorrhagic Fever cases increased in Turkey during the pandemic and new cases were reported in Spain.

About all these diseases, EITaF produced 21 newsletters in 2022 that were disseminated to the ESCMID members. EITaF will continue its mission by collecting and filtering information about emerging infections and disseminating to the members and the public.

### ESCMID postgraduate education course

EITaF together with ESCMID International Affairs Subcommittee, ESCMID Study Group on Respiratory Viruses (ESGREV), and ESCMID Study Group on Viral Hepatitis organised an ESCMID postgraduate education course on 19–20 January of 2023 in Istanbul with 26 speakers and 116 participants. Thanks to Koç University İşbank Center for Infectious Diseases, Istanbul Metropolitan Municipality and Bayındır Healthcare Group for their support.

### Publications from the task force

'Disease X'-time to act now and prepare for the next pandemic threat, Mipatrini D, Montaldo C, Bartolini B, Rezza G, Iavicoli S, Ippolito G, Zumla A, Petersen E.

Eur J Public Health. 2022 Nov 29;32(6):841-842. doi: 10.1093/eurpub/ckac151.

Understanding the rebound of influenza in the post COVID-19 pandemic period holds important clues for epidemiology and control, Lee SS, Viboud C, Petersen E.

Int J Infect Dis. 2022 Sep;122:1002-1004. doi: 10.1016/j.ijid.2022.08.002.

Vaccination for monkeypox prevention in persons with high-risk sexual behaviours to control on-going outbreak of monkeypox virus clade 3, Petersen E, Zumla A, Hui DS, Blumberg L, Valdoleiros SR, Amao L, Ntoumi F, Asogun D, Simonsen L, Haider N, Traore T, Kapata N, Dar O, Nachega J, Abbara A, Al Balushi A, Kock R, Maeurer M, Lee SS, Lucey DR, Ippolito G, Koopmans M.

Int J Infect Dis. 2022 Sep;122:569-571. doi: 10.1016/j.ijid.2022.06.047.

The first case of artemisinin treatment failure of *plasmodium falciparum* imported to Oman from Tanzania, Subudhi AK, Bienvenu AL, Bonnot G, Abu-Shamma R, Khamis F, Lawati HAAA, Picot S, Petersen E, Pain A.

J Travel Med. 2022 Aug 12:taac092. doi: 10.1093/jtm/taac092.

Emergence of new SARS-CoV-2 Variant of Concern Omicron (B.1.1.529) highlights Africa's research capabilities, but exposes major knowledge gaps, inequities of vaccine distribution, inadequacies in global COVID-19 response and control efforts, Petersen E, Ntoumi F, Hui DS, Abubakar A, Kramer LD, Obiero C, Tambyah PA, Blumberg L, Yapi R, Al-Abri S, Pinto TCA, Yeboah-Manu D, Haider N, Asogun D, Velavan TP, Kapata N, Bates M, Ansumana R, Montaldo C, Mucheleng'anga L, Tembo J, Mwaba P, Himwaze CM, Hamid MMA, Mfinanga S, Mboera L, Raj T, Aklillu E, Veas F, Edwards S, Kaleebu P, McHugh TD, Chakaya J, Nyirenda T, Bockarie M, Nyasulu PS, Wejse C, Muyembe-Tamfum JJ, Azhar EI, Maeurer M, Nachega JB, Kock R, Ippolito G, Zumla A.

Int J Infect Dis. 2022 Jan;114:268-272. doi: 10.1016/j.ijid.2021.11.040. ■

# Society Milestones

## STUDY GROUPS AND STANDING COMMITTEES

1983

**ESGAR**

European Study Group  
on Antibiotic Resistance

**ESGAI**

ESCMID Study Group  
for Anaerobic Infections

**ESGNI**

ESCMID Study Group  
for Nosocomial Infections

**ENSEI**

European Network for the  
Study of Experimental  
Infections

2003

**ESPRIT**

ESCMID Study Group  
for Primary Care Topics

**ESGB**

ESCMID Study Group  
for Biofilms

**ESGCP**

ESCMID Study Group  
for Clinical Parasitology

**EFISG**

ESCMID Fungal Infection  
Study Group

**ESGIB**

ESCMID Study Group  
for Infectious Diseases  
of the Brain

**EFWISG**

ESCMID Food- and  
Water-borne  
Infections Study Group

**ESGVH**

ESCMID Study Group  
for Viral Hepatitis

**ESGICH**

ESCMID Study Group  
for Infections in  
Compromised Hosts

**EUCIC**

European Committee on  
Infection Control

**EVASG**

ESCMID Vaccine  
Study Group

**ESGITM**

ESCMID Study Group  
for Infections in Travellers  
and Migrants

**ESGS**

ESCMID Study Group  
for Infections in  
Compromised Hosts

**ESGVM**

ESCMID Study Group  
for Veterinary  
Microbiology

**EITaF**

Emerging Infections  
Task Force

**ESGHAMI**

ESCMID Study Group  
for Host and Microbiota  
Interaction

**ESGPHM**

ESCMID Study Group  
for Public Health  
Microbiology

1993

**ESGEM**

ESCMID Study Group for Epidemiological Markers

**ESGMD**

ESCMID Study Group for Genomic and Molecular Diagnostics

**ESGCI**

European Study Group on Cardiovascular Infection

**EWPICP**

European Working Party on Infections in Cancer Patients

**ESGCD**

ESCMID Study Group for *Clostridioides difficile*

**ESGARS**

ESCMID Study Group for Antimicrobial Resistance Surveillance

**ESGAP**

ESCMID Study Group for Antimicrobial stewardship

**EUCIC**

European Committee on Infection Control

**ESGIAI**

ESCMID Study Group for Implant-associated Infections

**ESGBOR**

ESCMID Study Group for Lyme Borreliosis

**EPASG**

ESCMID PK/PD of Anti-Infectives Study Group

**ESGCIP**

ESCMID Study Group for Critically Ill Patients

**ESGLI**

ESCMID Study Group for Legionella Infections

2013

**ESGFOR**

ESCMID Study Group for Forensic and Postmortem Microbiology

**ESGIE**

ESCMID Study Group for Infections in the Elderly

**ESGBIES**

ESCMID Study Group for Bloodstream Infections, Endocarditis and Sepsis

**ESGMYC**

ESCMID Study Group for Mycobacterial Infections

**ESGREV**

ESCMID Study Group for Respiratory Viruses

**ESGMAC**

ESCMID Study Group for Mycoplasma and Chlamydia Infections

**ESGNTA**

ESCMID Study Group for Non-traditional Antibacterial Therapy

2023

The beating heart of ESCMID: the Study Groups, EUCAST, EUCIC and EITaF represent 40 years of outstanding research and teaching.



**NEVER LOSE AN  
OPPORTUNITY  
OF URGING  
A PRACTICAL  
BEGINNING**

Florence Nightingale



A working day in the life of ...



# Emmanuelle Cambau

Education Officer



## What places in Paris do you see?

Since I live in the south of Paris, near the Pantheon (5th district), and I work in the north (Bichat hospital at “Porte de Saint Ouen”), I spend about an hour on the bus or metro in the mornings. If the weather is fine, I walk across the “Jardin du Luxembourg”, then go on the metro. If it’s raining, I can get a direct bus from home to the hospital. The bus crosses the River Seine, and goes past the Louvre museum and the Opera Garnier, which are all very beautiful. I often stop for 5–10 min to have a coffee in one of the cafés on the way: I sit and think and prepare my future tasks and schedule for the day.

## What kind of people do you meet?

In the hospital, I first meet my team, i.e. secretary, technicians, technician supervisor, clinical microbiologist (CM) collaborators and students (Masters, PhD) who work in the laboratory. I am head of the department specialising in mycobacteriology. Sometimes I also meet other colleagues (MD, PhD) at the IAME UMR 1137 Inserm research unit, which is based at the University Paris Cité medical school, 50 meters from the hospital (same campus). When I attend research and professional meetings outside the hospital, I meet other CM/ID colleagues interested in tuberculosis, leprosy and infections due to nontuberculous mycobacteria, which are my topics of expertise now.

## What determines your rhythm?

It clearly depends on the tasks I have:

- Meetings with the team or with other groups; online video meetings for ESCMID, EUCAST, WHO leprosy group, ILEP, etc.
- Supervision of laboratory results, i.e. working in the laboratory (BSL3 and BSL2) with the technicians
- Calls and emails with MD colleagues about their patients, not only in the three hospitals my lab is involved with (Saint Louis, Lariboisière, Robert Debré), but also for all the French MDs asking for advice about diagnosis and treatment of tuberculosis, leprosy and NTM infections, since we are part of the National reference centre for mycobacteria and we organise monthly consultations
- Teaching medical students, scientists for Masters programmes, as well as CME for professionals
- Planning research work and discussions about results with Masters and PhD students
- Planning new projects and grant applications

Every week is different, which is very exciting. Sometimes it’s very busy, sometimes less busy and then you get a chance to think about future plans. I never get bored!

## What efforts are needed to promote the growth of ESCMID in practice and theory?

I think the challenge for ESCMID, to help it grow in size and quality, is to involve ESCMID members in the activities, take them on board, keep them busy with us, and open the doors to new ideas and comments. Attracting more members is also a “must” since there are so many CM and ID around the world who might not know us, and who could get some help and be attracted by some interesting activities with ESCMID.

## What is the importance of ECCMID with regard to the promotion of young researchers?

ECCMID is often the first time you are presenting your results in front of international colleagues. Of course, this has to be in English, which might be a challenge for some of them. They need to work hard to prepare their oral presentation or poster, which may lead to a first publication in the following months. ECCMID is also the place where young researchers can meet the scientists they know from the publications. Lastly, young researchers can meet up with their colleagues, becoming friends, and sometimes even meet up with their teachers, in a relaxing environment, with the possibility of talking outside work and showing themselves in a new light.

## Thought experiment: you have the opportunity to change the world in a concrete way through education. Which actions would you take?

This is a very difficult question to answer. If this is about educating the general population, I would target the schools and make school mandatory in all countries for all children from a younger age until at least 15 years old. If this is about medical education, I would make it possible to study medicine and science at all ages, not just when you are 18–20 years old, like it is today. Lastly, I would target continuous medical education (CME) as the most important because medical science is changing thanks to innovations and new knowledge, and we often keep the old habits. ■

# Rewarding work

ESCMID is willing to offer a wide range of educational activities in more accessible formats than ever before. We look forward to you joining us online or onsite soon, also giving your ideas and needs.

*Emmanuelle Cambau*

In 2022, the ESCMID education programme was back to full strength, with 23 postgraduate education courses (PGECs) attended by 1,336 junior and senior colleagues in the fields of Clinical Microbiology and Infectious Diseases.

## What changed from the past?

Among the 23 courses, 10 courses were fully online, 3 courses were hybrid, i.e., onsite with online access, and 13 were onsite only. ESCMID will endeavour to increase the hybrid format because, although people love to spend 2 to 3 days onsite discussing and living with colleagues, travelling abroad can be challenging (cost, sustainability, time spent). Our educational activities are also being extended across the globe so that people in low-income and remote countries are able to participate.

As a result of the commitment of several ESCMID Study Groups (ESGVM, ESGICH, ESGMYC, ESGAP, EPASG, ESGIAI, ESGVH, ESGNTA, ESGEM, ESGAP, ESGIE, EVASG, ESGMD, ESGITM, EPASG, ESGARS, ESGNI, ESGPHM, ESGVH), as well as ESCMID Subcommittees (International Affairs, Ethics Advisory, Education, CMI journal, Trainee association, EUCAST), the topics for 2022 were numerous and adapted either to CM or ID or both. Additionally, we had a very successful Summer School in Rome, Italy, where 80 juniors and young professionals spent one week learning and discussing. Having just completed COVID-19 duty, many of them were able





Summer School is an invitation for networking and brainstorming on educational needs

to talk with each other, far from the barriers of country and hospital, and it was like a therapy session. I am sure many of us will remember the “fireplace session”!

Unfortunately, 4 PGECs had to be cancelled either due to difficulties in reaching attendants or other issues. This shows that we did not return completely to the time before the COVID-19 pandemic. It may also show that our members are waiting for a new format of educational programme, and even new topics.

### **Brainstorming on educational needs**

In 2023, we will invite all our members for a brainstorming on educational needs: questionnaires, surveys and study group discussions, will be organised; results will be shared on our website and new type of courses or learning might be announced for 2024.

The PGEC experiences will soon 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. This is a great work and issue to achieve, for which ESCMID launched a call for an ESCMID Academy Working Group inviting members to participate, giving ideas and helping to build e-learning modules.

Our thanks go to all the organisers, speakers and attendants, the various ESCMID Study Groups, Affiliated Societies and Subcommittees, that contributed to the success of the educational activities. I would also thank very much the members of the Educational Subcommittee who had given their time to choose the best proposals for the year 2022.

As always, these activities will not be possible without the tireless work of the ESCMID Executive Office. ■

*Contact us at [courses@escmid.org](mailto:courses@escmid.org)*

## Summer School

# A week full of energy

The 20th ESCMID Summer School took place from 2–9 July 2022 in Rome, Italy. We enjoyed beautiful sunny weather for the entire week as we hosted 78 young physicians, microbiologists, and researchers from 31 countries as far away as New Zealand and Mexico.



Gemelli University Hospital  
was a wonderful host

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 and COVID-19 patients. Small group workshops took a closer look at current hot topics, such as the planning of an antibiotic stewardship programme in the clinical centres, translating antibiogram results in real life, or nontuberculous mycobacterial infections.

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 from different countries. This rich academic timetable served as a wonderful backdrop for discussions among the participants and faculty members, with plenty of opportunities for networking, be it between sessions, at dinner during one of the evening events, or while visiting the cultural sights in Rome! For the first time, we were able to provide an insight into the enormous Gemelli University Hospital for the

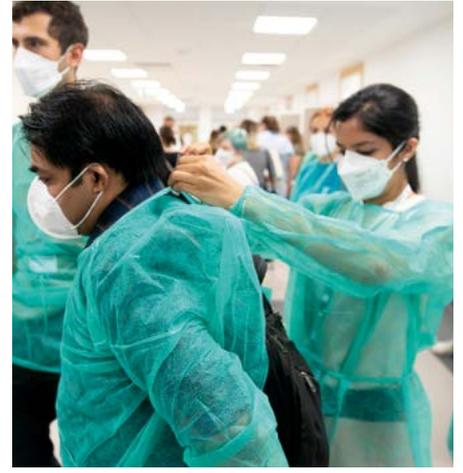


attendees to exchange their experiences in the field with local specialists. We look forward to hearing the results of the collaborations from the connections made in Italy, and hope that the participants will continue to stay in contact at future ESCMID events and beyond.

Special thanks must go to the ESCMID Executive Committee 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 all speakers for their contributions to the Summer School during the uncertainty of the COVID-19 pandemic. Of course, we appreciate the support of several entities for helping to organise all local affairs.

The 21st Summer School will be held from 1–8 July in 2023, taking place in Seville, Spain. We hope to see you there! ■

*Maurizio Sanguinetti*  
20th Summer School Director





# IMPRESSIONS FROM SUMMER SCHOOL 2022



# 2022 ESCMID Courses and Workshops

9 March 2022

Emerging laboratory and point-of-care technologies for detection of AMR and bacterial infection in veterinary medicine

16–18 March 2022

Safety of targeted and biological therapies: an Infectious Diseases perspective

24–25 March 2022, Nijmegen, Netherlands

Diagnosis and treatment of mycobacterial infections

21–22 April 2022, Carcavelos (Lisbon), Portugal

Pre-ECCMID course on Antimicrobial Stewardship

21–22 April 2022, Oeiras (Lisbon), Portugal

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

16 May–10 June 2022

Ethical Challenges in Infectious Diseases

28–29 May 2022, Zürich, Switzerland

The challenge of persistent biofilm-related bone and joint infections

7–10 June 2022

Personalised phage therapy: basic principles of monitoring and treatment

13–17 June 2022, Nijmegen, Netherlands

Principles of antimicrobial stewardship: the what and the how

7–8 July 2022

Moving beyond single species outbreaks: the role of mobile genetic elements

5–6 September 2022, Geneva, Switzerland

Paediatric infection management for the microbiologist, antimicrobial pharmacist, paediatrician and adult infectious diseases specialist

12–13 September 2022, Venice, Italy

Vaccination of the elderly in COVID-19 times

15–17 September 2022, Bologna, Italy

Systematic reviews and meta-analyses for guidelines development in infectious diseases, infection control and clinical microbiology

26–30 September 2022, Montisola, Brescia, Italy

Migration and Health: a world on the move

27–30 September 2022, Tallin, Estonia

Antimicrobial susceptibility testing with EUCAST criteria and methods

7–8 October 2022

Health-care associated infections and their prevention and control

17–19 October 2022, Šibenik, Zagreb, Croatia

Clinical microbiology testing in settings with limited resources and high prevalence of antimicrobial resistance: the role of diagnostic stewardship

20–21 October 2022 This course has been cancelled

COVID-19 collateral damage: impact on healthcare services in LMICs (Africa, Asia, South America)

20 October–9 December 2022

Training for an outbreak response: design your own tabletop exercise

20–22 October 2022, Utrecht, Netherlands

Better Methods for Clinical Studies in Infectious Diseases and Clinical Microbiology

28–30 October 2022, Belgrade, Serbia

1st TAE/ESCMID Leadership Academy: Creating future leaders in infectious diseases, clinical microbiology and infection control

3–4 November 2022

Getting to hepatitis B cure: Is it possible

26–27 November 2022, Belgrade, Serbia

Antimicrobial stewardship: a competency-based approach

# 2023 ESCMID Courses and Workshops

19–20 January 2023, Istanbul, Turkey

Update on current emerging infections

9–10 February 2023, Leuven, Belgium

Antifungal Stewardship from primary to tertiary care (AMS Cert.)

8–10 March 2023

What can forensic medicine teach us for the management of pandemics

8–10 March 2023, Paris, France

Measles in the 21st century: is eradication possible and how?

17–19 March 2023, Homburg/Saar, Germany

Antimicrobial stewardship (AMS) in migration- and travel-associated infections (AMS Cert.)

10–12 May 2023, Seville, Spain

Antimicrobial stewardship programme live! On-site learning in a Southern Europe hospital with low rate of MDRO (AMS Cert.)

31 May–2 June 2023, Pécs, Hungary

Hot topics of Infectious Diseases and Clinical Microbiology in Central and Eastern Europe

7–9 June 2023, Athens, Greece

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

12–15 June 2023, Lausanne, Switzerland

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

15–16 June 2023, Lille, France

Maths against antimicrobial resistance (AMS Cert.)

16–17 June 2023, Belo Horizonte, Brazil

Transplant Infectious Diseases: Quality and Safety in Transplantation

25–27 July 2023, Brussels, Belgium

Personalised phage therapy: from the lab to the patient

4–9 September 2023, Palma, Spain

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

6–7 September 2023, Milan, Italy

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

21–22 September 2023, Geneva, Switzerland

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

5–7 October 2023, Amsterdam, Netherlands

Diagnostic and therapeutic approach to patients with CNS infections

28–31 October 2023, Melbourne, Australia

Antimicrobial susceptibility testing with EUCAST criteria and methods

17–19 November 2023, Crete, Greece

HYBRID Antimicrobial stewardship and infection prevention and control (AMS Cert.)

## AMS Certificate

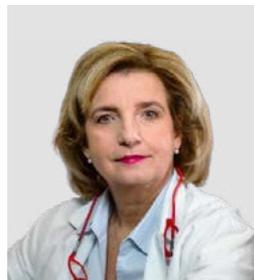
# A huge step forward

Antimicrobial Stewardship Certificate 2022–2024: 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.



Jeroen Schouten  
Antimicrobial Stewardship  
Certificate Programme Coordinator



Bojana Beovi  
Antimicrobial Stewardship Certificate  
Programme Coordinator



Nijmegen, 13–17 June 2022

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) Advanced modules and three Elective modules (the participants must 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 who have a strong potential to introduce or upgrade AMS in their settings.

The first presentation of the project has shown that in many hospitals and other healthcare settings AMS is still in its early phase of development; it confirms the need for systematic education in AMS and the ESCMID decision to start the AMS Certificate Programme. We are glad to see that a new class of 40 students will join the programme in June 2023. ■



Belgrade, 26–27 Nov 2022



Rome, 18–19 Oct 2022

## CONTACTBOX

For any queries, please email  
[amscert@escmid.org](mailto:amscert@escmid.org)

## 01 SOCIETY

1983  
Foundation of the European Society of Clinical Microbiology

1990  
Inclusion of Infectious Diseases  
ESCM > ESCMID

## SCIENCE AND PUBLICATIONS

1983  
ESCMID news regularly published  
in the European Journal  
of Clinical Microbiology

1986  
First study groups:  
ESGAR und ESGARAB

## 03 EDUCATION

1991  
First education course  
during ECCMID

1992  
First postgraduate  
education course

1993  
Regular  
newsletter  
established

# ESCMID ROUTE MAP 1983–2023

## 06 ECCMID

1983  
ECCM Bologna

1985  
Brighton

1987  
The Hague

1989  
Nice

1991  
ECCM > ECCMID  
Oslo

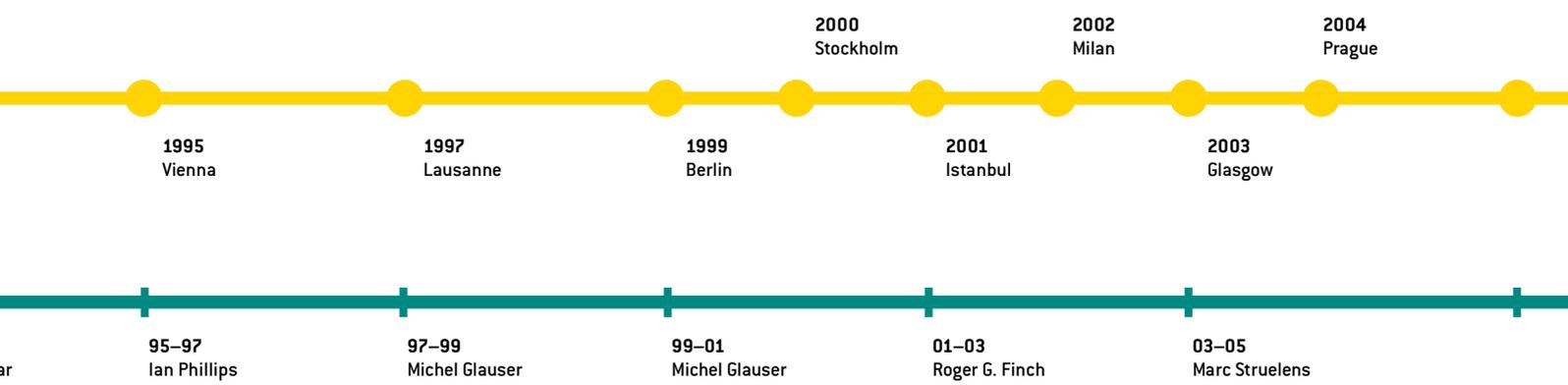
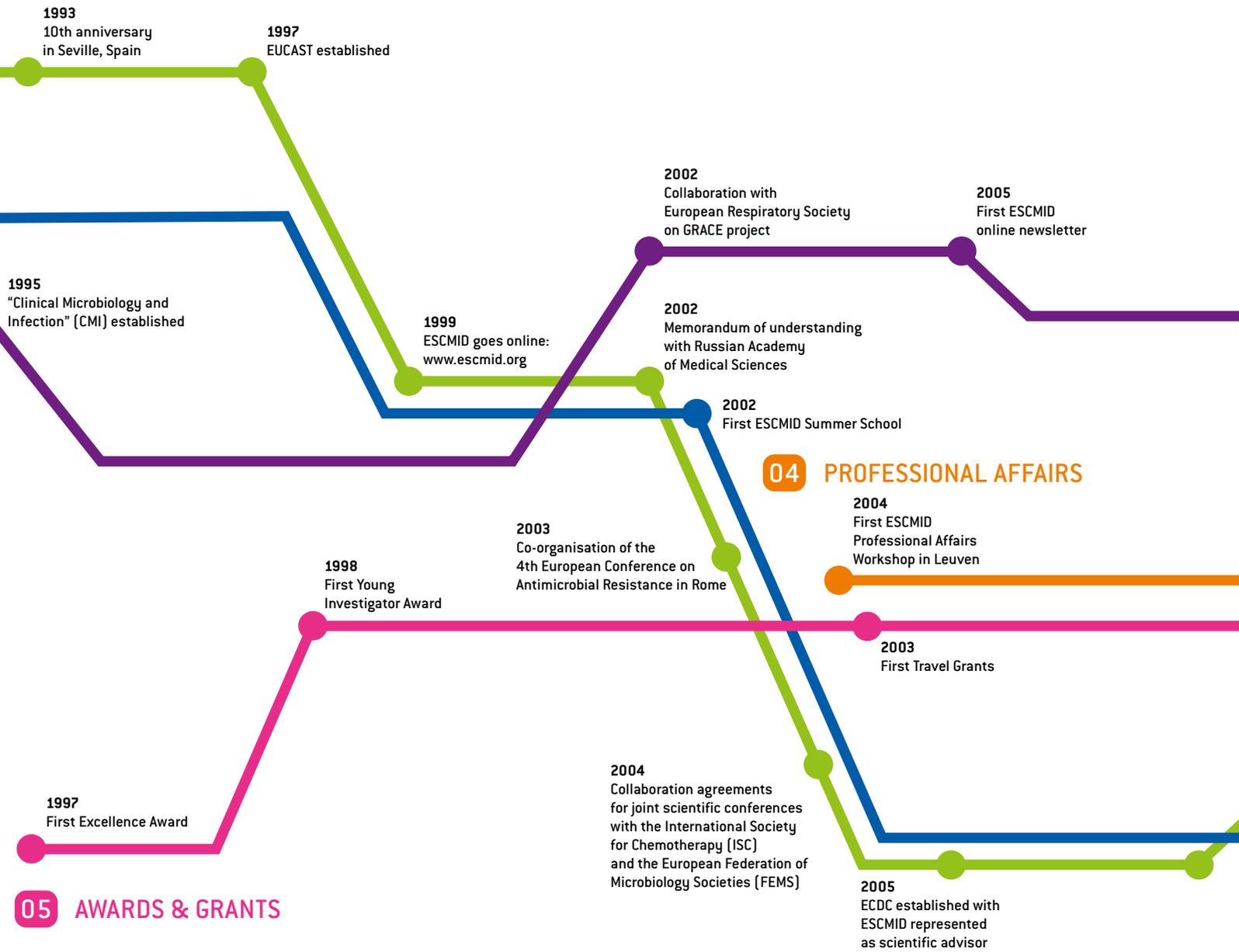
1993  
Seville

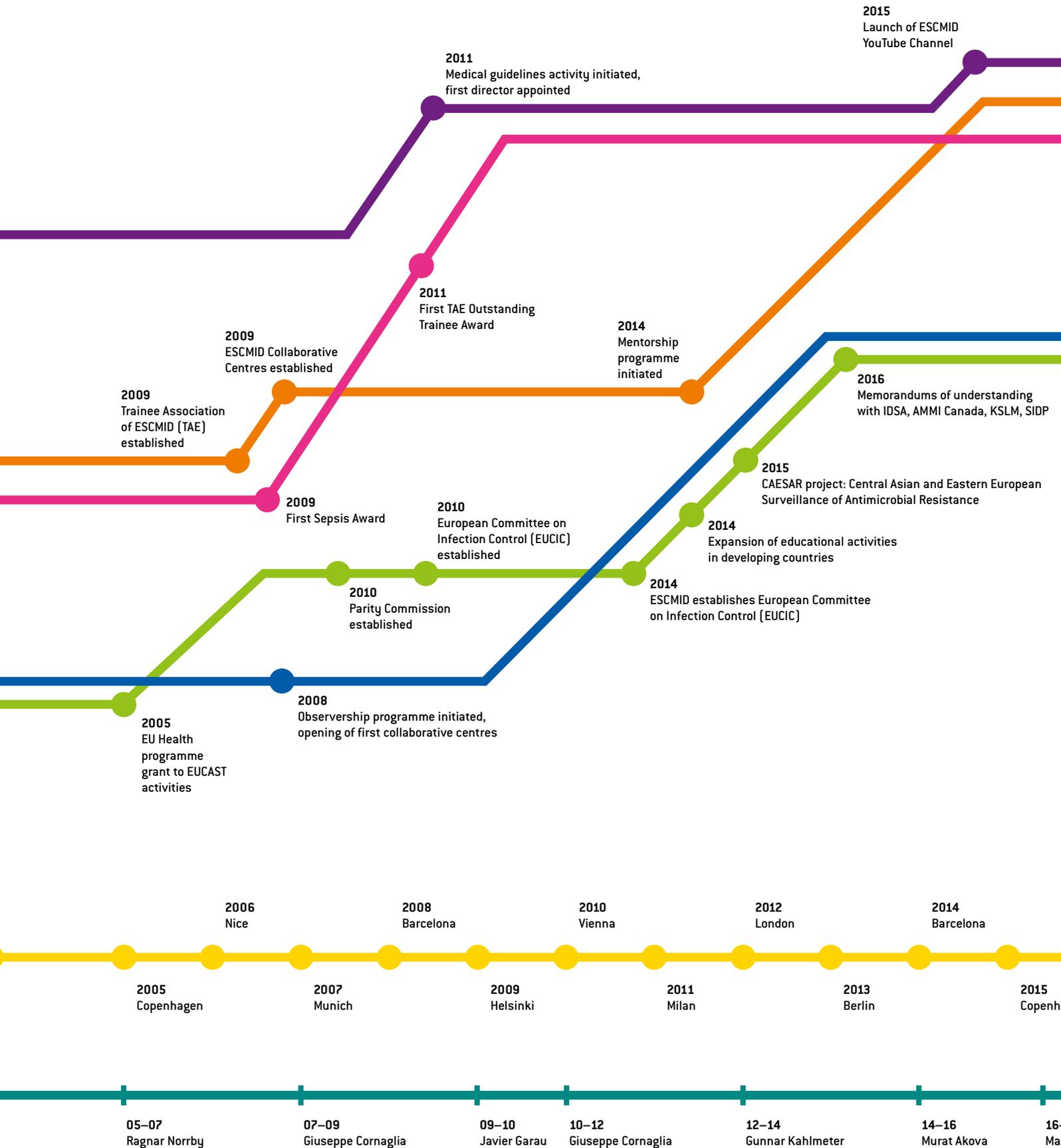
## ESCMID PRESIDENTS

83–90  
Jan Verhoef

90–93  
Evelio J. Perea

93–95  
Jacques Ac



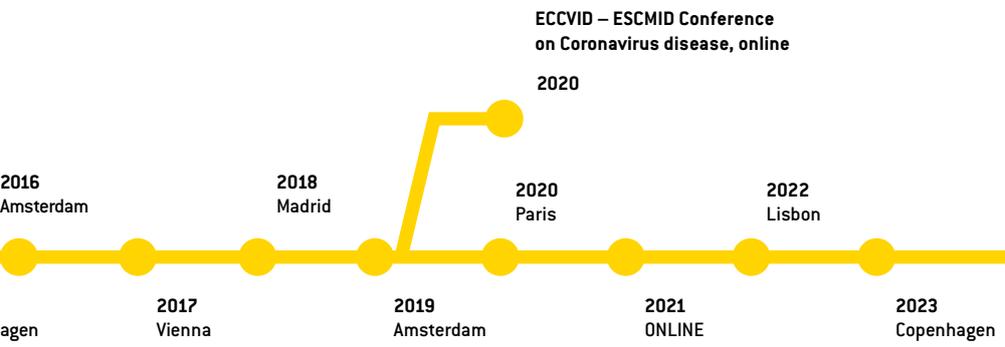
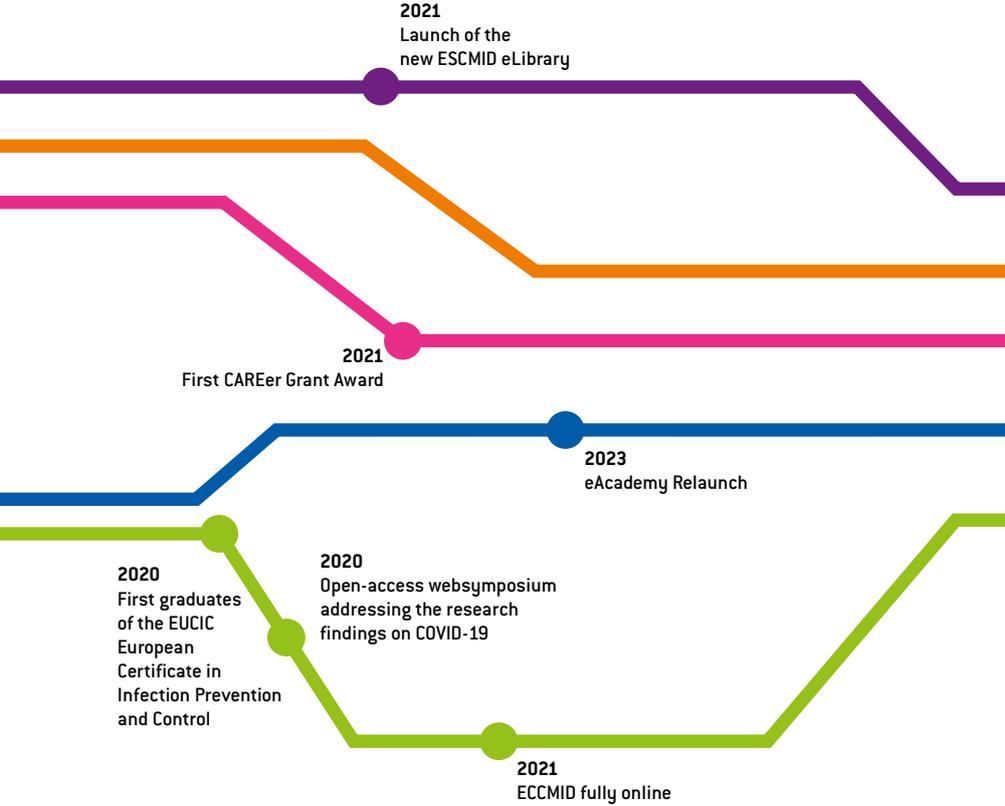


**THE THREE COLUMNS OF THE NEW STRATEGY**

**GLOBAL LEADERSHIP IN GUIDING PRACTICE, EDUCATION AND TRAINING**

**BEING AT THE FOREFRONT OF PREPAREDNESS AND RESPONSE TO EMERGING INFECTIONS**

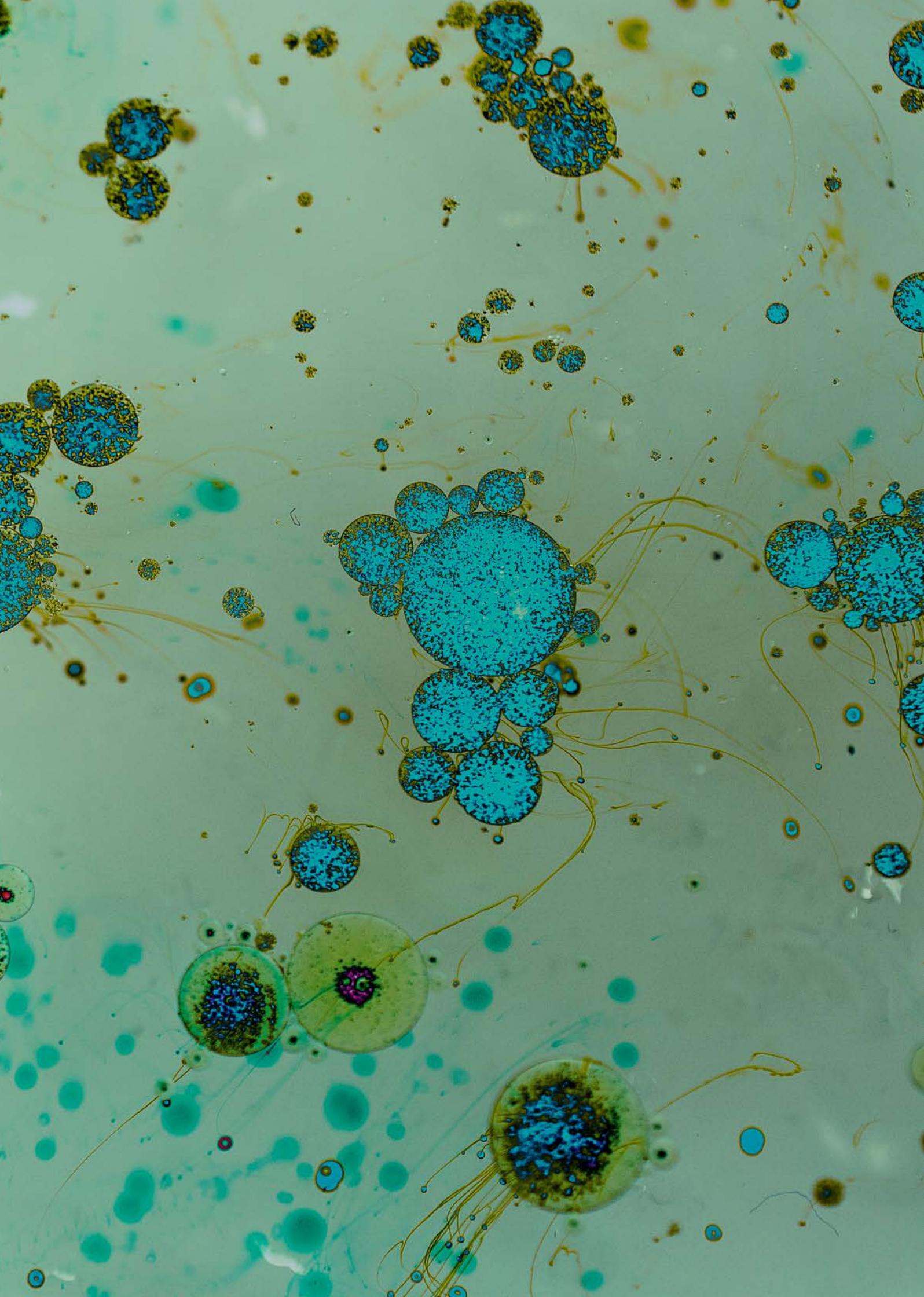
**DRIVING FORWARD THE RESPONSE TO ANTIMICROBIAL RESISTANCE**





**NOTHING  
WILL WORK  
UNLESS  
YOU DO.**

Maya Angelou



A working day in the life of ...



# Anu Kantele

## Professional Affairs Officer



### **You arrive at the University of Helsinki, maybe take another look towards the Gulf of Finland – what happens in the next few hours?**

Describing a regular day is a bit tricky, for my days vary considerably because of my diverse posts across the scientific community and healthcare, ranging from professor at a medical faculty to chief physician at a university hospital, and head of the vaccine research centre MeVac. Part of each month I spend abroad for my international tasks. In Finland, some days I work remotely, attending several online meetings in a row and dealing with a long list of things to do, including documents with a deadline not to be missed. At the campus, my location depends on the tasks scheduled for the day. As an example, let's take a look at yesterday. The day started on the infectious diseases outpatient ward tending to my long-standing patient with leprosy, instructing one of our younger physicians to take slit skin samples. Next, a team meeting on a research project took me over to MeVac, where some administrative tasks also had to be done. After that, I met up with one of my PhD students to discuss his manuscript. On my way home, I took an hour's break at the gym to restore energy for the rest of my working day, i.e. the evening hours needed to manage a bunch of emails and handle the broad mix of tasks on my to-do list for the day.

### **What do most young scientists still have to learn when they start?**

Science is a way of life. It involves having to settle for very little free time, but in return you get to network with talented professionals and to enjoy friendships, sharing moments of joy, sorrow and exaltation, and a lot of hard work.

### **What qualities do scientists need to become successful?**

Most of all, I think you need strong motivation and a lot of enthusiasm to carry you over many frustrating patches to be encountered along the way. In addition, I'd list imagination and innovation, honesty, and an inherent desire to contribute to the common good as valuable assets.

### **What would you like to see in the field of professional affairs in the next few years?**

I wish for more professionals to join ESCMID and see for themselves what an amazing society this is, and to find out the numerous opportunities we can offer. All these new members would, of course, eventually become active and eagerly contribute to ESCMID's pursuits themselves. ■

# Learning new things, exchanging knowledge

I wish for more professionals to join ESCMID and see for themselves what an amazing society it is, and to find out the numerous opportunities we can offer.

*Anu Kantele*

## **Observerships**

After the slowdown due to the pandemic, we resumed activities in 2022 with great resilience, especially with our highly valued ESCMID Observership programme. After a lot of visits scheduled at the last call in 2021, we hosted a new call for 50 funded observerships in autumn 2022, with the number of applicants reaching nearly 80. Visits will take place from spring 2023. In 2022 we also resumed the call for the specially funded observership at the Mayo Clinic in Rochester (Minnesota, USA) as well as the call for the very popular observership at the European Centre for Disease Prevention and Control (ECDC office in Stockholm, Sweden). For the latter, we had more than 50 applications, and 20 ESCMID observers participated in an intensive and educational 1-week programme in October 2022 at ECDC.

We were delighted to see a rise in the number and quality of applications in 2022, indicating the strong will of young ESCMID members to learn new things and exchange knowledge and experience with the host institutes. These ESCMID Collaborative Centres (ECCs) are centres of expertise providing observers with an opportunity to improve their competencies in Clinical Microbiology (CM) and Infectious Diseases (ID). In 2023 we are hosting two calls for 50 funded observerships, plus the calls for Mayo Clinic and ECDC observerships.

## **Mentorships**

The Mentorship programme is still getting less attention than it deserves, with 8 applications in 2022. This programme, accessible for ESCMID Full and Young Scientist Members, is intended to provide young or less experienced ESCMID members with an opportunity to receive guidance for research and career development from a senior ESCMID member at one of our ESCMID Mentorship Centres (EMCs). Mentees are supported over a period of up to two years with EUR 2,000, covering expenses such as publication charges from mentor-mentee collaboration. Applications can be sent throughout the year. We encourage our members to make use of this great opportunity.

### **Trainee association of ESCMID**

In 2022, as in previous years, we continuously supported the Trainee Association of ESCMID (TAE) which is very active in projects aimed at widening career opportunities for medical trainees and young scientists. You'll find a detailed summary of TAE activities on the dedicated page of the yearbook. As a highlight, we had the first hybrid "TAE Day" at ECCMID 2022 which turned out a success just like the previous ones. TAE day offers a great opportunity for young ESCMID members to get direct feedback from experienced CM and ID professionals about their career paths.

### **Other activities**

Yet another activity deserving note is the cooperation with organisations leading medical training in Europe, such as the Union Européenne des Médecins Spécialistes (UEMS), both sections of ID and MM. After signing a Memorandum of Understanding with the UEMS MM Section, a first pilot online European Exam in Medical Microbiology (EEMM) was run in 2021 and a formal onsite EEMM was held in 2022 in Paris. Together with the UEMS MM section, we are now planning another EEMM for 2023 to improve and harmonise MM specialty training across Europe.

In 2022, the Professional Affairs Subcommittee conducted a survey among ESCMID members on the literature they found most useful and types of resources they would prefer ESCMID to provide. The results will help ESCMID in developing improved educational tools useful, for example, when preparing for national exams and/or continuing medical education. In addition, numerous sessions proposed or co-organised by the Professional Affairs Subcommittee and TAE were accepted for ECCMID 2023, attesting the scientific drive of our portfolio. For the year to come, my wish is to help current and new ESCMID members by improving their position through expertise and skills they may acquire attending ESCMID activities, whatever their background, career and age. Furthermore, to improve the coverage of tropical medicine in EU countries, I wish to implement career development for our members in this important field.

I want to thank our members, the ECCs, the EMCs, and the young colleagues of the TAE for their precious support and contribution to the growth and success of Professional Affairs activities. Their feedback and recommendations are welcome and highly appreciated. ■

---

## **PROFESSIONAL AFFAIRS SUBCOMMITTEE**

### *Chair*

*Anu Kantele, Finland  
ESCMID Professional Affairs Officer*

### *CM members*

*Karl Gustaf Kristinsson, Iceland  
Olivier Denis, Belgium  
Makeda Semret, Canada  
Birgit Willinger, Austria  
UEMS MM Section representative:  
Truls Michael Leegaard, Norway*

### *ID members*

*Özlem Kurt Azap, Turkey  
Anna Checkley, UK  
Sipho Kenneth Dlamini, South Africa  
Rita Murri, Italy  
UEMS ID Section representative:  
Jean Paul Stahl, France*

# On networking and participation

The ESCMID Parity Commission aims to review and improve the representation of scientific minorities as well as gender and geographical balance in the fields of Clinical Microbiology (CM) and Infectious Diseases (ID). Since its establishment, members have focused on tutoring CM/ID specialists and young scientists in minority groups or from resource-poor countries as well as linking ESCMID with national societies to bridge the gaps of gender, economic status and ethnicity. The Parity Commission is also monitoring the quality of ESCMID educational events, including ECCMID, to ensure balance in the gender and country of origin of speakers, chairs, teachers and course participants.

Scan this code to find all publications and further informations



# Parity Commission

## The ESCMID CAREer grant

In November 2020, the Parity Commission announced the launch of the ESCMID CAREer grant, a programme aimed at ESCMID members who require support to advance their scientific career whilst looking after their children or, new from 2022, suffering from an unexpected situation that prevents them from working full-time (disease, care of ill parents, etc). The ESCMID CAREer grant (by paying a scientific/technical staff member or assistant), allows the participant to reduce his/her work percentage from 100 % to 80 %, or from 80 % to 60 %, thus providing more time with their families. A new call was opened from November 2022 to January 2023 where we offered up to three grants – revision and final selection are currently ongoing.

## Support for medical trainees and professionals in Ukraine

In an effort to support Ukrainian members and colleagues during these challenging times of the ongoing war, the ESCMID Parity Commission proposed and implemented the granting of up to 200 free annual full memberships to CM and ID specialists still working in Ukraine, to support their training, education and professional growth.

## ESCMID postgraduate course

The Parity Commission is organising an ESCMID

postgraduate course entitled “Hot topics of Infectious Diseases and Clinical Microbiology in Central and Eastern Europe”, taking place in Pécs, Hungary on 31 May–2 June 2023. The aim of the course is to give a comprehensive overview of challenging topics in Infectious Diseases currently emerging or continuously present in Central and Eastern Europe, from diagnostic and therapeutic perspectives. These include viral, parasitic and fungal diseases, and antimicrobial resistance of bacteria. The course also aims to create a forum for networking and discussing these topics between experts invited from various regions of Europe. This course aims to facilitate the participation of members from Central and Eastern Europe who are often a minority presence at ESCMID events.

## Acknowledgements

Our deep thanks go to Onya Opota and Giulia De Angelis, who will be ending their terms in the Parity Commission at ECCMID 2023, for their dedication and hard work in the last 4 years. At the same time, we welcome André Fuchs and Khetam Hussein who will join the Parity Commission after ECCMID 2023. We look forward to working with them in the coming years!

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

## PARITY COMMISSION

### Chair (leaving after ECCMID 2023)

Emmanuel Cambau, France  
Education Officer and Chair of the  
Parity Commission

### Members

Anu Kantele, Finland  
(Chair from ECCMID 2023)  
Agnes Maria Sonnevend, Hungary  
Giulia De Angelis, Italy  
(leaving after ECCMID 2023)  
Onya Opota, Switzerland  
(leaving after ECCMID 2023)

### Incoming members from ECCMID 2023

André Fuchs, Germany  
Khetam Hussein, Israel

# ESCMID Collaborative Centres and Observerships

Our goal is to facilitate international education and collaboration. To this end, we encourage our members to visit ESCMID Collaborative Centres (ECCs) in other countries. The focus is on practice, with job shadowing to gather new ideas for the home institute. As centres of excellence in Clinical Microbiology and Infectious Diseases, ECCs are excellent role models. The Observerships welcome foreign ESCMID members to make new contacts and promote international exchange. The focus here is on improving diagnostic and therapeutic procedures.

## Funded Observerships

Over the last two years, ESCMID launched two calls, each for 50 observerships, plus special funded observerships at the ECDC and Mayo Clinic. The autumn call 2022 for funded observerships turned out to be highly successful: we received 76 eligible applications, 50 of which were granted for the year 2023. We are delighted to report an increase in both the quantity and quality of applications, as evidenced by the high average scores achieved in the evaluations. Deserving of note, in 2023 we will have more intercontinental than intra-European visits, demonstrating the growing reach and expansion of ESCMID outside Europe's borders. Most of the observerships granted are to take place during the European spring and summer months in 2023. Another valuable programme to include here is the special funded observership at the Mayo Clinic (Rochester MN, United States) with its call in January this year and visit in June.

## ECDC Observership Programme

A special mention goes to the European Centre for Disease Prevention and Control (ECDC) for hosting ESCMID members over the ECDC/ESCMID observership at the ECDC headquarters in Solna, Stockholm (Sweden) on 10–14 October 2022. ESCMID observers, 20 in all, were joined by observers from the European Committee on Infection Control (EUCIC) and the European Society for Clinical Virology (ESCV) for a five-day programme designed to introduce the ECDC activities, role and mandate in supporting public health actions to control and prevent infectious disease in the EU and globally. The presentations and hands-on exercises facilitated interaction between ECDC experts and observers, who gained practical experience in rapid risk assessments, modelling, and analyses of genomics data to help public health decision-making. For this ESCMID-ECDC observership initiative, the eighth of its kind, we have received,

once again, excellent feedback from both ECDC staff and ESCMID observers. The visit reports and more detailed information are included on the ESCMID website.

## ESCMID Collaborative Centres

ESCMID Collaborative Centres (ECCs) are, as centres of expertise (labs, wards etc.), essential partners for observerships, inviting the observers to visit and improve their knowledge and competencies in clinical microbiology or infectious diseases. At present we have 111 active ECCs, mostly in Europe and a few on other continents. I would like to thank our ECCs for their continuing support of ESCMID members, especially Young Scientists. Grateful for each collaboration, ESCMID greatly appreciates the time and resources each ECC contributes to the visits. ■

*Anu Kantele*

*ESCMID Professional Affairs Officer*

[www.escmid.org/observerships](http://www.escmid.org/observerships)

Scan this code to find all publications and further informations



# Ethics Advisory Committee

From updating the ESCMID code of conduct, to organising an educational course, to publishing a commentary on research ethics, the year 2022 has been busy for EEAC activities.

An open forum titled “Ethical issues in Infectious Diseases” was organised at ECCMID 2022, and several different important ethical topics were discussed in a relaxed and open environment. Gaps in the availability of antibiotics, Coronavirus disease-19 (COVID-19) vaccine distribution in high- and low-income countries, and conflicts of interest were discussed in detail. The forum generated high interest and fruitful discussions and was highly appreciated. The EEAC also presented a poster at the 2022 ECCMID, summarising a global survey on ethics and Infectious Diseases. The survey, which is still ongoing, explores Infectious Diseases, physicians’ perceptions, and gaps in the field of bioethics. In the poster, the responses of 246 physicians from 52 countries were included, showing high interest in bioethics, with most responders pointing out that major gaps should be addressed, and expressing interest in education sessions on bioethics in Infectious Diseases.

In the summer of 2022, the EEAC organised an online course under the umbrella of ESCMID. The main topic was the discussion on “Ethical Challenges in Infectious Diseases”, with particular attention on the ethical challenges during the COVID-19 pandemic. The course included 3–4 weekly talks, followed by a 1-hour weekly live interactive discussion. Topics included the role of ID physicians, rights vs obligations, during a deadly pandemic; the role of patients; resource allocation, and research during the pandemic. It was a success, and both students and speakers participated with great interest.

In late autumn, EEAC contributed to the review of the ESCMID code of conduct (COC). Suggestions were made and communicated to the ESCMID executive committee (EC).

Another focus of EEAC is research ethics. For this reason, a commentary has been published in “Clinical Microbiology and Infection” (CMI). In agreement with the CMI Editorial Office and the ESCMID EC, the EEAC also serves as an independent body for CMI to be periodically consulted regarding suspected cases of research misconduct and publishing ethics such as fabrication, falsification, and plagiarism.

In order to assess the ethical considerations in guideline development, the EEAC has proposed the OPENING project (IncOrPorating Ethics iN CLINical Guidelines: Practical Indications) planned for 2023. The project will conduct a review of European and international guidelines to assess the extent to which clinical practice guidelines address ethical considerations or incorporate ethical issues. The aim is to generate a guidance document for incorporating ethical considerations into ESCMID guidelines in collaboration with the ESCMID guidelines subcommittee.

During the COVID-19 pandemic, the EEAC actively monitored ESCMID members, especially committee and subcommittee members, for non-ethical public actions regarding medical recommendations (e.g., indications on vaccination, prevention, and treatment of COVID-19) and informed the ESCMID Executive committee about those actions which conflict with the interest of ESCMID’s aim and scope, and which could potentially generate public confusion.

The EEAC will be participating in the upcoming 2023 ECCMID in Copenhagen, organising a one-hour symposium on “Ethical dilemmas with antimicrobial therapy” and participating in the Open forum titled “Equal opportunity in publication and research”. In addition, the EEAC in collaboration with the Antimicrobial Stewardship Certificate training programme is participating in a course titled “Antimicrobial stewardship: Ethical dilemmas,” scheduled for November 2024.

In summary, 2022 has been a busy year for the group. EEAC is striving to encourage education, research and other activities pertaining to Biomedical ethics. The ESCMID Ethics Advisory Committee, established in 2021, is an independent body with advisory purposes and directly reports to the ESCMID Executive Committee (EC) on various ethical matters. Published commentary in *Clinical Microbiology and Infection* (CMI) under: <https://doi.org/10.1016/j.cmi.2022.01.002> ■

---

## ETHICS ADVISORY COMMITTEE

*Chair*  
Murat Akova, Turkey

Aleksandra Barac, Serbia  
Asma Nasim, Pakistan

Elda Righi, Italy  
Dafna Yahav, Israel

TAE

# Major projects in focus

The Trainee Association of ESCMID (TAE) represents the interests of junior doctors, trainees and other medical specialists in the area of Clinical Microbiology (CM) and Infectious Diseases (ID) within ESCMID. The TAE Steering Committee represents approximately 3,000 Young Scientist Members and works towards improving the ID and CM training curriculum by facilitating international collaborations, providing a communication platform and organising educational activities.

*Petar Velikov*



Petar Velikov, TAE President

Starting with the first hybrid ECCMID in Lisbon, Portugal after the start of the SARS-CoV-2 pandemic, TAE collaborated with a number of Subcommittees, ESCMID Study Groups and external partners to organise a total of 4 scientific sessions and workshops. Importantly, the Steering Committee organised the annual TAE Day in collaboration with the ESCMID Executive Committee which provided the platform for our members to meet ID and CM experts, exchange experiences and share perspectives.

During this term, the TAE Steering Committee focused on several major projects. The first ever TAE Leadership Academy was organised having gathered junior doctors and trainees from around and outside of Europe and worked towards creating the next generation of leaders in CM and ID. We contributed to the execution of the annual ESCMID Summer School in Rome, Italy where the ESCMID Executive Committee and major experts provided the next generation with up-to-date information on a range of topics, while sharing state of the art research and conclusions. A total of 7 episodes of the TAE Podcast interviews with ESCMID experts were prepared and released. If you are interested in joining any of these activities, please contact us at [tae@escmid.org](mailto:tae@escmid.org).

Immediately after leaving Lisbon, we initiated preparations for ECCMID 2023 with 15 proposals in collaboration with a range of experts from our excellent Subcommittees and Study Groups. For TAE Day 2023, we have prepared a few new surprises, including the chance to get the first hand perspective of other trainees who have benefited from ESCMID opportunities, as well as to meet ESCMID experts and discuss specialised topics such as financing in research, clinical trials and leadership in ID and CM. You will also get to know our new TAE Outstanding



Trainee Awardees who will talk about their personal experiences but will also work to inspire you to continue working toward your self-development as well as the improvement of healthcare for your patients.

For the upcoming year, TAE plans to expand our outreach via social media, to further increase our network in order to reach and represent more trainees around the world. We plan to initiate new projects but also continue the previously started successful activities. We want to engage you – our members – in active collaborations towards increasing training opportunities but also improving patient outcomes.

We sincerely thank all our colleagues for their continuous feedback and support. Together, we can improve our training and increase the participation of young professionals in international activities. ■



## TAE STEERING COMMITTEE

### *TAE President*

*Petar Velikov, Bulgaria*  
*tae@escmid.org*

### *Members*

*Suzanne Van Asten, Netherlands*  
*Yousra Kharabi, France*  
*Nicolas Power, Ireland*  
*Anja Šterbenc, Slovenia*

*Giorgia Caruana, Switzerland*  
*Maria João Lopes, Portugal*  
*Katharina Last, Germany*

The background features a close-up of a petri dish containing a bacterial culture with orange and yellow streaks and small red and blue dots. On the left side, there is a white outline of two human heads facing each other, suggesting a conversation or shared knowledge.

**WE MUST HAVE  
PERSEVERANCE  
AND, ABOVE ALL,  
CONFIDENCE IN  
OURSELVES.**

Marie Curie







# Gunnar Kahlmeter

Excellence Award Winner

## Where is your place of inspiration and knowledge?

Family, friends and colleagues in EUCAST and ESCMID and the thought that there is much which can be improved further.

## Let's put science aside for a moment. Which literary work of fiction is a masterpiece for you?

Jerzy Kosiński's "The painted bird". Had you asked for a "masterpiece" in general, I would have answered Francis Poulenc's opera "Dialogues of the Carmelites"

## Keyword excellence: what personal ability is the basis?

Tenacity, appetite.

## How and where did you live during your studies?

Between 19 and 35 I lived, studied, and worked in Lund. The medical microbiology department at Lund University, under the fantastic leadership of Professor Rune Grubb, made my years as a young man very memorable. I loved lecturing and tutoring students in the medical faculties of Lund and Uppsala, and the clinical microbiology work – throughout my entire life, science has been without pressure.

## What impact would you say awards have on people?

I am sure it is individual and varies with the age of the awardee. To those mature in age and opinions, such as I, it is a recognition of some things well done. To younger colleagues, awards are an inspiration and an opener of new doors. Both are good and in both cases an inspiration to keep at it.

## What is your vision for ESCMID in the next five years?

ESCMID is to me the backbone of international clinical microbiology and infectious diseases, with a continued and accelerated responsibility to younger colleagues and colleagues in low- and middle-income countries, in the fields of science, diagnostics,

tutoring and job opportunities. This is particularly the case when national structures and the economy are weak or insufficient. Take care of the young! Continue offering "Observerships", postgraduate courses and summer school. Invent new programmes but sustain and further develop the best of the old.

## Are you more of a lone wolf or team player and how does your work benefit from this?

Oh, difficult question – I am probably a lone wolf who has developed skills as a team player.

## Which famous person would you like to talk to one day about the subject and goal of your work?

Over the course of more than 50 years spent in the field of microbiology, I have met Ernst Chain, L. P. Garrod, Hans Ericsson and John Sherris, and Kofi Annan, because we used to share Friday late evening train rides from Copenhagen airport to our cottages in Blekinge. They all have two things in common, they were great and they are dead. But I wish I could talk to them again.

## What time of day is "yours" and why?

It was always late evening and night. In the old days I would read to my three kids, fall asleep while doing so, and 30 min later my wife would wake me up, we would have coffee and then I would drive to work around 10 pm. As I grow older, the kids have moved out, I give up around midnight and go to bed with my CPAP.

## How would you best friends describe you? And your colleagues?

Probably both friends and colleagues would describe me as busy and stubborn, and perhaps in later years "grumpy" and with less patience. I have "built" and run three clinical microbiology laboratory services over the years, in three different administrative and political contexts, so stubborn and busy are both important. Friends and family might add "absent". ■

# ESCMID Excellence Award in Science

Gunnar Kahlmeter, M.D., now 73 years old, has served in clinical microbiology (CM) since 1971. He has now retired from being a lecturer at Lund and Uppsala medical faculties, senior consultant, and head of clinical microbiology laboratories in Kronoberg, Blekinge, and Kalmar counties. However, he still heads the EUCAST Development Laboratory and the Swedish Reference Laboratory for the phenotypic susceptibility testing of bacteria in Växjö, Sweden. His wife Annika is the Head/Director of the Public Dental Service in Kronoberg, and two of his three children are involved in research, one in social sciences and one as an M.D. and specialist in oncology.



“ESCMID is to me the backbone of international clinical microbiology and infectious diseases.

Gunnar Kahlmeter

### The father of EUCAST

Apart from research, with publications in the fields of antimicrobial resistance (AMR) and susceptibility testing (AST), he has been involved in the national and international committee and society work within the fields of CM, AMR and AST, methods development, quality control, and external quality assessment. Most colleagues will think of him as the father of EUCAST (European Committee of Antimicrobial Susceptibility Testing), which he brought from an anonymous existence of little consequence to a dominant position in Europe with the help of ESCMID and colleagues in many European countries. He steered EUCAST to being accepted by colleagues and EU agencies such as EMA and ECDC and to being adopted by many countries outside Europe. Gunnar Kahlmeter made many appearances in national meetings around the globe doing battle on behalf of EUCAST.

### Past president of ESCMID

He was also a member of the ESCMID Executive Committee, serving two years as its President from 2012–2014. Since its early beginnings, Gunnar Kahlmeter has been the webmaster of EUCAST ([www.eucast.org](http://www.eucast.org)) and is still active on EUCAST's Steering Committee, the EUCAST Development Laboratory, and the Swedish Reference Laboratory. He is also the current Chair of the WHO AMR STAG Committee.

Gunnar Kahlmeter concentrated his research on antimicrobial resistance (AMR) and antimicrobial susceptibility testing (AST). The work in AMR has dealt with the national and international development and definition of AMR, and with population intervention to discover the disappointing lack of effect on trimethoprim resistance by a 24-month drastic withdrawal of the molecule from use in both primary and hospital care.

Much work went into the ECO-SENS studies dealing with *E. coli* resistance in communities from 17 countries. It resulted in devising a cheap and simple method for transporting urine from several hundred participating primary care sites, thus guaranteeing the success of the project. Among the most important findings concerning resistance to individual agents was identifying the main difference between the north and south of Europe in terms of the proportion of *E. coli* completely devoid of resistance (50 % in the south and 75 % in the north of Europe). These studies also enabled reporting on cross- and co-resistance and the surprising finding that co-resistance between even unrelated agents was very high.

During his 20-plus years with EUCAST, much effort went into organising international networks to help develop necessary, previously lacking, representative materials of isolates of “hopeless bacteria”, namely *Burkholderia pseudomallei*, *Vibrio cholerae* and other *Vibrio* species, *Corynebacterium diphtheriae*, *Brucella melitensis*, *Bacillus anthracis*, and *anaerobic bacteria*. These efforts ensured stimulation in proficiency in MIC and disk diffusion testing and the importance of QC. All of this was made possible by the support of research foundations, ESCMID, and the fantastic collaborators in the EUCAST Development Laboratory as well as many colleagues around the world who have leaned over backwards to enable these often difficult projects.

**Following Gunnar Kahlmeter's lecture “Antimicrobial susceptibility testing: where we came from, what we have and what we need” (15 April 2023, 13:30–14:30, Hall A) the Excellence Award and Young Investigator Awards will be presented in the Opening Ceremony (15 April 2023, 18:30–20:00, Hall A). ■**

Young Investigator Awards

Jacob Bodilsen

# “Head over heels: how I fell in love with CNS infections”

Presentation title

What impact is the award likely to have on your personal connection to your research?

“Increase my motivation to keep doing research”



Jacob Bodilsen,  
Awardee Infectious Diseases

Jacob Bodilsen (MD, PhD, Associate professor) is an infectious diseases specialist working as a clinician and researcher at Aalborg University Hospital, Denmark. He has been a long-time member of ESGIB since 2013 and currently serves as secretary of the executive committee. He is also an editorial board member of the European Journal of Clinical Microbiology and Infectious Diseases. Jacob Bodilsen is the lead investigator of the ORAL and AMEN randomised controlled trials and is a co-founder and secretary of the nationwide Danish Study Group of Infections of the Brain (DASGIB).

His main research interest is CNS infections with a special focus on brain abscesses as well as bacterial and viral meningitis. Lately, he has also engaged in pharmacokinetic analyses of antimicrobial treatment of CNS infections using microdialysis in a porcine model. In addition, he has conducted studies on COVID-19.

**Give us a picture of the moment you found out that you won.**

Sorry, I don't have that.

**If you could invent an award: for what and for whom?**

New investigator talents with 20 or less publications.

**What book is on your dessert/coffee table, etc. right now?**

"Sapiens" by Yuval Noah Harari.

**What haven't you done in years but always wanted to?**

Try to live in another country to learn about different ways of doing science and other cultures.

**What impact is the award likely to have on your personal connection to your research?**

Increase my motivation to keep doing research. ■

Belén Gutiérrez-Gutiérrez

# “Personalised medicine in infections caused by multidrug-resistant Gram-negative bacteria”

Presentation title

What impact is the award likely to have on your personal connection to your research?

“I believe that everyone should find their true passion”

Belén Gutiérrez-Gutiérrez (MD, PhD) is a faculty member of the Infectious Diseases Division at the Hospital Universitario Virgen Macarena, and Associate Professor of Medicine in the Department of Medicine of the University of Seville (Seville, Spain). She belongs to the Research Group “Clinical Research in Infectious Diseases” of the Institute of Biomedicine of Seville (IBIS), led by Professor Jesús Rodríguez-Baño. She has an expert degree in epidemiology and new methodologies in clinical research.

Her research has focused on the treatment of patients with multidrug-resistant Gram-negative infections. She was involved in several international and multicentre projects for the treatment and clinical management of multi-resistant bacterial infections. For her, clinical research is fundamentally a team-oriented endeavour. She aims to continue working on collaborative projects looking for personalised treatment for infectious diseases.



Belén Gutiérrez-Gutiérrez,  
Awardee Infectious Diseases

**Give us a picture of the moment you found out that you won.**

I was at the hospital getting ready to call the first patient I had an appointment with and moments before, I checked my mobile and I had received an email from ESCMID. I was informed that I had been selected as the recipient of the 2023 ESCMID Award for Young Investigators in Clinical Microbiology and Infectious Diseases. I stood still, in silence and thoughtful. I just couldn't believe it. Seconds later, I realised what had just happened and shared the fantastic news with my family, friends and colleagues who were very happy for me.

**If you could invent an award: for what and for whom?**

If I could invent an award, it would be the "Inspiring Mentor Award" for teachers and mentors who have made a positive impact on the lives of their students or mentees. I believe that the guidance and support provided by great mentors can shape a person's life and career, and this award would recognize their important contributions.

**What book is on your dessert/coffee table, etc. right now?**

I like to have different art history books on my bedside table. They help me to clear my mind and

take me to other places and back in time. For example, yesterday I was reading a book about the series of paintings that Joaquín Sorolla painted between 1913 and 1919 for the Hispanic Society of America called "Vision of Spain". They are fourteen canvases depicting the customs, and traditions of regions of Spain at that time.

**What haven't you done in years but always wanted to?**

Something I haven't done in the last few years but always wanted to is traveling to different countries with my family to broaden their horizons and expose them to different cultures. I believe that traveling is one of the best ways to learn about the world, and I would love to share that experience with my children. It's also a great way to create memories that will last a lifetime.

**What impact is the award likely to have on your personal connection to your research?**

I believe that everyone should find their true passion. This award is likely to have a significant impact on my personal connection to one of my passions, clinical research. Additionally, it will provide me with opportunities to collaborate with other researchers and further advance our collective understanding of Infectious Diseases. ■

Anne Wyllie

# “Saliva as a reliable sample type for sustainable surveillance and outbreak response efforts”

Presentation title

Give us a picture of the moment you found out that you won.

“I was fortunate to be at home, in Auckland, NZ, staying with my Nana”

Anne Wyllie (Ph.D.) completed her BSc (Biomedical Science) and MSc (Medical Science) at the University of Auckland, New Zealand. In 2011, Anne joined the group of Drs. Debby Bogaert and Krzysztof Trzciński, research technicians at UMC Utrecht, Netherlands. In 2013, she started her Ph.D. on “Molecular surveillance of *pneumococcal carriage* in all ages”. In 2017, she started her postdoctoral training under Dr. Daniel Weinberger at the Yale School of Public Health. In 2019, Anne was promoted to Associate Research Scientist and in 2021, after forming her own research group at Yale, she was promoted to Research Scientist.

Anne Wyllie is propelling the use of saliva as a superior sample for high-quality, low-cost community surveillance of respiratory pathogens and exploring their (co-)infection dynamics. Her innovations during the pandemic and commitment to open science have produced freely available PCR protocols, enabling laboratories to implement rapidly accessible testing and surveillance programmes.



Anne Wyllie,  
Awardee Clinical Microbiology

**Give us a picture of the moment you found out that you won.**

I was fortunate to be at home, in Auckland, NZ, staying with my Nana. We were in her lounge when I received the email which was incredibly moving for me and I absolutely cherish that she got to share that with me.

**If you could invent an award: for what and for whom?**

It would be a 'Team Player' type of award – a nod to those who foster collaboration, recognising that we can drive so much more forward when we're able to join forces, leveraging each other's expertise or data collection efforts to help push our respective fields forward. There would be bonus points for senior faculty who actively seek out to include junior faculty who, despite their talents, too often get held back from not having 'enough' experience when their grants are being reviewed. We have witnessed the power of collaboration over the course of the COVID-19 pandemic to drive forward an incredible number of advances. It is my hope that this will continue.

**What book is on your dessert/coffee table, etc. right now?**

There's quite the backlog of books that are either partially read or that I have wanted to read but have struggled to find time to get to the past couple of years. Next up are finishing 'Thinking Fast and Slow' and 'Moonshot' and starting 'The Mother Tongue' and 'Around the World in 80 Trains'.

**What haven't you done in years but always wanted to?**

I increasingly daydream about just taking a week off where I just potter around the house and properly unwind. ■

Oliver Van Hecke

# “Smooth seas do not make skilful sailors: the challenges and opportunities of antimicrobial stewardship in South African primary healthcare”

Presentation title

Give us a picture of the moment you found out that you won.

“Initially surprised, then elated and now humbled, because this award is a culmination of all the great people along the way who believed in me”

Oliver Van Hecke is an academic GP and Senior Clinical Research Fellow at the Nuffield Department of Primary Care Health Sciences (University of Oxford). He is a mixed-methods clinical researcher, a Fellow of the Royal College of General Practitioners, and a practising generalist in the UK's NHS.

His DPhil (PhD) at Oxford in 2018 filled a major evidence gap by assessing the impact of antibiotic resistance for patients in the community. He is the course module organiser on “Antimicrobial stewardship interventions in primary care”: as part of the ESCMID Antimicrobial Stewardship Certificate.

His research broadly focuses on ways to optimise antibiotic prescribing for common infections in the community and reduce the impact of drug-resistant infections. This broadly encompasses four areas: developing clinical decision-support tools; evaluating rapid diagnostic tests for common infections; promoting cross-discipline efforts to improve antibiotic prescribing; and making antibiotic awareness campaigns more impactful.



Oliver Van Hecke,  
Awardee Clinical Microbiology

**Give us a picture of the moment you found out that you won.**

Initially surprised, then elated and now humbled because this award is a culmination of all the great people along the way who believed in me.

**If you could invent an award: for what and for whom?**

The 'Goodwill' Award for exemplar collaborative work between North & South.

**What book is on your dessert/coffee table, etc. right now?**

I have no coffee table. Too many sharp edges for two children under three!

**What haven't you done in years but always wanted to?**

Ski.

**What impact is the award likely to have on your personal connection to your research?**

Governments the world over recognise that shifting more care into primary care is key to sustainable health care provision. Society urgently needs more medical generalists. I want to continue making a meaningful contribution to inspire future generalists, and to promote primary care generalists and social scientists in ESCMID (who are essential to successful antimicrobial stewardship but currently underrepresented). ■

Prof. Dr. Claire Dahyot-Fizelier is a french professor in anaesthesia and intensive care at the faculty of medicine of Poitiers' University since 2016. She was born in 1972 and studied medicine in Caen then anaesthesia and intensive care in Poitiers, obtained her Ph.D. in March 2008, became assistant professor in 2009 and professor in 2016 at the University of Poitiers.



Claire Dahyot-Fizelier

## Her field of expertise is neuro-intensive care

### Neuro-Intensive Care Unit

Claire Dahyot-Fizelier has been practicing anaesthesia-intensive care since 2005 at the University Hospital of Poitiers, and since 2012 has been working exclusively in intensive care. In 2012, she became head of Neuro-Intensive Care Unit at the University Hospital of Poitiers. This is her field of expertise now.

For 15 years, Claire Dahyot-Fizelier has been a member of the INSERM U1070 Research unit called "Pharmacology of antimicrobial agents and anti-bioResistance", a multidisciplinary group working on antibiotics PK-PD with translational approaches to the pharmacokinetic-pharmacodynamic of antimicrobial agents in critically ill patients. Thus, her main research interest is prevention and optimization of antimicrobial treatment in severe infections. Claire Dahyot-Fizelier began her research in studying antibiotics tissue distribution using microdialysis in the lung and muscle tissue of animals. She then developed research using microdialysis in a clinical setting in different tissues (muscle, peritoneal cavity and brain) of critically ill patients.

### Member of the ATLANREA

Within the U1070 research team, she now focuses her research on the PK-PD of antimicrobial in the central nervous system in extracellular fluids and cerebro-spinal fluid, as well as leading a French multicentre study on this topic, the PKpopLCR trial.

Claire Dahyot-Fizelier is also a member of the board of the ATLANREA research network that has been working for a decade on the population of severely brain injured patients. The ATLANREA research network has already published several multicentre studies on ventilator-associated pneumonia, and PROPHY-VAP trial is one of the group's projects. Claire Dahyot-Fizelier is also a member of the EBIC (European Brain Injury Consortium) and ESGIB (ESCMID Study Group for Infectious Diseases of the Brain); treasurer of the ANARLF (Association de Neuro-Anesthésie Réanimation de langue Française); and President of the Intensive care Committee of SFAR, the French Society of Anaesthesia and Intensive Care. ■

# TAE Outstanding Trainee Awardees



**Joseph Donovan**  
London, UK

Joseph Donovan is an Infectious Diseases/General Medicine registrar based at University College London Hospitals NHS Trust and the London School of Hygiene and Tropical Medicine. Keen to develop broad experience in a range of settings, he has undertaken volunteer medical work in Namibia, Costa Rica, Nicaragua, Peru and Tanzania, and studied for Diplomas in Tropical Medicine and Travel Medicine. During infectious diseases training Joseph spent an additional year gaining critical care experience, before moving to Vietnam in 2017 for 4 years to research tuberculous meningitis, manage multicentre clinical trials, and complete a PhD. Now back in London, Joseph enjoys teaching others – on the Diploma of Tropical Medicine and Hygiene in London, and as an instructor in Advanced Life Support. Balancing his roles in clinical infectious diseases, brain infection research, and education, he hopes to inspire others with his enthusiasm, continue to learn from his colleagues, and find new ways to help his patients.



**Florian Tagini**  
Lausanne, Switzerland

Florian Tagini is currently doing both his residency in infectious diseases and his training in clinical microbiology at the Lausanne University Hospital, Switzerland, where he has also completed an MD-PhD thesis. He gained expertise on bacterial genomics, focusing mainly on the analysis of virulence factors, new bacterial species descriptions and on outbreak investigation in a clinically relevant timing. Florian has been consistently taking part in teaching by conducting practicals for medical students, biology students and for postgraduate workshops. Besides, he has been involved in several associations to improve the conditions of fellow students/trainees as well as in organising events for young scientists. He is currently in charge of the Early Career section of the Swiss society for microbiology and is the Swiss national representative of ESCMID. In years to come, Florian hopes to apply his experience and motivation for the benefit of patients, fellow trainees and students.

The two scientists shared via Messenger how they experienced the awarding and what they expect from next year. Let's see what they have to say...

**JENNY**

Hey Florian and Joseph, we haven't talked in a while. How are you?

**FLORIAN TAGINI**

I am great thanks. Very exciting and very busy time at the moment as I recently transitioned from my rotation in infectious diseases to my training in clinical microbiology. Also busy on a personal level with one happy and energetic 1.5-year old kid (as they should be of course)!

**JOSEPH DONOVAN**

Also very busy! I have moved from a research post to a tropical medicine and infectious diseases post in London. I am also a parent so I am always trying to correctly balance work and home life

**JENNY**

Wow, that sounds like a lot of work... but also like a fulfillment 😊 By the way: I heard that you won the Outstanding Trainee Award! Congratulations 😊

**JENNY**

What exactly were you awarded for?

**JOSEPH DONOVAN**

Thanks! Absolutely thrilled to have won an ESCMID Trainee award. It was awarded for contributions to infectious diseases teaching, networking and collaborating.

**FLORIAN TAGINI**

Thanks a lot! Indeed that was great news ! It was awarded for alternating research, training in infectious diseases and in clinical microbiology as well as networking and organizing events for my peers in Switzerland (as the Early Career representative of the Swiss Society for Microbiology).

**JENNY**

Then you both seem to have the gift of bringing people together and getting them excited about the cause! That's a great skill.

**JOSEPH DONOVAN**

I have definitely been lucky to work with some really inspirational people in the infectious diseases field. And there is always so much to learn!

**JOSEPH DONOVAN**

I think it is really important to be really interested in the field (which I think both Florian and I are)

**FLORIAN TAGINI**

Couldn't agree more with Joseph!

**JENNY**

😊 How do you think the price will affect your work next year? Will it have an impact?

**FLORIAN TAGINI**

It will render ECCMID more exciting for sure! As well as change the plans in July to participate to this nice summer school in Seville

**JENNY**

Yes! One week in Seville this year. I've seen it. Super exciting. What are you looking forward to most at the summer school?

**JOSEPH DONOVAN**

Definitely meeting other trainees and finding out what they are up to

**FLORIAN TAGINI**

I agree and I am sure that we are going to be great team there !

**JOSEPH DONOVAN**

Plus a bit of the Seville sun! That will be a really nice setting for the school

**JENNY**

That sounds great. Too bad for anyone who can't be there! Some moments are priceless... Coming back to your award: what were you actually doing at that moment when you found out?

**JOSEPH DONOVAN**

I was sat in a very cold office. And it was a very warming feeling!

**JENNY**

Very well said

**JOSEPH DONOVAN**

At the time I was writing up some research data on neurological infection. That is my area of research

**FLORIAN TAGINI**

Same here, at work and enjoyed the news !

**JOSEPH DONOVAN**

But I took a break when I saw the email, and made myself a celebratory cup of tea!

**FLORIAN TAGINI**

Sounds very British indeed!

**JOSEPH DONOVAN**

Haha yes!

**JENNY**

The second! Pulitzer Prize is coming 😊 But seriously: especially with children and family, your commitment is not self-evident. Fortunately, it is appreciated – and rewarded. I hope you have a good time in Spain. And warm offices before 😊

**FLORIAN TAGINI**

Thanks!

**JOSEPH DONOVAN**

Thank you!

**JENNY**

It was super nice to hear from you guys again.

**JOSEPH DONOVAN**

You too, catch you soon

**FLORIAN TAGINI**

Definitely, see you soon!

**JENNY**

See you.

Young.  
Outstanding.  
Resolute.

ESCMID research grants help young outstanding investigators pursue ground-breaking research in the fields of clinical microbiology and infectious diseases. Let's see who the grantees were in 2022.



**Hebah Atef Al-khatib, 37**  
Biomedical Research Center/Qatar  
University, Qatar

**Project**

Towards pan-coronavirus vaccine:  
Exploring broadly neutralising  
anti-coronavirus antibodies in  
MERS-CoV following COVID-19  
infection and vaccination

**A world without science would be...**

difficult to live. Since the beginning of life, our curiosity to discover ourselves and our environment has led us to achieve better living situations. The advances in science have improved our life quality and led to a prosperous, healthy, and modern life.

**My life without science would be...**

meaningless and boring. My passion in science makes every day different, exciting, and full of new experiences. Planning new projects is a challenging and exciting journey starting from discovering new ideas, designing, and optimising the experiments, and analysing data. Science has also provided me with the opportunity to meet brilliant minds from around the world.

**Is there a beauty of science and where do you find it?**

It relies in its ability to change our life to the best. Better health, better environment, better communication. Thousands of lives are saved every day due to the advancement in disease management, treatment, and control. Finally, and most importantly, science brings all humanity together to achieve better life for everyone.



**Lisa Bauer, 35**  
Erasmus MC, Rotterdam,  
Netherlands

**Project**

Elucidating the cellular and  
inflammatory responses of brain cells  
to respiratory virus infections.

**A world without science would be...**

drowning in endless arguments without rational facts supporting any of the opponents.

**My life without science would be...**

also challenging but with unsuccessful gardening, beer brewing and husky breeding.

**Is there a beauty of science and where do you find it?**

For me the beauty in science unravels itself when I look at biological structures, be it a perfect icosahedron of a picornavirus particle or neural networks on my confocal slides reminiscent of abstract art.



**Eva Piano Mortari, 38**  
Bambino Gesù Children's Hospital,  
Italy

**Project**

Memory B cells generated by vaccination or natural infection have different capacities to generate mucosal immunity

**A world without science would be...**

a static, motionless world, always the same as itself and most importantly without progress and without any understanding of what is happening around us.

**My life without science would be...**

boring. The most fascinating thing about being a researcher is that the days are always different, you don't have to do the same things over and over again, and that always makes everything interesting and captivating.

**Is there a beauty of science and where do you find it?**

Giorgio Parisi (Nobel laureate in physics) entitled his book 'Steps that never end' and encapsulated in this title the perfect synthesis of the beauty of science for me: the beauty of knowing that learning will never end. There will always be something to discover, understand, interpret, evaluate, and connect with everything else.



**Juliana Gonçalves, 33**  
Human Immunobiology and Pathogenesis Lab, iNOVA4Health, NOVA Medical School, Faculdade de Ciências Médicas, NOVA University of Lisbon, Portugal

**Project**

Tackling infection through modulation of the hormonal immune axis

**A world without science would be...**

stagnated. Science bring the knowledge that moves the world.

**My life without science would be...**

an empty life. Science is a great passion in my life that makes me study and learn, trying to achieve new things every day.

**Is there a beauty of science and where do you find it?**

The beauty of science is in the small details of an experiment that could bring new ideas and new hypothesis.



**Vivek V Thacker, 34**  
Swiss Federal Institute of Technology  
Lausanne, Switzerland

**Project**  
Investigating cellular crosstalk in  
cGAS-STING mediated endotheliitis  
in COVID-19

**A world without science would be ...**  
unbearable, because so much of that innate curiosity that makes  
us human would be repressed.

**My life without science would be ...**  
incomplete, because I enjoy the constant stream of mental  
stimulation that a career in science provides.

**Is there a beauty of science and where do you find it?**  
There is! From the smallest of things - an intricate protein  
structure that performs a complex function, to the largest of  
things - exoplanets, solar systems and far-away galaxies, to the  
most abstract of things - a short mathematical equation that  
succinctly describes a complex phenomenon.



**Claudia Sofia Paradela Gomes, 37**  
New York University School of  
Medicine, United States

**Project**  
Identification of biomarkers for  
cerebral malaria

**A world without science would be ...**  
a world with no purpose.

**My life without science would be ...**  
hard to imagine. Science has been the connecting point of all my  
choices since very early, both throughout my academic career  
and my personal life.

**Is there a beauty of science and where do you find it?**  
It is an amazing feeling to design an experiment to answer our  
questions, perform the experiment and be among the first ones  
to discover something new. It is incredible to dream that we can  
change the world and know that it can actually be true one day.



**David Rodriguez-Temporall, 30**  
Hospital General Universitario  
Gregorio Marañón, Spain

**Project**  
Improved identification of fungal  
species by MALDI-TOF and  
application of machine learning for  
detection of antifungal resistance  
mechanisms

**A world without science would be ...**  
a misunderstood world.

**My life without science would be ...**  
unmotivated, boring and meaningless.

**Is there a beauty of science and where do you find it?**  
I find beauty of science in constant learning, the challenges that  
help me grow professionally, in opening my mind and in the  
curiosity to answer questions and generate new ones.



**Carlo Cerini, 38**  
University Department of Infectious  
and Tropical Diseases, ASST Spedali  
Civili of Brescia and University of  
Brescia, Brescia, Italy

**Project**  
Impact of a package of diagnostic  
tools, clinical algorithm, and training  
and communication on outpatient  
acute fever case management in rural Mozambique

**A world without science would be ...**  
a trip without compass.

**My life without science would be ...**  
a life with less incentive to learn and improve myself.

**Is there a beauty of science and where do you find it?**  
The beauty of science is in the drive to understand and improve  
our natural world, in collaborating and sharing of knowledge.



**Nicolás Sarute, 38**  
 Institut Pasteur de Montevideo,  
 Uruguay

**Project**  
 Analysis of the role of non-muscle  
 myosin IIA in viral entry

**A world without science would be ...**  
 ruled (completely) by misinformation  
 and unsubstantiated theories.

**My life without science would be ...**  
 hard to imagine, but definitely sad.

**Is there a beauty of science and where do you find it?**  
 I find beauty in every new discovery, even the tiniest, that  
 contributes to push knowledge a bit forward.



**Filippo Favretto, 37**  
 University of Verona, Italy

**Project**  
 Effect of non-immunosuppressive CsA  
 derivatives on parasite cyclophilins as  
 a potential treatment against toxoplas-  
 mosis

**A world without science would be ...**  
 a world without progression. It is hard to me to imagine a world  
 where the society cannot take advantage of all the invaluable  
 discoveries that only constant scientific research, at any level,  
 can provide.

**My life without science would be ...**  
 a life without knowledge. Only science in fact allows us to fully  
 understand nature and the rules governing the life of all the  
 living organisms.

**Is there a beauty of science and where do you find it?**  
 The beauty of science consists in the possibility to learn  
 something new every day. As scientists, we are called to answer  
 very complicated questions and to understand difficult phe-  
 nomena. In addition, we have the possibility to teach and to  
 transmit the knowledge of our findings to other people and to  
 young students, thus extending scientific awareness to the  
 society.



**Michele Spinicci, 37**  
 Department of Experimental and  
 Clinical Medicine, University of  
 Florence, Italy

**Project**  
 Cystic echinococcosis in Chile:  
 mapping of a neglected zoonosis  
 prioritized by the WHO by portable  
 ultrasound screening

**A world without science would be ...**  
 definitely hopeless.

**My life without science would be ...**  
 a lot less fun.

**Is there a beauty of science and where do you find it?**  
 Science gives the opportunity to turn passion, curiosity and  
 imagination into actual deeds and knowledge.



**Domitille Callon, 30**  
 Virology Laboratory and Forensic  
 Pathology Department. Academic  
 Hospital and University of Reims,  
 France

**Project**  
 Pathogenesis of *viral* myocarditis as a  
 cause of sudden death. Study of viral  
 inflammatory markers

**A world without science would be ...**  
 impossible.

**My life without science would be ...**  
 easier but empty.

**Is there a beauty of science and where do you find it?**  
 I find it in the eyes of my family and friends.



**Susana O. Catarino, 36**  
Center for Microelectromechanical Systems (CMEMS) / University of Minho, Portugal

**Project**  
Nanocarrier-based microfluidic strategies for characterisation of *Plasmodium falciparum*-infected cells

**A world without science would be ...**  
a world without curiosity and thirst for knowledge. Definitely, it would be missing the main driver for progress and development.

**My life without science would be ...**  
emptier and a lot less fun. I love all the challenges that working with science brings (even frustration)!

**Is there a beauty of science and where do you find it?**  
The beauty of science can be found everywhere, in each minimal nanodiscovery, each new result, each new finding. That's what fascinates me.



**Abhinay Ramaprasad, 33**  
Francis Crick Institute, United Kingdom

**Project**  
Functional screening of rhomboid proteases by conditional mutagenesis in the malaria parasite

**A world without science would be ...**  
a never-ending lecture without question time.

**My life without science would be ...**  
bland.

**Is there a beauty of science and where do you find it?**  
If you look closely, everywhere.



**Trinh Phan-Canh, 30**  
Medical University of Vienna, Austria

**Project**  
Rom1 as a fungal sensing factor during skin colonization of the human fungal pathogen *Candida auris*

**A world without science would be ...**  
ruled by fear and superstition.

**My life without science would be ...**  
a life devoid of wonder, excitement, and discovery.

**Is there a beauty of science and where do you find it?**  
The beauty of science is profound to me, as a molecular biologist. My passion lies in unlocking nature's secrets through meticulous observation and analysis. While the excitement of discovery is certainly a component of the beauty of science, the true essence of it lies in the intellectual journey of comprehending the molecular basics behind natural phenomena and finding ways to demonstrate them. Science is an integral part of my life.



**Pedro Puerta, 38**  
Hospital Clínic de Barcelona, Spain

**Project**  
In-vitro activity of CD5CAR-NK cells against moulds causing invasive fungal disease

**A world without science would be ...**  
a world of ignorance, a world without challenges.

**My life without science would be ...**  
meaningless, empty, and lacking stimulation.

**Is there a beauty of science and where do you find it?**  
Is there a beauty of science and where do you find it? The most beautiful thing is to understand the world surrounding us. To enjoy every process, from the most simple to the extremely complex. To face challenges that drive you to find solutions. To persist when failing and finally find the answer. To celebrate any little step forward. Science is exciting and breathtaking.



**Chiara Ceresa, 38**  
Università del Piemonte Orientale  
– Dipartimento di Scienze del  
Farmaco, Novara, Italy

**Project**  
Isonitriles: innovative antifungal  
agents to counteract invasive  
infections

**A world without science would be ...**

very different from the current one: less beautiful, less varied, less safe. Human history would be darker. Scientific progress leads to overcoming the limits of everyday life by trying to understand and explain the unknown.

**My life without science would be ...**

repetitive and monotonous...science is passion, discovery, sharing and collaboration...it's part of me...without it I wouldn't be who I am.

**Is there a beauty of science and where do you find it?**

To answer the question, I would like to quote a few words from Henri Poincaré, which reflect my idea of beauty in science. "The man of science does not study nature because it is useful; he studies it because he enjoys it, and he enjoys it because nature is beautiful. If nature weren't beautiful, it wouldn't be worth knowing, nor would it be worth living our lives."



**Felipe Pérez-García, 35**  
Department of Clinical Microbiology,  
Hospital Universitario Príncipe de  
Asturias, Madrid, Spain

**Project**  
Hepatitis D virus infection in HIV/  
HBV co-infected patients from the  
AIDS Research Network (CoRIS) cohort

**A world without science would be ...**

a much less interesting world. Denying science to human beings would be like denying them a part of their own nature: asking questions and seeking answers.

**My life without science would be ...**

boring. For me, research is an inseparable part of my work as a clinical microbiologist, and without it my job would be routinary and meaningless.

**Is there a beauty of science and where do you find it?**

There is beauty in science, and everyone must find their own source of beauty to do science from the bottom of their hearts. I find such beauty by sharing research with my wife Rebeca, who is my example and reference as a scientist, as well as my source of inspiration.



**Elizabeth Villasis, 37**  
Universidad Peruana Cayetano  
Heredia, Peru

**Project**  
Functional role of antibodies in  
asymptomatic *P. vivax*  
infections from the  
Peruvian Amazon.

**A world without science would be ...**

boring.

**My life without science would be ...**

monotonous.

**Is there a beauty of science and where do you find it?**

In everyday discovery, like when you find out what you know and what you do not know, keeps you humble and motivated, and energised to continue with the research, coz you know it will be worth it.



**Robert de Vries, 39**  
Chemical Biology, Utrecht University,  
Netherlands

**Project**  
Preventing the bad and  
encouraging the good:  
a universal strategy to sway  
antibody responses.

**A world without science would be ...**

a major trip back in time.

**My life without science would be ...**

a very boring one...as with many professions, you need to have a passion for it!

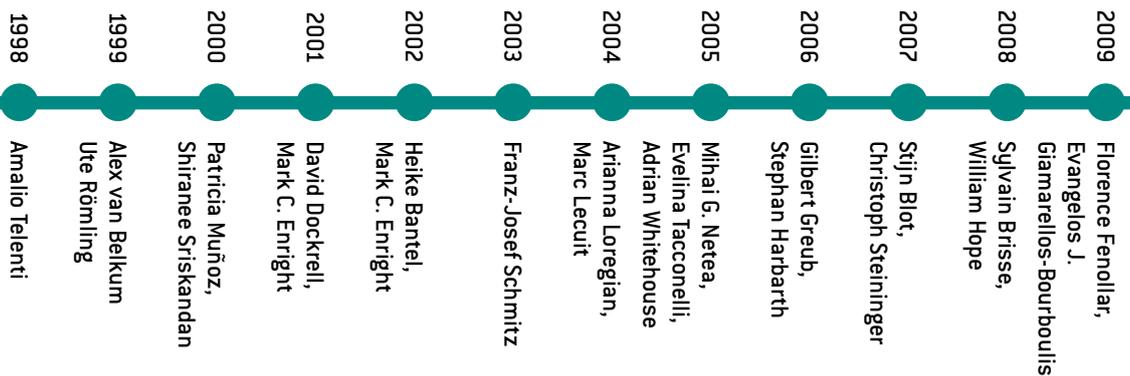
**Is there a beauty of science and where do you find it?**

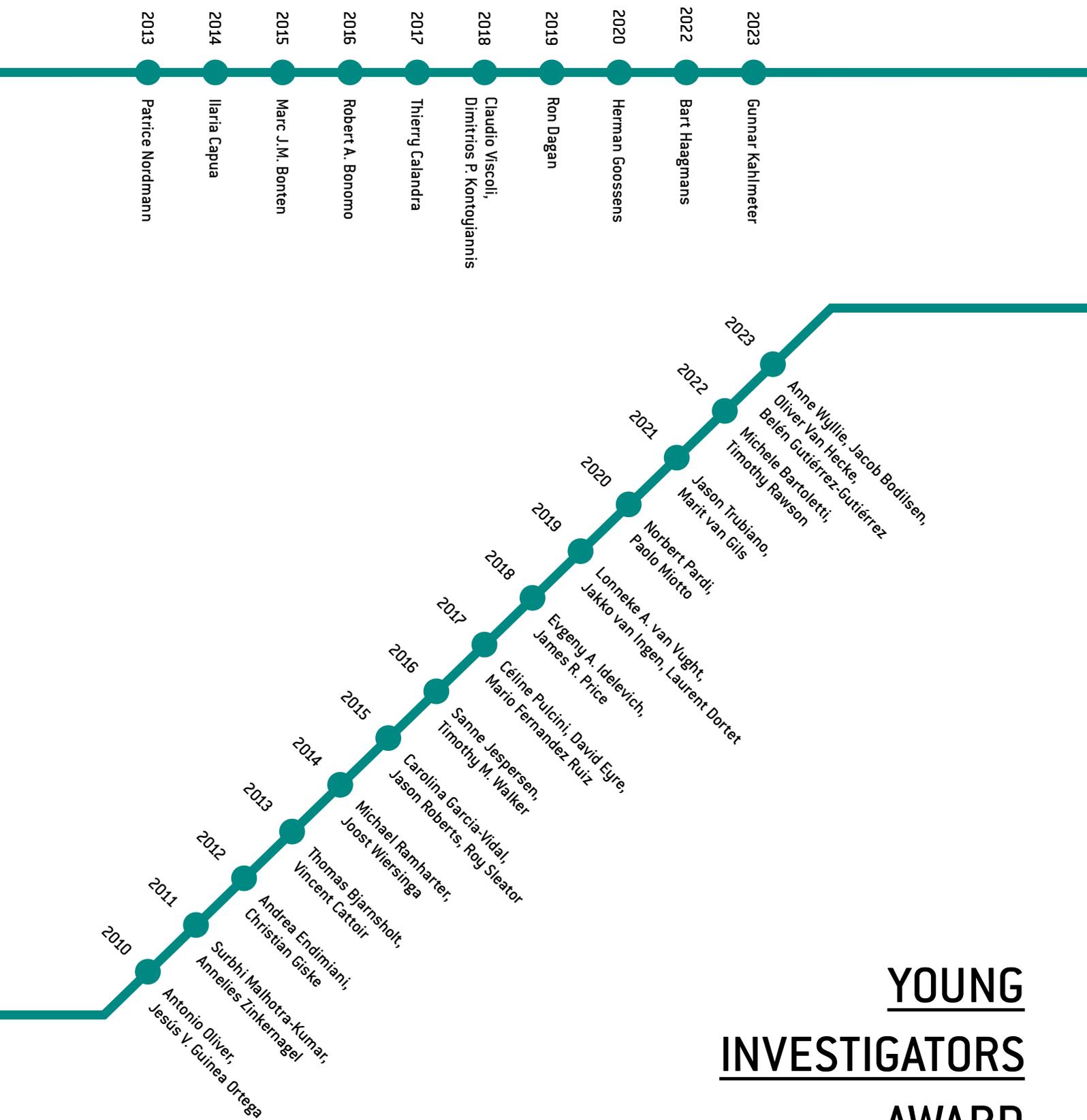
Science is something you do with your eyes. I'm still amazed when bands show up or when I see fluorescently stained cells and tissues... amazing.

# Awardees

40 YEARS OF EXCELLENCE

## EXCELLENCE AWARD





# YOUNG INVESTIGATORS AWARD



**WHAT'S THE USE  
OF DOING ALL  
THIS WORK  
IF WE DON'T GET  
SOME FUN OUT  
OF THIS?**

Rosalind Elsie Franklin

[quoted by Aaron Klug, Nobel Laureate, Chemistry]



32nd  
**ECCMID**  
Lisbon, Portugal  
23-26 April 2022  
  
#ECCMID2022  
The congress  
of ESCM

32nd  
**ECCMID**  
Lisbon, Portugal  
23-26 April 2022  
  
#ECCMID2022  
The congress  
of ESCM

32nd  
**ECCMID**  
Lisbon, Portugal  
23-26 April 2022  
  
#ECCMID2022  
The congress  
of ESCM

# 32<sup>nd</sup> ECCMID



## PHOTO GALLERY 32<sup>nd</sup> ECCMID LISBON, PORTUGAL 23–26 APRIL 2022

ECCMID 2022, the moment we all finally met again in person after two years of pandemic, marked the beginning of the hybrid era of the ECCMID congress. We are proud of the success of this congress, with over 10,000 attendees on site in Lisbon and more than 3,000 joining simultaneously online, giving a total number of attendees similar to pre-pandemic attendance levels.



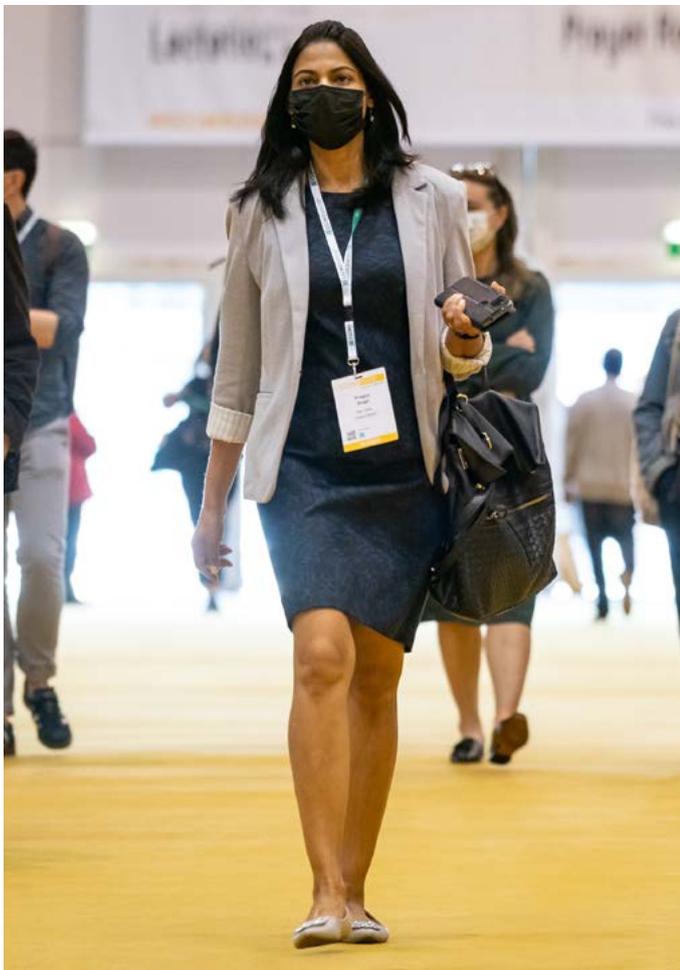
ECCMID takes place annually in the spring and is recognised by academia, the clinical world and industry as the largest European congress for the presentation and discussion of research in the fields of clinical microbiology and infection. The first European Congress of Clinical Microbiology (ECCM) was organised in Bologna in 1983. After the Society's adoption of Infectious Diseases in the late eighties, the first ECCMID was held in 1991 in Oslo – about 3,500 kilometres away from Lisbon, the first city to welcome ECCMID back after the pandemic.





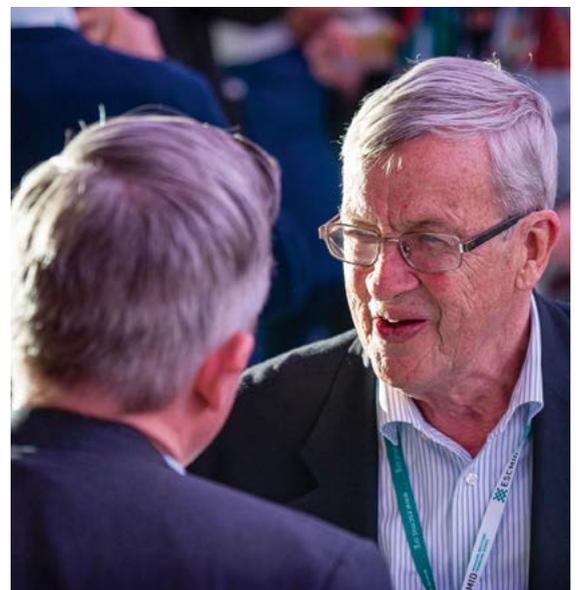
# IT'S ALL ABOUT THE PEOPLE ECCMID 2022







The scientific programme of ECCMID is a synthesis of current priorities in the fields of clinical microbiology and infectious diseases. The diagnosis, treatment, epidemiology and prevention, as well as related basic microbiology, are addressed by leading scientists. Keynote lectures, symposia, meet-the-expert sessions, educational workshops, as well as eposter and oral sessions, guarantee representation of recent scientific developments. Many subjects are addressed in interactive sessions to maximise the educational aspect.







ESCMID's yearly congress attracts over 13,500 participants. ECCMID offers a wide range of sessions including keynotes, symposia, eposter sessions, educational workshops, meet-the-expert sessions and more

# 32<sup>nd</sup> ECCMID

## 23–26 April 2022, Lisbon, Portugal

### Attendees

ECCMID 2022 was our very first hybrid congress, allowing us to accommodate many participants from all over the world, and breaking another record with 159 countries represented. Of attendees, over 750 experts comprised the ECCMID 2022 faculty (invited speakers and session chairpersons). The United Kingdom, United States, Spain, Germany, and Italy were the top 5 represented countries, and quite a few countries were represented in ECCMID 2022 for the very first time. In addition to registered health professionals and scientists, many delegates representing nearly 200 sponsors and exhibitors were present onsite. We were also pleased to have 72 registered journalists, which brought worldwide attention and coverage to the congress.

### Invited Scientific Programme

The scientific programme of ECCMID 2022 saw >250 sessions running across many parallel tracks. The invited programme consisted of different session types for a total of 144 sessions, including 9 keynote lectures, 36 2-hour and 30 1-hour invited symposia, 28 educational workshops, and 26 meet-the-expert sessions. Notably, almost 50% of the invited sessions were co-organised by different ESCMID entities and affiliated societies. These were complemented by

traditional formats such as the “Year in” and ESCMID awards sessions and the popular Clinical Grand Rounds. Not surprisingly, COVID-19 was one of the dominant topics of the scientific programme. The 9 keynotes were as always a highlight, covering a wide range of topics including pandemic preparedness, microbiome and infection control and prevention, to name a few. The programme also included special sessions co-organised with leading scientific journals – the Lancet Group and CMI and a special session organised ad hoc in response to the hepatitis of unknown aetiology incident.

This year we had 4 “open forum” sessions where speakers briefly presented their ideas and views on topics such as science and politics, ethical issues, and the educational value of Twitter, which were then discussed with the audience. The “Pipeline Corner” included 2 sessions: the well-known “Therapeutics Pipeline Corner” and the recently added “Diagnostics Pipeline Corner”.

The TAE (Trainee Association of ESCMID) organised their traditional session, which attracted many participants and helped young scientists to interact with well-known experts and members of the ESCMID Executive Committee.



An important part of the scientific programme involved a record number of nearly 60 integrated symposia jointly arranged with the industry.

### The Abstracts Programme

Out of more than 4,700 abstracts submitted from 109 different countries, the Programme Committee selected 3,685 (78%) for oral or poster presentations. This is also the point where we would like to thank once again the hundreds of abstract reviewers for their continuous effort and their work. Without them, it would have not been possible to select accepted abstracts, which were hosted in 109 sessions (>700 oral presentations) and nearly 3,000 posters, that were presented onsite in a paper poster format and online on the ECCMID platform.

### Highlights and New Formats

For the first time, we had three Pre- and Post-ECCMID days, which allowed the participants to extend their ECCMID experience. The online days focused on diagnostics, COVID-19, and antimicrobial resistance and stewardship and consisted of 22 sessions, thus further strengthening the ECCMID invited programme.

Not unexpectedly, COVID-19 was a dominant topic in ECCMID 2022, featured in 12 invited sessions. Moreover, COVID-19 accounted for 21% of submitted abstracts in 2022 being the top-ranking abstract category (followed by antimicrobial resistance and bacterial infections).

In 2022, we explored several new formats including the Keynote Scientific Interview featuring an active discussion between the Keynote speaker and a high-level moderator, and the virtual walk-through sessions in which moderators reviewed selected

posters in a themed manner. We also created a new abstract category hosting cases and case-series, giving rise to 10 well attended case sessions in which unusual clinical cases were presented and discussed.

Several other new and recently added ECCMID initiatives were extremely well-received, including an onsite infectious disease-themed Escape Room focusing on travel medicine, and small-group 'Fireplace Sessions' in which predominantly young ESCMID members had a chance to talk with keynote lecturers in a more relaxed setting. A live-streamed ECCMID TV ran on the hour each day during the congress, bringing interviews, prize segments and daily highlights to the online audience. The Art Gallery of ECCMID 2022 featured amazing artwork originally created by our community members, with a focus placed on artwork featuring the professional and societal impact of the pandemic.

### Outlook

The 33rd ECCMID in 2023 will be held in Copenhagen, Denmark as a hybrid congress. We strive to present you with the most attractive and interesting programme in science, education, policy discussions, product exhibition, social interaction, and atmosphere. As international meetings are gradually returning to normal, in 2023 we expect attendees from well over 100 countries, >5,000 abstract submissions, and >150 sessions in the field of infection research, diagnosis and management.

I would like to thank the ECCMID Programme Committee that worked tirelessly to help shape such a superb programme and the outstanding support of the entire ESCMID Office Team, for both scientific management and event organisation. I look forward to meeting all of you in person in Copenhagen. ■

Watch a video of the  
32<sup>nd</sup> ECCMID





# 33<sup>rd</sup> ECCMID

## 15–18 April 2023, Copenhagen, Denmark

### Return to (New) Normal

ECCMID 2023 marks a full return to the usual schedule with respect to congress organisation and the making of the scientific programme. Following a challenging couple of years where we had to hold the congress fully online in 2021 and move to a hybrid format for the first time in 2022, ECCMID 2023 will be the year we consolidate these experiences by adopting the hybrid format as a “new normal” going forward.

### Scientific Programme and Keynote Speakers

At the time of writing, the invited scientific programme is still in progress, and we expect to host over 300 sessions including the invited programme, abstract programme, and integrated programme. We will continue hosting all our regular session formats, such as the symposia, workshops, and meet-the-expert as well as over 50 Integrated Symposia developed with the industry. These will be complemented by a wide range of special sessions. Of special interest will be the 8 confirmed Keynote Lectures, which will cover a wide range of timely topics, from bioinformatics and diagnostics, epidemiology, and bacterial infections to public health. After the success of the past two years, Keynote speakers will again participate in the “Fireplace session” after their lecture. They will meet with a small group of registered participants to enable an informal discussion and promote exchange between an established leader and young professionals. Interestingly, COVID-19 accounts for only a small fraction of sessions this

year, as opposed to 2021/22, perhaps another sign of the gradual return to normal business. Furthermore, we will organise again the Pre- and Post-ECCMID days, a 6 half-days online event hosted on the ECCMID platform, with the aim of expanding the congress experience beyond the traditional 4 days in April. The Pre- and Post-ECCMID days will cover several interesting topics ranging from global health and emerging infections to antimicrobial resistance, stewardship, and diagnostics, and will contain talks from renowned speakers from all over the world.

### ECCMID 2023 Abstract numbers

This year, we received an enormous number of abstracts, totalling over 6,350 abstracts (including >6,000 regular call and >350 late-breaking abstracts). After careful review by our dedicated reviewers and discussion with the Programme Committee, 74% of the submitted abstracts were accepted for presentation. We have now allocated almost 1,000 abstracts to various oral sessions and over 3,500 abstracts to paper poster sessions.

### Special features

At ECCMID 2023 we will also incorporate new and innovative sessions and initiatives. Of special note is the return of ePoster flash presentations in a modified version. This session type was greatly enhanced in the programme, thus allowing nearly a thousand (!) presenting authors of accepted abstracts to deliver oral presentations of their work in the congress.

### Personalisation of content

During ECCMID 2023, we are introducing for the first time a personalised experience for congress participants through the online ECCMID 2023 virtual platform. Our team has tagged all sessions featured in the programme with keywords, which were also used by abstract submitters. These keywords are also a new part of the ECCMID profile of congress attendees, thus allowing us to provide users of our platform with recommendations for sessions and abstracts matching their preferences and interests.

### Selective Pressure – our new quiz

Selective Pressure will be an interactive quiz where groups of 4 persons will compete, challenging their knowledge in CM/ID. The questions for the participants will be submitted by the ESCMID community. All ECCMID participants are welcome to attend this session for an interactive, educational, and entertaining experience, with our moderator of the session, Prof. Jesús Rodríguez-Baño.

### Art allery

Following the success of the Art Gallery at ECCMID 2021 & 2022, we are delighted to host the ECCMID Art Gallery once again in 2023. In 2021, we focused on the COVID-19 pandemic and asked our community to express in their art how they felt during this extraordinary and challenging time. We received over 20 unique original art pieces, ranging from paintings and photographs to poetry and sculptures. For ECCMID 2022, we received even more unique and beautiful pieces of art from almost 40 submitters. This year, around 100 pieces of original artwork will be shared with the ECCMID community during the congress, both onsite and in a published online book. We will also give prizes for the best works of art, including registration to ECCMID 2023 and the chance to exhibit the winning work live onsite.

### Escape Room

Following the high demand in 2022, we are continuing this initiative while allowing a larger number of groups to participate in this immersive experience. Escape Room participants will need to harness their problem-solving skills and knowledge of clinical microbiology and infectious diseases to complete this year's puzzle on time. I would like to thank all congress attendees, abstract submitters and presenters, industry sponsors, our honourable speakers and faculty members, the abstract reviewers, and my dear colleagues in the Programme Committee and ESCMID Office. I look forward to welcoming you in Copenhagen for a fascinating and enjoyable meeting. ■

*Jacob Moran-Gilad*  
ECCMID Programme Director

## ECCMID Programme Committee 2023

FIRST NAME	LAST NAME	CITY	COUNTRY
Emmanuelle	Cambau	Paris	France
Daniela Maria	Cirillo	Milan	Italy
Stephanie	Dancer	Glasgow	United Kingdom
Robert	Flisiak	Bialystok	Poland
Jon	Friedland	London	United Kingdom
Heli	Harvala	London	United Kingdom
Jaroslav	Hrabak	Pilsen	Czech Republic
Anu	Kantele	Helsinki	Finland
Nina	Khanna	Basel	Switzerland
Kimberley	Kline	Geneva	Switzerland
Florian	Krammer	New York	United States
Tyra Grove	Krause	Copenhagen	Denmark
Katrien	Lagrou	Leuven	Belgium
Joanne M.	Langley	Halifax	Canada
Gustavo	Lopardo	Vicente Lopez	Argentina
Colin	Mackenzie	Dusseldorf	Germany
Preeti	Malani	Ann Arbor	United States
Bruno	Megarbane	Paris	France
Graeme	Meintjes	Observatory	South Africa
Jacob	Moran-Gilad	Beer Sheva	Israel
Joel	Mossong	Luxembourg	Luxembourg
Anna	Norrby-Teglund	Huddinge	Sweden
Joshua	Nosanchuk	New York	United States
José Ramón	Paño-Pardo	Zaragoza	Spain
Anna	Papa-Konidari	Thessaloniki	Greece
Spyros	Pournaras	Athens	Greece
Elisabeth	Presterl	Vienna	Austria
Mario	Ramirez	Lisbon	Portugal
Pilar	Retamar	Seville	Spain
Priscilla	Rupali	Velore	India
Simona	Ruta	Bucharest	Romania
Maurizio	Sanguinetti	Rome	Italy
Bhanu	Sinha	Groningen	Netherlands
Vitali	Sintchenko	Sydney	Australia
Robert	Skov	Copenhagen	Denmark
Julia	Toubiana	Paris	France
Annelies	Verbon	Rotterdam	Netherlands
Heiman	Wertheim	Nijmegen	Netherlands
Sebastian	Wicha	Hamburg	Germany
Dafna	Yahav	Petah Tikva	Israel
Kai	Zhou	Shenzhen	China
Snjezana	Zidovech Lepej	Zagreb	Croatia
Annelies	Zinkernagel	Zurich	Switzerland

# Challenge of Antimicrobial Resistance

After a couple of years' absence from face-to-face meetings, the 7th ESCMID-ASM joint conference on “Drug Development to Meet the Challenge of Antimicrobial Resistance” took place in Dublin from 4 to 7 October 2022. The meeting was well attended with 266 delegates including 50 faculty members from 32 countries. This created a dynamic atmosphere throughout the meeting and vibrant discussions during the Q&A sessions following the talks.

## How it started

The meeting began with a well-attended bootcamp, for which we thank GARDP, CARBX, AMR action fund, JPIAMR, REPAIR, and Wellcome trust for sponsoring. The topics included a session on what R&D support the academic and small pharma community needs, and presentations on valuable resources which are currently available along with how to access these. This was followed by another excellent session outlining the current challenges in discovery and preclinical development. The bootcamp videos can be accessed on YouTube and via the GARDP website:

<https://revive.gardp.org/conference-recordings/>.

The main symposium continued with high quality presentations and introduced us to novel ideas in clinical trial design and how clinical trial networks can be used. The community was challenged to think beyond regulatory approval in terms of demonstrating the benefit and the impact new medicines will have in the community, in society, and in future pandemics. The necessity to address an unmet need on a global scale was championed with two outstanding keynote presentations by Marc Mendelson and Kamini Walia, which provided valuable insight into AMR in regions within the global south.

One of the challenges with addressing AMR continues to be the lack of new drugs with uniquely different mechanisms, thus we were excited to hear about the





novel approaches being explored from early discovery through to clinical development. In another excellent symposium, we were reminded of the importance and challenges of clinical development for paediatric patients.

### Opportunities for networking

The delegates had many opportunities for networking throughout the meeting with poster sessions and an evening reception. We enjoyed the opportunity to see high-quality emerging science through the poster exhibitions along with fast-paced short presentations from the top-rated posters which showed off the wealth of talent in new and young investigators. In addition to this we were able to showcase three young investigators in platform sessions, namely Waheed Adedeji, Vineet Dubey, and Pheobe Williams.

The main symposium concluded with a lively session by our keynote speakers, Andrew Shorr and Alison Holmes, who challenged us to consider how new drugs will be used.

It was delightful to witness the energy at the meeting from the Q&A sessions to the networking events. This was all made possible by the work of an outstanding multi-disciplinary, multi-national organising committee comprising both ESCMID and ASM members, and in particular the hard work and dedication of the ESCMID organisational team.



### Looking forward

The next meeting will be held in Boston, USA, September 19-22, 2023, and will be primarily sponsored by ASM and co-produced with ESCMID. The planning for this meeting is underway and will include fresh content, high-quality presentations from world-leading experts, and further networking opportunities. A call for abstracts will be released by ASM in the coming weeks, and we look forward to welcoming you to Boston. ■

*Shampa Das*

Scan this code to find all publications and further informations



# The art of networking among microbiologists

Since the mid-1980s, the ESCMID Study Group ESGEM has organised a tri-annual meeting called the International Meeting on Microbial-Epidemiological Markers (IMMEM). The 13th edition took place in the wonderful city of Bath, UK, from 14–17 September 2022. Altogether, 381 participants from 43 countries on all continents convened to discuss and exchange ideas on various aspects of microbial strain typing and characterisation under the overriding theme, ‘Establishing whole genome sequencing at the core of epidemiological surveillance’.

## On abstracts and presentations

Almost 200 abstracts were accepted and 14 were selected for oral presentations. To provide opportunities from regions or research groups that are not well-resourced, ESCMID granted free attendance to the conference for 10 early career scientists from all around the world and ESGEM granted another two. Four Travel Grants were approved for attendants from Low- and Middle-Income Countries (LMIC) by ESCMID (3) and by ESGEM (1). The application of next-generation sequencing to answer diverse questions in the fields of research, public health, and human and veterinary medicine was central to most of the sessions and topics at IMMEM XIII.

## Scientific Programme

**Day 1:** The introductory session focused on opportunities and challenges in metagenomics and microbiome studies. The session included keynote talks by Marion Koopmans (Netherlands), Ana Sofia Ribeiro Duarte (Denmark), and Alexander Greninger (US) on several aspects of metagenomics approaches for clinical diagnostics and pathogen and AMR surveillance. It was followed by two oral presentations on (meta)genomic surveillance of pathogens and AMR in sewage and wastewater by Patrick Munk (Denmark) and Chrystal Landgraf (Canada). Session 2 was planned in a debate format on the contribution of One Health to the AMR crisis. Introductory statements were given by Hajo Grundmann (Germany), Stefan Schwarz (Germany), and Liz Wellington (UK) leading to a lively discussion afterwards. The opening ceremony started with some introductory words from the ESCMID president Annelies Zinkernagel representing the ESCMID EC, followed by the chair of ESGEM Guido Werner, and Lauren Cowley representing the local organizing committee. Bill



Hanage (US) and Iruka Okeke (Nigeria) gave two scientific plenary talks. Bill Hanage reminded the audience that metadata is fundamental to making sense of existing and yet-to-be-created genomic pathogen data. Iruka Okeke discussed achievements and challenges for the implementation of genomic pathogen diagnostics and surveillance in an LMIC.

**Day 2:** The early morning session 4 was dedicated to recognising and naming lineages. Aine O'Toole (UK), Kelly Wyres (Australia), and Rebecca Gladstone (Norway) discussed aspects of microbial lineage designations and strain type characteristics for various bacterial and viral pathogens. The subsequent late morning session 5 returned to the subject of genomics in LMIC. Talks were given by Josefina Campos (Argentina) about genomic epidemiology in Argentina, Martin Antonio (The Gambia) about genomic surveillance in West Africa, and David Aanensen (UK) introducing the NIHR Global Health Research Unit on Genomic Surveillance of AMR. Two selected abstracts were presented by Anderson Oaikhena (Nigeria) about genomic surveillance of *Staphylococcus aureus* and Koen Vandellannoote (Cambodia) about *Salmonella enterica* ser. Paratyphi A in Cambodia. An entire afternoon session 6 was dedicated to the analysis of mobile genetic elements (MGE), namely plasmids. Two talks were given by Grace Blackwell (Australia) on analysing large datasets for MGE reconstruction and Alvaro San Millan (Spain) about pOXA-48 plasmid dynamics in hospital patients. Selected oral talks by Sergio Arredondo-Alonso (Norway) and Val Lanza (Spain) introduced typing approaches for cataloguing plasmids in *Escherichia coli* and *Enterococcus faecalis*, respectively. A late afternoon session 7 introduced existing platforms for molecular epidemiology. Silvia Argimon (UK) introduced Pathogenwatch, Richard Neher (Switzerland) Next-Strain, Keith Jolley (UK) BIGSdb, and Nabil-Fareed Alikhan (UK) Enterobase. Attendants could ask questions about all aspects of practical applications of these platforms in a round table format.

**Day 3:** In the morning session 8 evolutionary aspects of population dynamics of selected pathogens were introduced by Helena Seth-Smith (Switzerland) focusing on genomics and diagnostics of *Chlamydia trachomatis*, Chris Ruis (UK) on mutational signatures in microbial populations, and Claire Chewapreecha (Thailand) on melioidosis as a neglected disease caused by *Burkholderia pseudomallei*. Selected short presentations by Francesca Coll (UK) introduced an improved methodology for AMR prediction from WGS data in *Enterococcus faecium* and Marit Hetland (Norway) presented a study on patient evolution of multidrug-resistant *Klebsiella pneumoniae* ST17 isolates. Zoonotic pathogens were the focus of session 9. Talks were given by Ed Feil (UK) on host specialization of zoonotic pathogens, Lucy Weinert (UK) on pathogenicity and across-host-transmission of *Streptococcus suis* and arbovirus genomic surveillance in Latin America by Jaqueline Goes de Jesus (Brazil). Two short oral presentations completed this session given by Aldert Zomer (Netherlands) on plasmid dynamics in *Campylobacter* spp. and Clare Barker (UK) on the mechanisms of persistence in *Listeria monocytogenes*.

**Day 4:** The last day of the conference started with two short oral presentations of novel bioinformatics' achievements. Eric



Stevens from FDA (US) highlighted the challenges of big data for epidemiological surveillance in the US and John Lees (UK) presented advancements in assembly-free typing schemes. Session 10 described strategies to combine epidemiological, genomic, and other metadata to better resolve outbreaks, survey pathogen transmissions, and adopt measures of infection prevention from a public health view. Bernardo Gutierrez Granja (UK) showed how complementary data can help fill in the gap of insufficient sampling of emerging viruses in Latin America, Tjibbe Donker (Germany) analysed patient networks and MRSA transmissions in hospitals, and Caroline Buckee (US) demonstrated that mobility data combined with molecular surveillance can help identify populations at risk. The 2h session was completed by short oral talks given by Sion Bayliss (UK) on machine learning to predict the geographical origins of *Salmonella* and by Henrik Hasman (Denmark) on a new software tool for interdisciplinary analysis and visualization of hospital outbreaks. The final session was planned as a round table and debate about "Lessons learned from SARS CoV-2 genomic surveillance". Nick Loman and Lauren Cowley (UK) moderated a session presenting different views on the subject by Jacob Moran-Gilad (Israel), Benjamin Howden (Australia), and Bill Hanage (US). All participants placed questions during the entire conference, which were taken up by the two moderators and packed into specific thematic blocks. Upcoming issues during the 1.5 hrs session allowed for feedback and the inclusion of the entire audience in the room.

### Poster Sessions

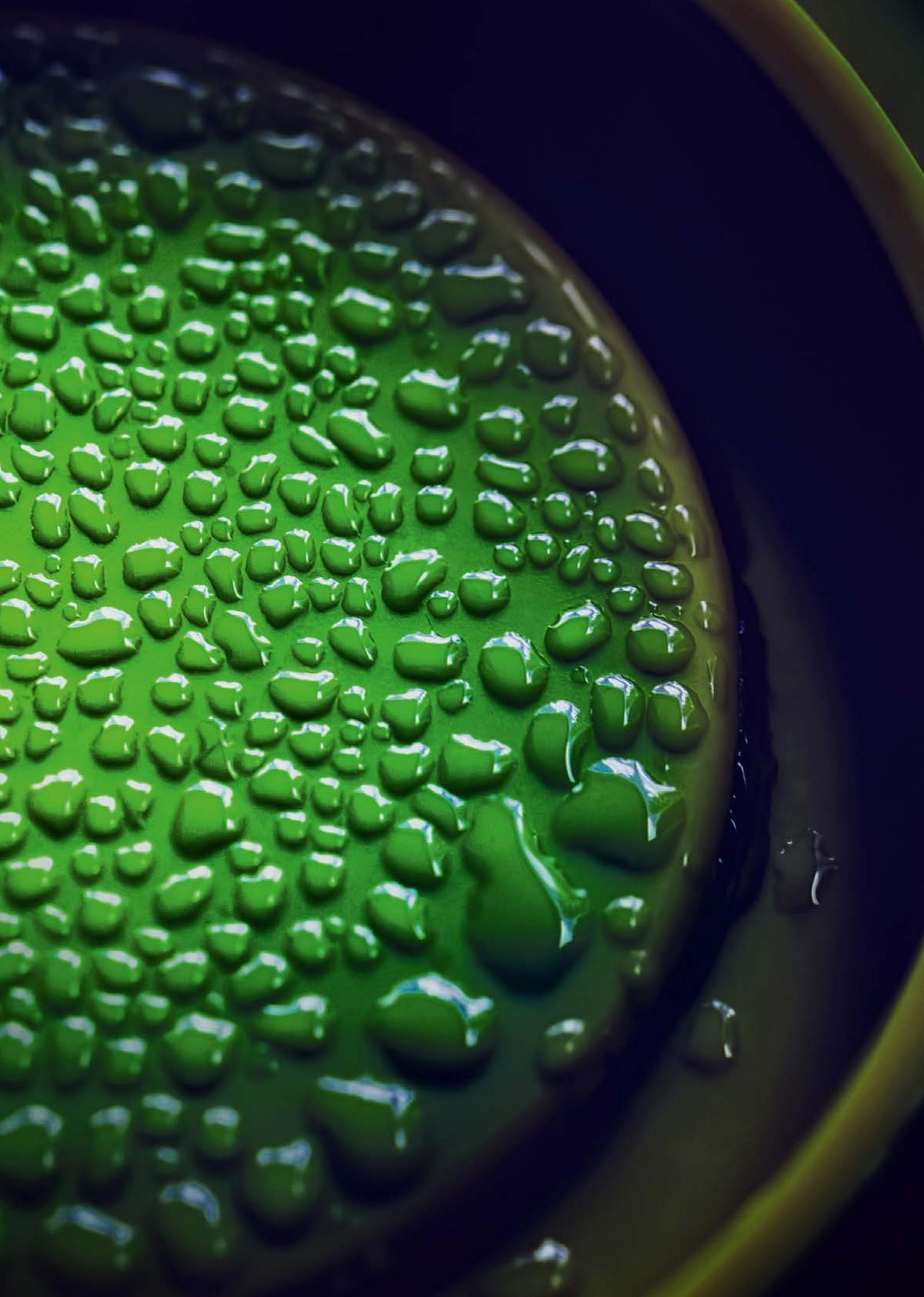
Altogether 185 posters were presented and discussed during two days of the conference. The poster discussions were scheduled twice for 2h on Thursday and Friday afternoon leaving sufficient time, especially for most of the early career attendants, to present and discuss their work. The ESGEM Executive committee awarded five Poster Prizes presented to Keira Cozens from the UK, Julian Paganini from the Netherlands, Kar Mun Lim from Singapore, Christopher Connor from Australia, Norma Fàbregas and Daniel Pérez from Spain, which was sponsored by MDPI Microorganisms, and one Prize for the best oral presentation to Marit Andrea Klockhammer Hetland from Norway, sponsored by Microbial Genomics and the Microbiology Society. The journal *Microbial Genomics* also launched a Special Collection dedicated to IMMEM XIII: "Establishing whole genome sequencing at the core of epidemiological surveillance". ■

Guido Werner



**THE PRESENT IS  
NOT A POTENTIAL  
PAST, IT IS THE  
MOMENT OF CHOICE  
AND ACTION.**

Simone de Beauvoir



A working day in the life of ...



# José Ramón Paño-Pardo

Publications, Communications & Guidelines Officer



**José Ramón Paño-Pardo: how do you prepare for a day at the hospital?**

As an early bird, I begin my day by reading the news and catching up on emails, working on presentations, or finishing articles. However, since I'm an infectious diseases consultant, many of my clinical activities cannot be scheduled, so I try to establish routines wherever possible. When I arrive at the hospital, I review patients' information available in the electronic medical record, such as nurses' notes and microbiology reports, to prioritize my clinical rounds. Before doing rounds, I also have a briefing with the team as part of my clinical routine.

**What does communication mean in a scientific context, and where is it difficult?**

As medicine is not a solo but a teamwork activity, communication is essential in all aspects of clinical duties. Indeed, I encourage the residents on my team to pay attention to the proportion of our clinical duties that involves either receiving information from patients or producing information for other specialists, nurses, or patients. Unfortunately, communication can be difficult due to several interferences, including staying scientifically updated given the vast amount of information produced.

**What is the importance of publications for scientific discourse?**

High-quality scientific publications are essential for sound evidence-based clinical decisions, and dissemination of knowledge is critical for the practice of Medicine. Scientific publications are an essential tool for knowledge delivery, and technical developments provide opportunities to find new strategies for dissemination.

**Which recent "ESCMID discourse" has particularly surprised you, and why?**

The effort devoted by the EC to design a comprehensive strategy for the society for the coming years. I consider this approach very necessary for ESCMID and very stimulating as an EC member. ■

# CMI: One of ESCMID's Flagships

Publications in 2022: *Clinical Microbiology and Infection (CMI)*, the official journal of ESCMID, is committed to disseminating high-quality scientific research to advance the fields of clinical microbiology and infectious diseases. With its carefully curated selection of publication types, including original research, reviews, commentaries, and perspectives, the journal provides a wealth of valuable insights to improve clinical practice.

*José Ramón Paño-Pardo*

*CMI*'s contributions to the field are evidenced not only by its impressive impact factor, but also by the recognition it receives from researchers and practitioners alike for the quality of its content. For a more comprehensive summary of the journal's achievements in 2022, please refer to the dedicated *CMI* page in this yearbook or the guidelines section.

We are indebted to the Editor-in-Chief, Leonard Leibovici, the whole editorial team, and of course, the support of all the authors and reviewers. The outstanding performance of *CMI* would not be possible without their valuable contributions. The high-quality scientific and professional content provided by the journal makes it that much more important to increase dissemination. In 2022, we have strengthened our efforts to enhance the outreach of *CMI*'s content by highlighting and sharing *CMI* publications on several ESCMID communication channels, from the weekly newsletter to our social media network accounts. We are committed to streamlining this approach to ensure that *CMI*'s content reaches the highest number of people interested in infectious diseases and clinical microbiology.

### ESCMID support in publications

We are extremely proud of the ESCMID community, including our Study Groups, Committees, and recipients of ESCMID research grants, for their exceptional productivity in publishing peer-reviewed articles. A long list of such publications is available in the dedicated section of this yearbook. We strongly encourage all ESCMID members to acknowledge ESCMID's contributions and to inform the ESCMID Office when a manuscript with ESCMID support is published. This will enable us to better track these publications and create a comprehensive list that adequately recognises all contributors. Additionally, it will allow your work to receive greater visibility through ESCMID channels.

Wishing you a successful 2023, we are open to receiving your suggestions, comments, and ideas for further improvements. ■

Scan QR-Code to find all publications and further informations



## PUBLICATION SUBCOMMITTEE

### Chair/ESCMID

José Ramón Paño-Pardo, Spain,  
Publications Officer jrpanno@unizar.es

### CMI Editor-in-Chief

Leonard Leibovici, Israel

### Elsevier Representative

Marianna Taffi, United Kingdom

# Publications

## Medical guidelines

ESCMID/EUCIC clinical practice guidelines on perioperative antibiotic prophylaxis in patients colonized by multidrug-resistant Gram-negative bacteria before surgery  
Righi E, Mutters NT et al. *Clin Microb Infect* 2022; Article in press. doi: 10.1016/j.cmi.2022.12.012.

ESCMID COVID-19 guidelines: diagnostic testing for SARS-CoV-2  
Fragkou PC, De Angelis G et al. *Clin Microb Infect* 2022; 28: 816-822. doi: 10.1016/j.cmi.2022.02.011.

ESCMID rapid guidelines for assessment and management of long COVID  
Yelin D, Moschopoulos CD et al. *Clin Microb Infect* 2022; 28:955-972. doi: 10.1016/j.cmi.2022.02.018.

European society of clinical microbiology and infectious diseases guidelines for coronavirus disease 2019: an update on treatment of patients with mild/moderate disease  
Bartoletti M, Azap O et al. *Clin Microb Infect* 2022; 28:1578-1590. doi: 10.1016/j.cmi.2022.08.013.

## Publications from Study Groups

### EUCAST

A pragmatic approach to susceptibility classification of yeasts without EUCAST clinical breakpoints  
Astvad KMT, Arikan-Akdagli S, Arendrup MC. *J Fungi (Basel)* 2022; 30:8(2):141. doi: 10.3390/jof8020141.

Update from the European Committee on Antimicrobial Susceptibility Testing (EUCAST)  
Giske CG, Turnidge J, Cantón R et al. *J Clin Microbiol* 2022; 16:60(3):e0027621. doi: 10.1128/JCM.00276-21.

Cefiderocol: EUCAST criteria for disc diffusion and broth microdilution for antimicrobial susceptibility testing  
Matuschek E, Longshaw C, Takemura M et al. *J Antimicrob Chemother* 2022; 29:77(6):1662-1669. doi: 10.1093/jac/dkac080.

Comment on: multicentre validation of a EUCAST method for the antifungal susceptibility testing of microconidia-forming dermatophytes  
Arendrup MC, Jørgensen KM, Guinea J et al. *J Antimicrob Chemother* 2022 31:77(4):1212-1213. doi: 10.1093/jac/dkac004

Spectrophotometric detection of azole-resistant *Aspergillus fumigatus* with the EUCAST broth microdilution method: is it time for automated MIC reading of EUCAST antifungal susceptibility testing of *Aspergillus* species?  
Meletiadiis J, Efstathiou I, van der Lee HAL et al. *J Antimicrob Chemother* 2022 27:77(5):1296-1300. doi: 10.1093/jac/dkac046.

How to: ECOFFs-the why, the how, and the don'ts of EUCAST epidemiological cutoff values  
Kahlmeter G, Turnidge J. *Clin Microbiol Infect*. 2022; 28(7):952-954. doi: 10.1016/j.cmi.2022.02.024.

Expected phenotypes and expert rules are important complements to antimicrobial susceptibility testing  
Gatermann S, Das S, Dubreuil L et al. *Clin Microbiol Infect*. 2022; 28(6):764-767. doi: 10.1016/j.cmi.2022.03.007

Searching high and low: call for a Joint European Society for Paediatric Infectious Diseases-European Committee on Antimicrobial Susceptibility Testing survey on dosage of antibacterial agents in children-part one  
Aguilera-Alonso D, Cantón R, Giske CG et al. *J. Pediatr Infect Dis J*. 2022; 1:41(4):e182-e185. doi: 10.1097/INF.0000000000003457.

Searching high and low: call for a joint ESPID-EUCAST survey on dosage of antibacterial agents in children-part one  
Aguilera-Alonso D, Cantón R, Giske CG et al. *Clin Microbiol Infect*. 2022; 28(4):625-627. doi: 10.1016/j.cmi.2021.12.015.

Evaluation of 10 brands of pre-poured Mueller-Hinton agar plates for EUCAST disc diffusion testing  
Åhman J, Matuschek E, Kahlmeter G. *Clin Microbiol Infect*. 2022; 28(11):1499.e1-1499.e5. doi: 10.1016/j.cmi.2022.05.030.

Adaptation of *Brucella melitensis* antimicrobial susceptibility testing to the ISO 20776 standard and validation of the method  
Tscherne A, Mantel E, Boskani T et al. *Microorganisms*. 2022; 20:10(7):1470. doi: 10.3390/microorganisms10071470.

Molecular mechanisms of acquired antifungal drug resistance in principal fungal pathogens and EUCAST guidance for their laboratory detection and clinical implications  
Rogers TR, Verweij PE, Castanheira M et al. *J Antimicrob Chemother*. 2022; 28:77(8):2053-2073. doi: 10.1093/jac/dkac161.

Multicentre validation of a modified EUCAST MIC testing method and development of associated epidemiologic cut-off (ECOFF) values for rezafungin  
Arendrup MC, Arikan-Akdagli S, Castanheira M et al. *J Antimicrob Chemother*. 2022; 23:78(1):185-195. doi: 10.1093/jac/dkac373.

### EITaF

Emergence of new SARS-CoV-2 Variant of Concern Omicron (B.1.1.529) - highlights Africa's research capabilities, but exposes major knowledge gaps, inequities of vaccine distribution, inadequacies in global COVID-19 response and control efforts  
Petersen E, Ntoumi F et al. *Int J Infect Dis*. 2022; 114:268-272. doi: 10.1016/j.ijid.2021.11.040

### TAE

Role and perception of clinical microbiology and infectious diseases trainees during the COVID-19 crisis  
Bouiller K, Peiffer-Smadja N et al. *Future Microbiol*. 2022. 17(6): 411-416. doi: 10.2217/fmb-2021-0129

### EEAC

The ESCMID ethics advisory committee (EEAC): purpose and challenges  
Righi E, Yahav D, Akova M et al. *Clin Microb Infect* 2022. 28: 470 – 471. doi: 10.1016/j.cmi.2022.01.002

### EFISG

Performance of existing clinical scores and laboratory tests for the diagnosis of invasive candidiasis in critically ill, nonneutropenic, adult patients: A systematic review with qualitative evidence synthesis  
Giacobbe DR, Asperges E, Cortegiani A et al. *Mycoses* DOI: 10.1111/myc.13515

Performance of existing definitions and tests for the diagnosis of invasive aspergillosis in critically ill, non-neutropenic, adult patients: An update including COVID-19 data  
Bassetti M, Zuccaro V, Asperges E et al. *Journal of Infection* DOI: 10.1016/j.jinf.2022.08.003

### EPASG

Research priorities towards precision antibiotic therapy to improve patient care  
Bulman ZP, Wicha S, Nielsen E et al. *Lancet Microbe*. DOI: [https://doi.org/10.1016/S2666-5247\(22\)00121-5](https://doi.org/10.1016/S2666-5247(22)00121-5)

### ESGAI

A comparison of the antimicrobial resistance of fecal *Bacteroides* isolates and assessment of the composition of the intestinal microbiotas of

carbapenem-treated and non-treated persons from Belgium and Hungary  
Soki J, Wýbo I, Wirth R et al. *Anaerobe*. 2022 Feb;73:102480. doi: 10.1016/j.anaerobe.2021.102480.

## ESGAP

Current clinical practice in antibiotic treatment of *Staphylococcus aureus* bacteraemia: results from a survey in five European countries  
D T P Buis, J M Prins, L Betica-Radic et al. *Journal of Antimicrobial Chemotherapy*, Volume 77, Issue 10, October 2022. doi: 10.1093/jac/dkac237

Development of an international survey tool to measure confidence and current antimicrobial stewardship practices of hospital pharmacists  
Naomi Weier, Nathalie Thilly, Philip Howard et al. *Journal of Antimicrobial Chemotherapy*, Volume 77, Issue 12, December 2022. doi: <https://doi.org/10.1093/jac/dkac343>

Introducing the global antimicrobial stewardship partnership hub (GASPH): creating conditions for successful global partnership collaboration  
Sneddon J, Guise T, Jenkins D et al. *JAC Antimicrob Resist*. 2022 Nov 8;4(6). DOI: 10.1093/jacamr/dlac115

Importance of antimicrobial stewardship in solid organ transplant recipients: An ESCMID perspective  
Ioannou P, Karakonstantis S, Schouten J et al. *Transpl Infect Dis*. 2022 Oct;24(5) doi: 10.1111/tid.13852.

Survey of delivery of parenteral antimicrobials in non-inpatient settings across Europe  
Emilie C, de Nocker P, Saïdani N et al. *Int J Antimicrob Agents*. 2022 Apr;59(4) doi: 10.1016/j.ijantimicag.2022.106559.

Indications for medical antibiotic prophylaxis and potential targets for antimicrobial stewardship intervention: a narrative review  
Ioannou P, Karakonstantis S, Schouten J et al. *Clin Microbiol Infect*. 2022 Mar;28(3) DOI: 10.1016/j.cmi.2021.10.001

## ESGARS

Susceptibility profiles and resistance genomics of *Pseudomonas aeruginosa* isolates from European ICUs participating in the ASPIRE-ICU trial  
Torrens G, van der Schalk TE, Cortes-Lara S et al. *Journal of Antimicrobial Chemotherapy* doi: 10.1093/jac/dkac122.

## ESGB

Exploiting phage-derived carbohydrate depolymerases for combating infectious diseases  
Oliveira H, Drulis-Kawa Z, Azeredo J. *Trends Microbiol*. 2022 Jun 9;S0966-842X(22)00114-7. doi: 10.1016/j.tim.2022.05.002.

## ESGBIES

Impact of neutropenia on clinical manifestations and outcome of *Staphylococcus aureus* bloodstream infection: a propensity score-based overlap weight analysis in two large, prospectively evaluated cohorts  
Camp J, Filla T, Glaubitz L, Kaasch AJ et al. *Clin Microbiol Infect*. 2022 Aug;28(8):1149.e1-1149.e9. doi: 10.1016/j.cmi.2022.03.018.

Impact of adherence to individual quality-of-care indicators on the prognosis of bloodstream infection due to *Staphylococcus aureus*: a prospective observational multicentre cohort  
Escrihueta-Vidal F, Kaasch AJ, Von Cube M et al. *Clin Microbiol Infect*. 2022 Oct 23:S1198-743X(22)00533-X. doi: 10.1016/j.cmi.2022.10.019.

## ESGBOR

Evidence of taxonomic bias in public databases: the example of the genus *Borrelia*  
Margos G, Wormser GP, Schwartz I, et al. *Ticks and Tick-borne Diseases* 2022 Sep;13(5):101994. doi: 10.1016/j.ttbdis.2022.101994.

*Borrelia* Ecology and Evolution: Ticks and Hosts and the Environment  
Margos G, Henningsson AJ, Markowicz M, Fingerle V. *Microorganisms* 2022 Jul 26;10(8):1513 <https://doi.org/10.3390/microorganisms10081513>

## ESGCD

A point-prevalence study on community and inpatient *Clostridioides difficile* infections (CDI): results from Combatting Bacterial Resistance in Europe CDI (COMBACTE-CDI), July to November 2018  
Viprey VF, Davis GL, Benson AD et al. *Eurosurveillance* 2022 Jun;27(26):2100704. doi: 10.2807/1560-7917.ES.2022.27.26.2100704.

How to: *Clostridioides difficile* infection in children  
Krutova M, de Meij TGJ, Fitzpatrick F et al. *Clinical Microbiology and Infection* 2022. doi: 10.1016/j.cmi.2022.03.001.

*Clostridioides difficile* positivity rate and PCR ribotype distribution on retail potatoes in 12 European countries, January to June 2018  
Tkalec V, Viprey V, Davis G et al. *Eurosurveillance*

2022 doi: 10.2807/1560-7917.ES.2022.27.15.2100417.

How can patients with *Clostridioides difficile* infection on concomitant antibiotic treatment be best managed?  
Fitzpatrick F, Safdar N, van Prehn J, Tschudin-Sutter S. *Lancet Infectious Diseases* [https://doi.org/10.1016/S1473-3099\(22\)00274-2](https://doi.org/10.1016/S1473-3099(22)00274-2)

Motility and the genotype diversity of the flagellin genes *fliC* and *fliD* among *Clostridioides difficile* ribotypes  
Karpiński P, Wultańska D, Piotrowski M et al. *Anaerobe* 2022 eb;73:102476. doi: 10.1016/j.anaerobe.2021.102476.

*Clostridioides difficile* infection: are the three currently used antibiotic treatment options equal from pharmacological and microbiological points of view?  
Krutova M, Wilcox M, Kuijper E. *International Journal of Infection Diseases* 2022. doi: 10.1016/j.ijid.2022.09.013

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 KE et al. *Journal of Hospital Infection* 2023 Jan;131:213-220. doi: 10.1016/j.jhin.2022.11.011.

## ESGCIP

Treatment of ventilator-associated pneumonia due to carbapenem-resistant Gram-negative bacteria with novel agents: a contemporary, multidisciplinary ESGCIP perspective  
Giacobbe DR, Roberts JA, Abdul-Aziz MH et al. *Expert Rev Anti Infect Ther*. 2022. doi: 10.1080/14787210.2022.2063838

Risk Factors for Intra-Abdominal Candidiasis in Intensive Care Units: Results from EUCANDICU Study  
Bassetti M, Vena A, Giacobbe DR et al. *Infect Dis Ther*. 2022 doi: 10.1007/s40121-021-00585-6.

A Wide Database for a Multicenter Study on *Pneumocystis jirovecii* Pneumonia in Intensive Care Units  
Di Meco G, Mora S, Giacobbe DR et al. *Stud Health Technol Inform*. 2022 DOI: 10.3233/SHTI220521

**Use of Antimicrobials for Bloodstream****Infections in the Intensive Care Unit, a Clinically Oriented Review**

Alexis Tabah, Jeffrey Lipman, François Barbier, Niccolò Buetti, Jean-François Timsit. *Antibiotics* 2022 doi: 10.3390/antibiotics11030362.

**ESGEM**

Next-generation sequencing in routine clinical microbiology and infectious diseases: an ESGMD-ESGEM ESCMID postgraduate course Hege Vangstein Aamot, Eric C.J.Claas, Natacha Couto et al. *New Microbes and New Infections* 2022 Nov 12;49-50:101046. doi: 10.1016/j.nmni.2022.101046.

**ESGFOR**

Positive airway pressure longer than 24 h is associated with histopathological volutrauma in severe COVID-19 pneumonia—An ESGFOR based narrative case-control review

Veroniek Saegeman, Marta C. Cohen, Lydia Abasolo et al. *Annals of Translational Medicine*. doi: 10.21037/atm-22-605.

**ESGHAMI**

How to: *Clostridioides difficile* infection in children

Marcela Krutova, Tim G J de Meij, Fidelma Fitzpatrick et al. *Clin Microbiol Infect*. 2022 Aug;28(8):1085-1090. doi: 10.1016/j.cmi.2022.03.001.

**ESGIAI**

Osteosynthesis-associated infection of the lower limbs by multi-drug and extensively drug-resistant Gram-negative bacteria: A multi-centre cohort

Efthymia Giannitsioti, Mauro José Salles, Andreas Mavrogenis et al. *Journal of Bone and Joint Infections* 2022. doi: 10.5194/jbji-7-279-2022

Microbiological Characterization of *Cutibacterium acnes* Strains Isolated from Prosthetic Joint Infections

Salar-Vidal L, Aguilera-Correa JJ, Brüggemann H, et al. *Antibiotics (Basel)*. 2022 Sep 16;11(9):1260. doi: 10.3390/antibiotics11091260.

The State of Microbiology Diagnostic of Prosthetic Joint Infection in Europe: An In-Depth Survey Among Clinical Microbiologists

Erlangga Yusuf, Charlotte Roschka, Jaime Esteban, et al. *Front. Microbiol.*, 20 June 2022. <https://doi.org/10.3389/fmicb.2022.906989>

Should all patients with a culture-negative periprosthetic joint infection be treated with antibiotics? : a multicentre observational study

van Sloten M, Gómez-Junyent J, Ferry T et al. *Bone Joint J*. 2022 Jan;104-B(1):183-188. doi: 10.1302/0301-620X.104B1.BJJ-2021-0693.R2.

**ESGIB**

Sex and Gender Differences in Bacterial Infections

Sara P Dias, Matthijs C Brouwer, Diederik van de Beek. *Infection and immunity* 2022 Oct 20;90(10):e0028322. doi: 10.1128/iai.00283-22.

Cerebrospinal fluid sex steroid hormones in bacterial meningitis

Dias SP, Brouwer MC, Boelen A, van de Beek D. *Medicine* 2022 Sep 9;101(36):e30452. doi: 10.1097/MD.00000000000030452.

The role of plasminogen activator inhibitor-2 in pneumococcal meningitis

Teske NC, Engelen-Lee JY, Dyckhoff-Shen S et al. *ACTA Neuropathologica Communications* 2022 Oct 29;10(1):155. doi: 10.1186/s40478-022-01461-1.

Changing profile of encephalitis: Results of a 4-year study in France

A Mailles, X Argemi, C Biron, et al. *Infectious diseases now* 2022 Feb;52(1):1-6. doi: 10.1016/j.idnow.2021.11.007.

Partial oral antibiotic treatment for bacterial brain abscess: an open-label randomized non-inferiority trial (ORAL)

Bodilsen J, Brouwer MC, van de Beek D et al. *BMJ Open* 2022

Treatment of community-acquired bacterial brain abscess: a survey among infectious diseases specialists in France, Sweden, Australia, and Denmark

Bodilsen J, Tattevin P, Tong S, Naucler P, Nielsen H. *Eur J Clin Microbiol Infect Dis*. doi: 10.1007/s10096-020-04032-1.

Treatment of HSV-2 meningitis: A survey among infectious diseases specialists in France, Sweden, Australia, and Denmark

Bodilsen J, Tattevin P, Tong S, Naucler P, Nielsen H. *Open Forum Infectious Diseases*. 2022 Dec; 9(12): ofac644. doi: 10.1093/ofid/ofac644

Handbook of Animal Models in Neurological Disorders, Chapter 27 – Experimental meningitis by *Streptococcus pneumoniae* and *Neisseria meningitidis* in rodents

Ngoc Dung Le, Susanna Ricci, Denis Grandgirard, Stephen L.Leib.

**ESGIE**

Predictors of survival in elderly patients with coronavirus disease 2019 admitted to the hospital: derivation and validation of the FLAMINGOV score

Tiseo G, Margalit I, Ripa M et al. *Clin Microbiol Infect* 2022 Sep 30;S1198-743X(22)00511-0. doi: 10.1016/j.cmi.2022.09.019.

Characteristics of long COVID among older adults: a cross-sectional study

Daitch V, Yelin D, Awwad M et al. *Int J Infect Dis* 2022 Sep 30;S1201-9712(22)00535-5. doi: 10.1016/j.ijid.2022.09.035.

Effectiveness and safety of colistin among older adults: a systematic review and meta-analysis

Margalit I, Prendki V, Tishler O et al. *J Antimicrob Chemother* 2022 Jul 28;77(8):2094-2104. doi: 10.1093/jac/dkac145.

Caring for older adults during the COVID-19 pandemic

Prendki V, Tiseo G, Falcone M. *Clin Microbiol Infect*. 2022 Jun;28(6):785-791. <https://doi.org/10.1016/j.cmi.2022.02.040>

**ESGITM**

Country-specific approaches to latent tuberculosis screening targeting migrants in EU/EEA\*

September 2019 to February 2020 Margineanu I, Rustage K, Noori T et al. *Eurosurveillance* 2022 Mar;27(12):2002070. doi: 10.2807/1560-7917.ES.2022.27.12.2002070.

**ESGMAC**

*Mycoplasma pneumoniae* beyond the COVID-19 pandemic: where is it?

Patrick M Meyer Sauteur, Victoria J Chalker, Christoph Berger et al. *Lancet Microbe* 2022 Dec;3(12):e897. doi: 10.1016/S2666-5247(22)00190-2.

*Mycoplasma pneumoniae* detections before and during the COVID-19 pandemic: results of a global survey, 2017 to 2021

Patrick M Meyer Sauteur, Michael L Beeton, Søren A Uldum et al. *Eurosurveillance* 2022 May 12; 27(19): 2100746. doi: 10.2807/1560-7917.ES.2022.27.19.2100746

Phenotypic and genotypic antimicrobial susceptibility patterns of the emerging human respiratory pathogen *Mycoplasma amphoriforme* isolated from the UK and Denmark

Jessica Day, Baharak Afshar, Richard S Rowlands et al. *Journal of Antimicrobial Chemotherapy* 2022 Oct 28;77(11):3126-3129. doi: 10.1093/jac/dkac293.

**ESGMD**

Next-generation sequencing in routine clinical microbiology and infectious diseases: an ESGMD-ESGEM ESCMID postgraduate course

Hege Vangstein Aamot, Eric C. J. Claas, Natacha Couto et al. *New Microbes and New Infections* 2022 Nov 12;49-50:101046. doi: 10.1016/j.nmni.2022.101046.

**ESGMYC**

Country-specific approaches to latent tuberculosis screening targeting migrants in EU/EEA\* countries: A survey of national experts, September 2019 to February 2020  
Ioana Margineanu, Kieran Rustage, Teymur Noori et al. *Eurosurveillance* 2022 Mar 24; 27(12): 2002070. doi: 10.2807/1560-7917.ES.2022.27.12.2002070

Rifampentine access in Europe: growing concerns over key tuberculosis treatment component  
Lorenzo Guglielmetti, Gunar Günther, Claude Leu et al. *European Respiratory Journal* 2022 May 19;59(5):2200388. doi: 10.1183/13993003.00388-2022

Co-administration of treatment for rifampicin-resistant TB and chronic HCV infection: A TBnet and ESGMYC study  
Simone Tunesi, Damien Le Dû, Gina Gualano et al. *Journal of Infection* 2022 Jun;84(6):834-872. doi: 10.1016/j.jinf.2022.03.004

**ESGNI**

Environmental sampling of innate hospital surfaces: a survey of current practices and the need for guidelines  
A S van der Schoor, M Boyle, A F Voor In 't Holt et al. *J Hosp Infect.* 2022 Oct;128:92-95. doi: 10.1016/j.jhin.2022.07.024

Infection prevention and control policies in hospitals and prevalence of highly resistant microorganisms: an international comparative study  
Manon D van Dijk, Anne F Voor In 't Holt, Emine Alp et al. *Antimicrobial Resistance & Infection Control* 2022 Dec 6;11(1):152. doi: 10.1186/s13756-022-01165-0

MRSA surveillance programmes worldwide: moving towards a harmonised international approach  
Baede VO, David MZ, Andrasevic AT et al. *Int J Antimicrob Agents.* 2022 Mar;59(3):106538. doi: 10.1016/j.ijantimicag.2022.106538.

**ESGNTA**

Exploiting phage-derived carbohydrate depolymerases for combating infectious diseases  
Hugo Oliveira, Zuzanna Drulis-Kawa, Joana Azeredo. *Trends in Microbiology* 2022 Aug;30(8):707-709. doi: 10.1016/j.tim.2022.05.002.

**ESGREV**

Performance of point-of care molecular and antigen-based tests for SARS-CoV-2: a living systematic review and meta-analysis  
Paraskevi C. Fragkou, Charalampos D. Moschopoulos et al. *Clinical Microbiology and Infection* 2022 doi: 10.1016/j.cmi.2022.10.028.

Host immune responses and possible therapeutic targets for viral respiratory tract infections in susceptible populations: a narrative review  
Paraskevi C. Fragkou, Charalampos D. Moschopoulos et al. *Clinical Microbiology and Infection* 2022 Oct;28(10):1328-1334. doi: 10.1016/j.cmi.2022.03.010.

Myeloid CD169/Siglec1: An immunoregulatory biomarker in viral disease  
Silva Herzog, Paraskevi C. Fragkou, et al. *Frontiers in Medicine* 2022 doi: 10.3389/fmed.2022.979373

**ESGS**

MRSA surveillance programmes worldwide: moving towards a harmonised international approach  
Baede VO, David MZ, Andrasevic AT et al. *Int J Antimicrob Agents.* 2022 Mar;59(3):106538. doi: 10.1016/j.ijantimicag.2022.106538

**ESGVH**

Acute hepatitis of unknown etiology in children at the 32nd ECCMID in Lisbon, Portugal  
Özkaya Sahin G, Harxhi A, Irving W and ESGVH. *Infect Dis Clin Microbiol* 2022 doi: 10.36519/idcm.2022.159

Hepatitis of unknown origin and etiology (acute non Hep A-E hepatitis) among children in 2021/2022: Review of the current findings  
Sallam M, Mahafzah A, Özkaya Sahin G and ESGVH. *Healthcare (Basel)* 2022 May 24;10(6):973. doi: 10.3390/healthcare10060973

Acute severe hepatitis of unknown aetiology in children: a new non-A-E-hepatitis virus on horizon?  
Özkaya Sahin G, Mondelli MU, Maticic M, Sandulescu O, Irving W and ESGVH. *Clin Microbiol Infect (CMI)* 2022 Sep;28(9):1300-1301. doi: 10.1016/j.cmi.2022.05.001.

Isolated anti-HBc: reflections from clinical microbiology and infectious diseases  
Ryden H, Nicolini LA, Andersson MI, Said ZNA, Sallam M, Özkaya Sahin G and ESGVH. *GERMS* 2022 Jun; 12(2): 155–157 doi: 10.18683/germs.2022.1318

Acute severe hepatitis outbreak in children: A perfect storm. What do we know, and what questions remain?  
Philippa C. Matthews, Cori Campbell, Oana Săndulescu et al. *Frontiers in Pharmacology* 2022 Nov 25;13:1062408. doi: 10.3389/fphar.2022.1062408.

Prevalence of undiagnosed hepatitis B virus infection in patients with COVID-19A single center retrospective study.  
Oana Săndulescu, Anca Streinu-Cercel, Victor

Daniel Miron et al. *Medicine (Baltimore)* 2022 Nov 11;101(45):e31385. doi: 10.1097/MD.00000000000031385.

**ESASG**

Impact of vaccination on the presence and severity of symptoms of hospitalised patients with an infection by the omicron variant (B.1.1.529) of the SARS-cov-2 (subvariant BA.1)  
Guillaume Beraud, Laura Bouetard, Rok Civljak et al. *Clin Microbiol Infect* 2022 Dec 29 doi: 10.1016/j.cmi.2022.12.020.

**Publications from recipients of ESCMID Grants**

DNA methylation alterations caused by Leishmania infection may generate a microenvironment prone to tumour development  
Vega-Benedetti A F, Loi E, Zavattari P *Front. Cell Infect. Microbiol.*, 2022; 12 doi: 10.3389/fcimb.2022.984134

A Search for Novel Legionella pneumophila Effector Proteins Reveals a Strain Specific Nucleotrophic Effector  
Monteiro I P, Sousa S et al. *Front Cell Infect Microbiol.* 2022; 12: 864626. doi: 10.3389/fcimb.2022.864626

*Staphylococcus massiliensis* isolated from human blood cultures, Germany, 2017–2020  
Last K, Lepper P M et al. *European Journal of Clinical Microbiology & Infectious Diseases* 2022; 41(4):663-669. doi: 10.1007/s10096-022-04409-4

Parenting and caregiving duties as career challenges among clinical microbiologists: a cross-sectional survey  
Last K, Schwierzeck V et al. *FutureMicrobiol* 2022; 17(8). <https://doi.org/10.2217/fmb-2021-0197>

TNF-related apoptosis-inducing ligand, interferon gamma-induced protein 10, and C-reactive protein in predicting the progression of SARS-CoV-2 infection: a prospective cohort study  
Tegethoff S A, Danziger G et al. *International Journal of Infectious Diseases* 2022; 222:178–187. doi: 10.1016/j.ijid.2022.05.051

Association between women's authorship and women's editorship in infectious diseases journals: a cross-sectional study  
Last K, Hübsch et al. *Lancet Infect Dis* 2022; 22(10): 1455-1464. doi: 10.1016/S1473-3099(22)00367-X

Self-assembling, supramolecular chemistry and pharmacology of amphotericin B: Poly-aggregates, oligomers and monomers  
Fernández-García R, Muñoz-García J C et al. *J Control Release.* 2022; 341:716-732. doi: 10.1016/j.jconrel.2021.12.019 ■

# A favourable feedback



José Ramón Paño-Pardo



Luigia Scudeller

Towards a sustainable model for ESCMID guidelines production: In 2022, our programme for guidelines fully resumed its activities, after the hindrance caused by the COVID-19 pandemic. Based on the priority list of topics built in 2021, a new call for guidelines projects was opened in 2022 and three new ESCMID-funded projects will soon start in 2023. Ongoing projects progressed, and several were published.

*Luigia Scudeller, José Ramón Paño-Pardo*

The second edition of the guidelines course was held as planned in Bologna, Italy, on 15–17 September 2022. Twenty young members participated in a 2-day training on systematic reviews and meta-analysis for guidelines development. 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 favourable 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 organizing a third edition in early fall 2023.

After the success of the Educational Workshop on economic aspects in guidelines development held at ECCMID 2022, the Guideline Subcommittee will co-organise a new workshop at ECCMID 2023 on guidelines implementation and impact in clinical practice. This workshop will review the available tools for both guidelines developers and users to track, monitor, and improve the uptake of guidelines and recommendations, with a special focus on infectious diseases, clinical microbiology, and infection control. The goal of the workshop is to explore effective strategies for putting guidelines into practice and enhancing

their impact on patient care. Besides established activities, new initiatives were started. Importantly, ESCMID started to provide methodological support and supervision to all guidelines panels. Also, a new project has kicked-off, entitled “IncOrPorating Ethics iN CLINical Guidelines: Practical Indications.” The ESCMID Ethics Advisory Committee, together with members of the Guidelines subcommittee, will perform a literature review on ethical considerations in clinical practice guidelines to inform their inclusion in future ESCMID guidelines using a reproducible framework. Finally, EUCAST involvement in all ESCMID guidelines has been formally sanctioned.

In conclusion, the ESCMID programme for guidelines is now fully established and operational. The challenge for the years ahead is to ensure efficient and relevant production of guidance, fit to the increasingly important global role of ESCMID in the field of Infectious Diseases, Clinical Microbiology and Infection Control. We plan to achieve this through an active involvement of new professionals to guidelines panels the Evidence Review Group and the Guidelines Subcommittee. 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). ■

*Luigia Scudeller*

*ESCMID Guidelines Director*

*José Ramón Paño-Pardo*

*ESCMID Guidelines Officer*

*Thank you*

*We would like to thank Amel Letaief and Khetam Hussein, who will end their term at ECCMID 2023, for their participation in the many activities of ESCMID Guidelines Subcommittee.*

*[https://www.escmid.org/guidelines\\_publications/guidelines](https://www.escmid.org/guidelines_publications/guidelines)*

## INFOBOX

### Three new ESCMID-funded guidelines projects

- Vaccination of the immunocompromised host
- Dosing of antimicrobials in patients with renal impairment with or without RRT
- Approach to suspected antibiotic allergy

Guideline	Societies Involved	ESCMID Engagement	Status
Guideline on management of severe community-acquired pneumonia	ERS/ALAT ESCIM/ESCMID	Endorsement	Near Publication
Guideline on rituals and behaviors in the operating room	ESCMID/HIS	Owner	Near Publication
Antibiotic surgical prophylaxis regimens among patients colonised with MDR-GNB and MDR-GPB	ESCMID	Owner	Near Publication
ESCMID Consensus document for management of COVID-19 in immunocompromised patients	ESCMID	Owner	In progress
Guideline on management of <i>Staphylococcus aureus</i> bacteremia	ESCMID/IDSA	Owner	In progress
Guideline on management of uncomplicated urinary tract infections	ESCMID/IDSA	Owner	In progress
Guideline on microbiological diagnosis of bloodstream 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
Diagnosis and treatment of brain abscess	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 hospitalized patients	ESCMID	Owner	In progress
IncOrPorating Ethics iN CLINical Guidelines: Practical Indications	ESCMID	Owner	In progress
Vaccination of the immunocompromised host	ESCMID	Owner	Approved
Dosing of antimicrobials in patient with renal impairment with or without RRT	ESCMID	Owner	Approved
Approach to suspected antibiotic allergy	ESCMID	Owner	Approved

## MEDICAL GUIDELINES SUBCOMMITTEE

Effrossyni Gkrania-Klotsas, United Kingdom  
 Khetam Hussein, Israel  
 Molina Gil-Bermejo, Spain  
 Amel Letaiaf, Tunisia

Sarah Tschudin Sutter, Switzerland  
 Jean-Paul Stahl, France  
 Blin Navaci, Kosovo (methodologist)  
 Mical Paul, Israel (CMI liaison, methodologist)

Scan QR-Code to find  
 all publications and  
 further informations



# Clinical Microbiology and Infection



Leonard Leibovici

*Clinical Microbiology and Infection (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 supporting authors and peer-reviewers: (<https://www.clinicalmicrobiologyandinfection.com/content/collection-editorial-policies>).

In 2022 the *CMI* impact factor rose to 13.31. 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.

At *CMI*, we encourage proposals for “How to ...” articles, an in-depth explanation of procedures, including new techniques for the clinical or research laboratory, new programmes (e.g., how to establish an antibiotic stewardship effort in a hospital) or new data analyses (e.g., how to use interrupted time-series analysis). Please see: [https://www.clinicalmicrobiologyandinfection.com/article/S1198-743X\(17\)30290-2/fulltext](https://www.clinicalmicrobiologyandinfection.com/article/S1198-743X(17)30290-2/fulltext)

In January 2022, *CMI* started to include DOIs (digital object identifiers) in article references. This is an important step in the ever-growing online platform of scientific journals that ensures a citation is always kept up to date and enables every published article to be cited properly (Clin Microbiol Infect. 2021 Dec;27(12):1715. doi: 10.1016/j.cmi.2021.10.009. Epub 2021 Oct 29.)

In July 2022, *CMI* created the opportunity of a mentored peer-review process for all its peer-re-

viewed manuscripts. For early-career researchers, peer-reviews done under mentorship can help guide good research, teach how to give constructive feedback, and help improve writing skills. Mentored peer-review helps to maintain the future role of peer-review, which is in growing demand. Please see: [https://www.clinicalmicrobiologyandinfection.com/article/S1198-743X\(22\)00367-6/fulltext](https://www.clinicalmicrobiologyandinfection.com/article/S1198-743X(22)00367-6/fulltext)

In October 2022, *CMI* started a series of commentaries on randomised controlled trials that were not done and should be done to answer a clinical question and propose how the obstacles can be overcome. Please see: [https://www.clinicalmicrobiologyandinfection.com/article/S1198-743X\(22\)00521-3/fulltext](https://www.clinicalmicrobiologyandinfection.com/article/S1198-743X(22)00521-3/fulltext)

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. ■

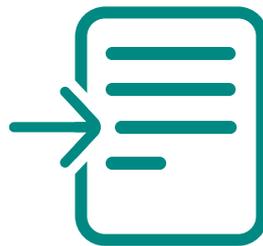
*Leonard Leibovici*  
CMI Editor-in-Chief

*Julia Friedman*  
CMI Editorial Office Manager



IMPACT  
FACTOR

**13.31**



ORIGINAL MANUSCRIPT  
SUBMISSIONS  
IN 2022

**2,110**



FULL-TEXT ARTICLE  
DOWNLOADS FOR CMI  
IN 2022

**4,620,085**

A working day in the life of ...



# Alexander W. Friedrich



Treasurer and Financial Support Officer

## **What does a typical working day look like in the life of Alexander W. Friedrich?**

I think I have one of the most interesting jobs in healthcare with plenty of responsibilities working within the world of our hospital as well as with many partners in the region and beyond. I have a day full of networking moments and meetings to manage and optimize healthcare as well as planning and realizing new buildings for the future. There are many decisions to be taken and you need to understand the different viewpoints before making the final choice. By far the most important task I have is to optimize collaboration between the people of different departments, clinics and professions in order to achieve excellent patient care and safety. This way I am informed about all the fantastic and exciting activities the people of our hospital are developing and reaching out for.

## **What influence does your involvement with ESCMID have on your work as Medical Director and CEO of the University Hospital Münster?**

One important point is that I am by law responsible in the board of directors for the hospital hygiene and prevention of infections. Of course, there are excellent doctors and scientists in our hospital who are medically responsible for this topic. However, my involvement with ESCMID allows me to be up to date with the latest global developments and discussions on the different topics regarding infection prevention and control. Infection prevention and control is of the utmost importance for me as medical director and CEO of our university hospital, and everybody who knows me knows this.

## **What professional and human commitment does the working maxim “Think out of the box and across borders” require?**

For optimal healthcare in a university hospital we not only provide care and treatment, but also develop the future of

healthcare. Therefore, we need to walk new paths and think outside of the box. Furthermore, modern healthcare needs the intertwined collaboration across all the man-made borders of different specialist fields, professions and healthcare providers in our Dutch-German healthcare region. Here, especially, the training of CM&ID specialists get my special attention in our hospital and healthcare region, as both specialist fields need highly multidisciplinary training involving many departments and institutions.

## **As CEO of a university hospital, your expertise is much in demand: how do you contribute to ESCMID?**

I am happy to contribute within the Executive Committee (EC) to all aspects of the EC leadership. As treasurer and financial support officer, I am responsible for all finances of ESCMID. Here, on the one side we have to manage properly all incomes and sponsorships and plan and realize the budgets for all activities of ESCMID. This way, ESCMID can foster science, education and networking on CM&ID Europe-wide and beyond. As clinical director of EUCIC, together with my colleagues in the steering committee, I am responsible for organizing the 2-year EUCIC course on infection prevention and control. Here, we already have run the second cohort which comprises of 25 people from more than 18 countries from all over Europe. They are following ten courses and observerships in different EUCIC excellence centres in different countries. Importantly, next to the content of infection control, the EUCIC course focuses on European competence and collaborative metacompetence in the field of infection prevention and control. ■

# Finances

Gross revenue ECCMID 2019–2022

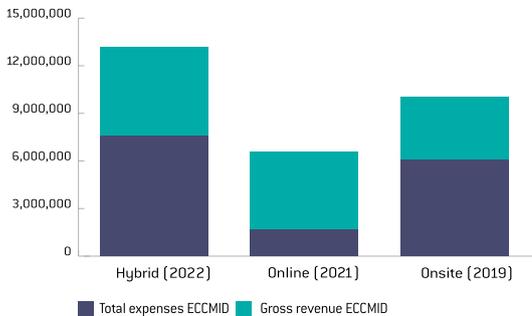


Fig. 1

Total Costs Educational Activities



Fig. 2

Research Funding 2021–2023

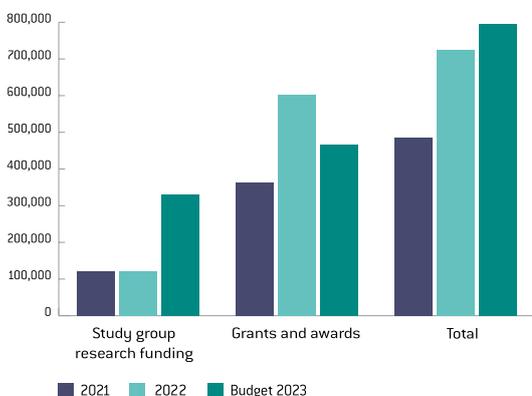


Fig. 3

## Looking back to the past year

After the challenging few years of the COVID-19 pandemic, things are finally starting to get back to normal. In 2022 we hosted the exceptionally successful first hybrid ECCMID in Lisbon, Portugal and online. With the return of onsite ECCMID we welcomed back attendees and sponsors alike resulting in increased income thanks to the high attendance. This highlights how the fields of clinical microbiology and infectious diseases have been thrust into the spotlight following the COVID-19 pandemic and its widespread global coverage in major media outlets. ECCMID generated 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).

Alongside the return to onsite ECCMID we were also able to bring back our onsite educational courses taking place across Europe, an additional two scientific conferences (IMMEM XIII and ESCMID/ASM), and a number of other activities including the EUCIC and AMS Certificate programmes. The costs of these activities are shown in the graph below (Fig. 2). After the difficulties faced during the pandemic in 2021 with entirely virtual events and conferences put on hold leading to low spending, we are now on the rise again. All of these activities showcase the shift away from COVID-focused content and the return to being able to concentrate on other research initiatives and topics like antimicrobial resistance (AMR) which will play a major role in the new ESCMID strategy moving forward.

It is not only educational events that have had an increase in the previous year but also ESCMID’s dedication to scientific excellence and research shown in the record sum of research grants that were awarded this year. There was a 33% increase in the total funding of scientific research projects as compared to previous years thanks to an increased number of grants awarded and the addition of the new Study Group Collaboration Grant. As shown in the graph below (Fig. 3) we increased the budget for scientific research projects in 2023 again by 9% compared to 2022.

## Getting read for the post-pandemic era

As the focus of the world moves away from the pandemic ESCMID can also shift focus and prepare for a new era and a strong future. ESCMID has made more significant investments in the education portfolio than previously to better support our post-graduate courses and technical workshops. ESCMID has increased investment in education by 86% compared to 2021 during the pandemic. Even compared to pre-pandemic investments education is still up by 28% from kEUR 422 in 2019 to kEUR 589 in 2022. ESCMID is growing in the classic educational content as well as branching out into new territory and new ways to deliver courses and more.

Strategic investments will be made in IT systems to allow ESCMID to continue to evolve and deliver high-quality content in the new hybrid norm both onsite and online. This will also let ESCMID propel into the future and deliver on the new ESCMID strategy with major developments in the infrastructure for the brand new ESCMID E-Academy and the E-Library both supporting our educational portfolio and yearlong learning opportunities. The costs of these activities are shown in the graph below

(Fig. 4) which will help to modernise and improve how we deliver scientific and educational content.

As a part of the new IT development and in line with the new ESCMID strategy, ESCMID will foster a focus on specific topics, such as AMR within the education portfolio. This has already been seen in the successfully launch of the AMS Certificate programme in 2022 and the continuation of the EUCIC programme with the start of a second cohort 2022–2024.

**The New ESCMID Strategy**

Over the past years the equity of ESCMID has been built up to mEUR 14.9 in 2022 (see Fig. 5). Due to the robust finances and the diligent economic decisions, we were able to compensate for most financial risks over the last years. Subsequently, ESCMID is now in a position to facilitate growth from the ground up, targeting key infrastructures for the members and launching a new ESCMID strategy. The basis of the new strategy comes in three main parts: To be global leaders in education and training, to drive forward the response to antimicrobial resistance (AMR) and to be at the forefront of preparedness and response to emerging infections.

The first aspect that will be addressed is ESCMID education. Strengthening this pillar of ESCMID will be accomplished by developing more online education and adapting what is offered to meet the new needs of ESCMID members in the form of independent learning and on-demand learning throughout the year. ESCMID courses will also work to better synchronise with the standard European curricula and collaborate stronger with European entities such as UEMS when it comes to education in the fields of CM and ID.

The pandemic has thrown into the spotlight the need for surveillance on emerging infections and another major global issue, AMR. Support for such strategic topics comes in the form of new research grants as well as the development of new ESCMID activities and organisational bodies to better address the needs of members.

**Final thoughts**

ESCMID is financially stronger than ever and will increasingly invest in our core activities and in the support of our members. We have drawn benefit from the return of onsite events, especially ECCMID which was a rousing success. It is clear to ESCMID that a strong IT infrastructure is crucial as we continue to develop the new ESCMID strategy and deliver high-quality content. Furthermore, ESCMID is highly committed to supporting science and support to our members in their cutting-edge research projects tackling important issues within the strategic focus. Together we will continue making the right strategical decisions to compensate for financial risks in a world in crisis, but always return positive financial results towards our members and to be able to invest in key initiatives that help ESCMID to accomplish its long-term mission. ■

*Alexander W. Friedrich*  
 ESCMID Treasurer and Financial Support Officer

**IT Investments**

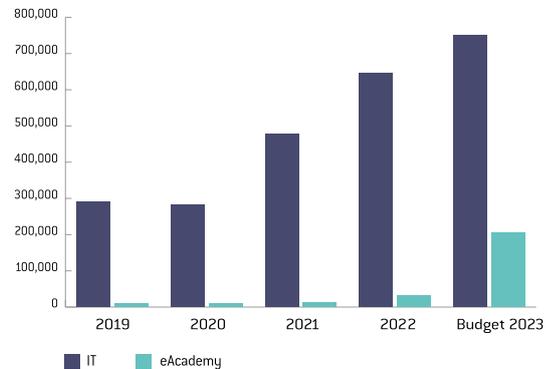


Fig. 4

**Increase of free capital**

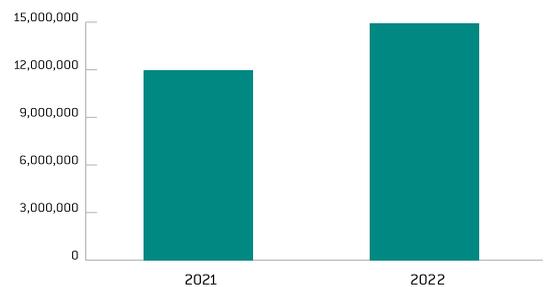
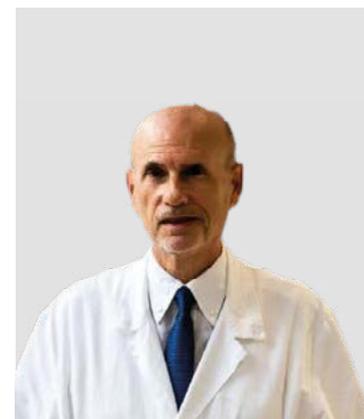


Fig. 5

# Time to start over

ESCMID International Affairs Subcommittee (EIAS) in 2022: After about three years of COVID-19 causing great concern, fear and apprehension worldwide, and a strong impact on healthcare systems and on the global economy, especially that of LMICs, the end of the tunnel seems closer.



*Nicola Petrosillo*

Which lessons have we learned from the COVID-19 pandemic? We have seen how much the global scientific community has come together and delivered some truly incredible achievements, including vaccines, better treatments, improving surveillance testing. On the other side, COVID-19 has unmasked and amplified many existing crises; health disparities that long-predated the coronavirus spread were exacerbated during the whole pandemic period.

Some wounds caused by COVID-19 should now be healed. During the SARS-CoV-2 pandemic, numerous research studies and public health programs had been compromised substantially. All efforts and resources were directed to the fight against COVID-19. While this situation was equally important in European and North American countries, in LMICs from Asia, Africa, and South America, limited resources may have had a more substantial impact on health systems.

Notably, the re-direction and allocation of health resources to the care of patients with COVID-19, resulted in a decrease in the prevention, diagnosis, treatment and follow-up of patients with infectious diseases such as HIV, TB, malaria, etc. Antenatal care and paediatric vaccination programs may have also been affected.

Moreover, infection prevention control and antimicrobial stewardship programmes may have been affected due to the shortage of human resources and

funding. The impact on antibiotic consumption in LMICs is mostly unknown. Several reports have highlighted the indiscriminate use of oral and intravenous antibiotics in LMICs, and the impact on antibiotic resistance is bound to be substantial.

Scientific societies are still recovering from the dramatic COVID-19 period. Many research activities such as sharing information, communication, education and science were reduced if not cancelled entirely. Limitations were caused not only by travel restrictions, but also by the reduced availability of most international societies towards a wide range of activities, due to their almost complete and intense involvement in the prevention and care of COVID-19 patients. EIAS also experienced a slowdown in activity, but now it is time to start over and rethink an action plan.

The main aim of EIAS remains to strengthen and promote ESCMID activities and partnerships around the world, in its areas of competence. However, it is now more important to re-establish relationships with societies and organisations working on infectious diseases, clinical microbiology, public health, infection prevention & control, tropical medicine, virology, parasitology, and with other ESCMID groups and international organisations (e.g. African CDC, ISID, etc.). Specifically, partnerships with other organisations in the care and study of infections in vulnerable populations is currently a priority for EIAS.

“None of us, acting alone,  
can achieve success.

Nelson Mandela

EIAS was also very involved in ECCMID 2022, with a talk on “Influenza and the COVID-19 pandemic” in the 2-hour Symposium “Past, present, and future of pandemics: preparedness and first defence against Influenza and the COVID-19 pandemic”. Moreover, EIAS had also collaborated with the ESCMID Study Group for Infections in Travellers and Migrants (ESGITM) on a 2-hour Educational Workshop titled “Changing world of infectious diseases: urbanisation and digitalisation Infectious diseases and globalised urbanisation” that explored infectious diseases and globalised urbanisation, innovative multi-infection screening tools, and catch-up vaccination in at-risk migrants.

In 2022, EIAS members participated to the VIII Congress of the Central America and the Caribbean Association of Infectious Diseases (ACENCAI) that took place in Panama City, Panama, from November 17 to 19, 2022. This is a biennial scientific event which brings together participants from all the Americas. Over 200 delegates from 21 countries attended ACENCAI 2022. The scientific agenda featured 80 lectures and 65 speakers from 19 countries, covering the most relevant aspects of clinical microbiology and infectious diseases.

There were also joint symposia with fellow societies such as the Pan American Association of Infectious Diseases (API), Brazilian Society of Infectious Diseases (SBI), Argentinian Society of Infectious Diseases (SADI), and Infectious Diseases Society of America (IDSA). In 2022 ACENCAI, EIAS co-organised a symposium titled “Impact of COVID-19 pandemic on infection Prevention & Control and Antimicrobial Stewardship Programme (ASP) in low

and middle-income countries (LMICs)”. The EIAS-ACENCAI symposium featured Maria Eugenia Gutierrez Pimentel (Panama, member of EIAS) as the chair and 3 speakers (2 from ESCMID and 1 from ACENCAI). ESCMID representatives were Joaquin Lopez-Contreras (Spain) and Jeroen Schouten (Netherlands) who discussed the impact of AMS and AMR in LMICs. This symposium represented a good opportunity to reinforce ESCMID partnership with Latin American societies on infectious diseases and clinical microbiology.

In 2022, close contacts with ESCMID Emerging Infections Task Force (EITaF) were continued, regarding the report of outbreaks in the “Outbreak News”, and the co-organisation of ESCMID courses on Emerging Infections that took place in January 2023.

Looking forward to 2023, EIAS has begun to collaborate with other ESCMID members to look into the creation of a new Study Group on vulnerable populations and global strategy. Furthermore, contacts were made with the Australasian Society for Infectious Diseases (ASID) for the participation of EIAS to their Annual Scientific Meeting 2024 where a joint session is proposed. Finally, the EIAS is looking forward to working with the Pan American Association of Infectious Diseases (API) for a joint session API/EIAS during the API/SADI Congress from 13 to 15 September 2023 at Buenos Aires, Argentina. We hope to see you there. ■

*Nicola Petrosillo*  
EIAS Chairperson

## ESCMID INTERNATIONAL AFFAIRS SUBCOMMITTEE

### Chairperson

*Nicola Petrosillo, Italy*

*Adrian Brink, South Africa*

*Monica Slavin, Australia*

*Mauricio J. Farfan, Chile*

*Ramasubramanian Venkatasubramanian, India*

*Seif Al-Abri, Oman*

*Yunsong Yu, China*

*Maria Eugenia Gutierrez Pimentel, API, Panama*

*Adalat Abdullayev, Azerbaijan*

# The expression of thanks goes to...

Every year hundred of reviewers dedicate their time and expertise to read and rate submitted abstracts and applications. Worth mentioning

 ECCMID abstract reviewers

 ESCMID Research Grant reviewers

## A

Aamot, Hege Vangstein, Norway    
 Abdala, Edson, Brazil    
 Abu Kwaik, Yosuef, United States   
 Agrawal, Umang, India    
 Ahman, Jenny, Sweden   
 Akan, Hamdi, Turkey   
 Akova, Murat, Turkey    
 Alanio, Alexandre, France    
 Alastruey-Izquierdo, Ana, Spain    
 Aldieri, Chiara, Italy   
 Allegaert, Karel, Netherlands   
 Almirante, Benito, Spain   
 Alp Mese, Emine, Turkey    
 Alvarez-Martinez, Miriam, Spain    
 Amaro, Francisco, Spain   
 Amoureux, Lucie, France   
 Andreoletti, Laurent, France    
 Angkasekwinai, Nasikarn, Thailand   
 Ardanuy, Carmen, Spain   
 Arendrup, Maiken Cavling, Denmark   
 Arikan-Akdagli, Sevtap, Turkey   
 Aubry, Alexandra, France   
 Azap, Özlem Kurt, Turkey   
 Azevedo, Nuno, Portugal  

## B

Balode, Arta, Latvia   
 Bandera, Alessandra, Italy   
 Barac, Aleksandra, Serbia    
 Barichello, Tatiana, United States    
 Bartoletti, Michele, Italy    
 Bayraktar, Banu, Turkey   
 Bearman, Gonzalo, United States   
 Becker, Sören Leif, Germany    
 Becker, Karsten, Germany   
 Beeton, Michael, United Kingdom 

Begovac, Josip, Croatia   
 Belaunzaran, Maria, Argentina   
 Belles, Raquel, Portugal   
 Benfield, Thomas, Denmark   
 Benito, Natividad, Spain    
 Benzonana, Nur, Turkey   
 Beraud, Guillaume, France   
 Berçot, Béatrice, France   
 Berger, Angelika, Austria   
 Bezirtzoglou, Eugenia, Greece    
 Bhatia, Sangeeta, United Kingdom   
 Bicanic, Tihana, United Kingdom   
 Bielicki, Julia Anna, United Kingdom   
 Biggs, Patrick, New Zealand   
 Bin Sulaiman, Helmi, Malaysia   
 Biswas, Sanjay, India   
 Bodilsen, Jacob, Denmark   
 Bogaert, Debby, United Kingdom   
 Bolotin, Shelly, Canada   
 Bonnet, Eric, France   
 Bonomo, Robert A., United States   
 Bonten, Marc J. M., Netherlands   
 Borghi, Elisa, Italy    
 Bosshard, Philipp, Switzerland   
 Bottagisio, Marta, Italy   
 Bottieau, Emmanuel, Belgium   
 Bouiller, Kevin, France   
 Brandao, Joao, Portugal    
 Brandenburg, Lars-Ove, Germany    
 Brink, Adrian John, South Africa   
 Broens, Els, Netherlands   
 Broenstrup, Mark, Germany   
 Brouwer, Matthijs, Netherlands    
 Brouwer, Michael, Netherlands   
 Bruchfeld, Judith, Sweden   
 Brugger, Silvio Daniel, Switzerland    
 Bruisten, Sylvia, Netherlands 

Bruno, Pozzetto, France   
 Bucki, Robert, Poland   
 Buetti, Niccolò, Switzerland   
 Bugla-Ploskonska, Gabriela, Poland   
 Buonfrate, Dora, Italy   
 Burgmann, Heinz, Austria   
 Bustinduy, Amaya, United Kingdom    
 Butaye, Patrick, Belgium 

## C

Calandra, Thierry, Switzerland   
 Calarasu, Cristina, Romania   
 Calbo, Esther, Spain   
 Calcagno, Andrea, Italy    
 Callon, Domitille, France   
 Calmy, Alexandra, Switzerland   
 Camoez, Mariana, Portugal    
 Campos, Josefina, Argentina   
 Canton, Rafael, Spain   
 Cardona, Pere-Joan, Spain   
 Carevic, Biljana, Serbia   
 Carmeli, Yehuda, Israel   
 Carratala, Jordi, Spain   
 Carter, Katharine, United Kingdom    
 Carvalho, Agostinho, Portugal    
 Cassini, Alessandro, Switzerland   
 Castelli, Francesco, Italy   
 Cattoir, Vincent, France   
 Cauda, Roberto, Italy   
 Caumes, Eric, France   
 Cavaco, Lina, Denmark   
 Cerca, Nuno, Portugal    
 Cercenado, Emilia, Spain   
 Cervera, Carlos, Canada    
 Charani, Esmita, United Kingdom   
 CHARREL, Remi, France   
 Chauzy, Alexia, France 

Chemaly, Roy, United States   
 Chesdachai, Supavit, United States   
 Chevaliez, Stephane, France   
 Christaki, Eirini, Greece   
 Cimen, Cansu, Germany   
 Cinque, Paola, Italy   
 Cirillo, Daniela Maria, Italy   
 Cisneros, José Miguel, Spain   
 Claas, Eric, Netherlands   
 Coenye, Tom, Belgium   
 Coia, John E., Denmark   
 Coiras, Mayte, Spain   
 Coombs, Geoffrey, Australia   
 Coque, Teresa M., Spain   
 Cordero Matia, Elisa, Spain   
 Cornely, Oliver, Germany   
 Cos, Paul, Belgium   
 Couto, Natacha, United Kingdom   
 Cox, Rebecca Jane, Norway   
 Cremieux, Anne-Claude, France   
 Cretu, Carmen-Michaela, Romania   
 Cruz Mata, Israel, Spain   
 Cuenca-Estrella, Manuel, Spain   
 Cutler, Sally Jane, United Kingdom   
 Cuwcutt, Kelly, United States 

## D

Dagan, Ron, Israel   
 Daikos, George, Greece   
 Damasco, Paulo, Brazil   
 Dancer, Stephanie, United Kingdom   
 Dandekar, Ajai, United States   
 Dannaoui, Eric, France   
 D'Arminio Monforte, Antonella, Italy   
 Davies Forsman, Lina, Sweden   
 Day, Jeremy, United Kingdom   
 De Ambrogio, Marco, United Kingdom 

De Castilhos, Juliana, Brazil   
 De Jong, Birgitta, Sweden   
 De Lencastre, Herminia, Portugal   
 De Swart, Rik, Netherlands   
 Dedic, Kanita, Bosnia and Herzegovina   
 del Campo, Rosa, Spain   
 Del Mar, Maria, Italy   
 Delliere, Sarah, France   
 Dessau, Ram B., Denmark   
 Dhungana, Gunaraj, Nepal   
 Digiandomenico, Antonio, United States   
 Do, Thi Thuy, Ireland   
 Dobay, Orsolya, Hungary   
 Dobrindt, Ulrich, Germany   
 Docobo Perez, Fernando, Spain   
 Docquier, Jean-Denis, Italy   
 Dolejska, Monika, Czech Republic   
 Donker, Tjibbe, Germany   
 Dorlo, Thomas, Netherlands   
 Dortet, Laurent, France   
 Doucet Populaire, Florence, France   
 Draghijeva, Elisaveta, Kuwait   
 Drevinek, Pavel, Czech Republic   
 Drgona, Lubos, Slovakia   
 Dumenil, Guillaume, France   
 Dumke, Roger, Germany   
 Dumpis, Uga, Latvia   
 Duvignaud, Alexandre, France 

## E

Edit, Zsoldiné dr. Urbán, Hungary   
 Efstathiou, Androulla, United Kingdom   
 Egli, Adrian, Switzerland   
 Eikeland, Randi, Norway   
 Ekelund, Oskar, Sweden   
 Endimiani, Andrea, Switzerland   
 Ene, Luminita, Romania 

Ercibengoa Arana, Maria, Spain   
 Ersu, Refika, Canada   
 Esteves, Francisco, Portugal   
 Evans, Benjamin, United Kingdom 

## F

Faria, Nuno Alexandre, Portugal   
 Fatahi-Bafghi, Mehdi, Iran, Islamic Republic of   
 Favennec, Loic, France   
 Feasey, Nicholas, Malawi   
 Fernández-Hidalgo, Nuria, Spain   
 Fernández-Ruiz, Mario, Spain   
 Figueiredo, Ceu, Portugal   
 Filia, Antonietta, Italy   
 Filip, Roxana, Romania   
 Fingerle, Volker, Germany   
 Fisman, David, Canada   
 Fitzpatrick, Fidelma, Ireland   
 FL, Barroso da Silva, Brazil   
 Flisiak, Robert, Poland   
 Florent, Morio, France   
 Fonseca, Denise, Brazil   
 Fortuna Rodrigues, Celia, Portugal   
 Foster, Timothy J., Ireland   
 Fowotade, Adeola, Nigeria   
 Francois, Bruno, France   
 Freire, Maristela P, Brazil   
 Freitas, Ana Raquel, Portugal   
 Fricke, W. Florian, Germany   
 Friedland, Jon S., United Kingdom   
 Frimodt-Moller, Niels, Denmark   
 Frisan, Teresa, Sweden 

## G

Gaia, Valeria, Switzerland   
 Galani, Irene, Greece   
 Gales, Ana, Brazil 

Garau, Javier, Spain   
 Garcia Vidal, Carolina, Spain   
 Gastmeier, Petra, Germany   
 Gatermann, Sören G., Germany   
 Gatier-Bouchardon, Anne, France   
 Gauthier, Timothy, United States   
 Geerlings, Suzanne E., Netherlands   
 Georghiou, Sophia, Switzerland   
 Getahun, Haileyesus, Switzerland   
 Ghanem-Zoubi, Nesrin, Israel   
 Giacobbe, Daniele Roberto, Italy   
 Giamarellos-Bourboulis, Evangelos, Greece   
 Giamarellou, Helen, Greece   
 Giannella, Maddalena, Italy   
 Giannitsioti, Efthymia, Greece   
 Giske, Christian, Sweden   
 Glocker, Erik, Germany   
 Gniadkowski, Marek, Poland   
 Gobbi, Federico Giovanni, Italy   
 Goering, Richard V., United States   
 Goldenberg, Simon, United Kingdom   
 Gomez Junyent, Joan, Spain   
 Gomperts-Boneca, Ivo, France   
 González Gutiérrez, Jessica, Spain   
 Gopalakrishnan, Ramachandran, India   
 Goto, Michihiko, United States   
 Gottlieb, Thomas, Australia   
 Grainger, Emma, United Kingdom   
 Green, Stefan, United States   
 Gresnigt, Mark, Germany   
 Groll, Andreas H., Germany   
 Grupel, Daniel, Israel   
 Guardabassi, Luca, Denmark   
 Guery, Benoit, Switzerland   
 Guinea, Jesus, Spain   
 Gutierrez Pimentel, Maria Eugenia, Panama 

## H

Hamprecht, Axel, Germany   
 Hansen, Sonja, Germany   
 Harbarth, Stephan Juergen, Switzerland   
 Harboe, Zitta Barrella, Denmark   
 Harvala, Heli, United Kingdom   
 Haug, Jon Birger, Norway   
 Hedayati, Mohammad Taghi, Iran   
 Hedberg, Maria E., Sweden   
 Hedman, Klaus, Finland 

Hell, Markus, Austria   
 Henden, Andrea, Australia   
 Hernandez Jimenez, Jarelys, United States   
 Herrmann, Jean Louis, France   
 Higgins, Paul G, Germany   
 Hilty, Markus, Switzerland   
 Hocquet, Didier, France   
 Holten Møller, Camilla, Denmark   
 Holzknacht, Barbara Juliane, Denmark   
 Hooda, Yogesh, Bangladesh   
 Horcajada, Juan P, Spain   
 Horgan, Mary, Ireland   
 Hrabak, Jaroslav, Czech Republic   
 Hughes, Diarmaid, Sweden   
 Humphreys, Hilary, Ireland   
 Hunfeld, Klaus-Peter, Germany   
 Huovinen, Pentti, Finland   
 Husain, Shahid, Canada   
 Hussein, Khetam, Israel 

## I

Iaria, Chiara, Italy   
 Idelevich, Evgeny A., Germany   
 Ilori, Elsie, Nigeria   
 Inan, Asuman, Turkey   
 Ip, Margaret, Hong Kong   
 Irving, William, United Kingdom   
 Ison, Michael G, United States 

## J

Jacqueline, Relecteur, Switzerland   
 Jankovic Makek, Mateja, Croatia   
 Jansen, Ruud, Netherlands   
 Jaulhac, Benoît, France   
 Jensen, Jorgen Skov, Denmark   
 Jensen, Slade, Australia   
 Jhaveri, Ravi, United States   
 Jin, Dong-Yan, Hong Kong   
 Jin, Tao, Sweden   
 Johnson, Melissa, United States   
 Junie, Lia Monica, Romania   
 Justesen, Ulrik Stenz, Denmark 

## K

Kahl, Barbara C., Germany   
 Kahlmeter, Gunnar, Sweden   
 Kai, Hilpert, United Kingdom   
 Kajova, Mikael, Finland   
 Kamga, Sandra, Netherlands 

Kantele, Anu, Finland   
 Karatuna, Onur, Sweden   
 Kardioglu, Aras, United Kingdom   
 Katragkou, Aspasia, United States   
 Kehrmann, Jan, Germany   
 Kernif, Tahar, Algeria   
 Khanna, Nina, Switzerland   
 Kiernan, Martin, United Kingdom   
 Kikhney, Judith, Germany   
 Kjellerup, Birthe, United States   
 Klimko, Nikolai, Russian Federation   
 Kline, Kimberley, Switzerland   
 Klingspor, Lena, Sweden   
 Kluytmans-Van den Bergh, Marjolein, Netherlands   
 Knoester, Marjolein, Netherlands   
 Kocak Tufan, Zeliha, Turkey   
 Köck, Robin, Germany   
 Kocsis, Béla, Hungary   
 Kodan, Parul, India   
 Koedel, Uwe, Germany   
 Koeken, Valerie A. C. M., Netherlands   
 Kofteridis, Diamantis, Greece   
 Köhler, Philipp, Germany   
 Kohli, Mikashmi, Switzerland   
 Kolpen, Mette, Denmark   
 Kondori, Nahid, Sweden   
 Kostyanov, Tomislav, Luxembourg   
 Koulenti, Despoina, Greece   
 Kowalska, Justyna, Poland   
 Kozlov, Roman, Russian Federation   
 Krutova, Marcela, Czech Republic   
 Kuenzli, Esther, Switzerland   
 Kühl, Richard, Switzerland   
 Kuijper, Ed J., Netherlands   
 Kumar, CP Girish, India   
 Kumar, Deepak, India   
 Kurt, Özgür, Turkey 

## L

Lackner, Michaela, Austria   
 Lagrou, Katrien, Belgium   
 Lakatos, Botond, Hungary   
 Landersdorfer, Cornelia, Australia   
 Lanternier, Fanny, France   
 Larsen, Jesper, Denmark   
 Larsen, Anders Rhod, Denmark   
 Lass-Flörl, Cornelia, Austria   
 Last, Katharina, Germany 

Laurent, Frederic, France   
 Law, Hwa Lin, Singapore   
 Lebeaux, David, France   
 Leblebicioglu, Hakan, Turkey   
 Leegaard, Truls Michael, Norway   
 Leibovici, Leonard, Israel   
 Lembo, David, Italy   
 Letaief, Amel, Tunisia   
 Lewis, Russell Edward, Italy   
 Ley, Serej, Switzerland   
 Liesenfeld, Oliver, United States   
 Lina, Gerard, France   
 Ljungman, Per, Sweden   
 Lo, Stephanie, United Kingdom   
 Lockhart, Shawn R., United States   
 Logan, Clare, United Kingdom   
 Logue, Catherine, United States   
 Longtin, Yves, Canada   
 Loo, Vivian, Canada   
 Lopardo, Gustavo, Argentina   
 López Lozano, José María, Spain   
 López-Cortés, Luis Eduardo, Spain   
 López-Medrano, Francisco, Spain   
 López-Vélez, Rogelio, Spain   
 Lorè, Nicola Ivan, Italy   
 Lucet, Jean-Christophe, France   
 Ludovisi, Serena, Italy   
 Lundgren, Jens D., Denmark   
 Lutsar, Irja, Estonia   
 Lytsy, Birgitta, Sweden 

## M

Maasoumy, Benjamin, Germany   
 MacGowan, Alasdair P., United Kingdom   
 Mackenzie, Colin, Germany   
 Maddocks, Sarah, United Kingdom   
 Maertens, Johan, Belgium   
 Mailles, Alexandra, France   
 Mairpady Shambat, Srikanth, Switzerland   
 Malani, Preeti, United States   
 Malhotra-Kumar, Surbhi, Belgium   
 Mallet, Maxime, France   
 Malone, Matthew, Australia   
 Maltezou, Helena, Greece   
 Manon, Vouga, Switzerland   
 Manuel, Oriol, Switzerland   
 Maraolo, Alberto Enrico, Italy   
 Marekovic, Ivana, Croatia   
 Marks, Michael, United Kingdom 

Martinez, Esteban, Spain   
 Martinez, Jose Luis, Spain   
 Martinez Martinez, Luis, Spain   
 Martin-Quiros, Alejandro, Spain   
 Marwick, Charis, United Kingdom   
 Mathers, Amy, United States   
 Maticic, Mojca, Slovenia   
 Matteelli, Alberto, Italy   
 Maurer, Florian, Germany   
 McGeer, Allison, Canada   
 Mediannikov, Oleg, France   
 Megarbane, Bruno, France   
 Megraud, Francis, France   
 Meletiadis, Joseph, Greece   
 Menchinelli, Giulia, Italy   
 Meschiari, Marianna, Italy   
 Mestrovic, Tomislav, Croatia   
 Mielke, Martin, Germany   
 Mikulska, Malgorzata, Italy   
 Minor, Philip, United Kingdom   
 Miotto, Paolo, Italy   
 Miranda, Isabel, Portugal   
 Molina, Jean-Michel, France   
 Molina Gil-Bermejo, José, Spain   
 Mölling, Paula, Sweden   
 Montravers, Philippe, France   
 Moore, David, United Kingdom   
 Moore, Catrin, United Kingdom   
 Moore, Dave, United Kingdom   
 Mora Montes, Hector Manuel, Mexico   
 Morace, Giulia, Italy   
 Morais da Fonseca, Denise, Brazil   
 Moran-Gilad, Jacob, Israel   
 Moreno, Santiago, Spain   
 Moreno Lozano, Cristina, United Kingdom   
 Morio, Florent, France   
 Morte Romea, Elena, Spain   
 Mossong, Joel, Luxembourg   
 Mueller, Nicolas, Switzerland   
 Muller, Anouk, Netherlands   
 Müller, Nicolas, Switzerland   
 Murillo, Oscar, Spain   
 Murugaiyan, Jayaseelan, India   
 Murugaiyan, Jayaseelan, India 

## N

Naas, Thierry, France   
 Nahrgang, Saskia, Denmark   
 Nasim, Asma, Pakistan   
 Naucner, Pontus, Sweden 

Nesher, Lior, Israel   
 Neves Silva, Nélia, Portugal   
 Nguyen Van, Jean-Claude, France   
 Nielsen, Elisabet, Sweden   
 Niemann, Stefan, Germany   
 Niesters, Hubert G.M., Netherlands   
 Nir-Paz, Ran, Israel   
 Nohynek, Hanna M., Finland   
 Norrby-Teglund, Anna, Sweden   
 Nosanchuk, Joshua, United States   
 Novais, Angela, Portugal   
 Nurjadi, Dennis, Germany 

## O

Öbrink-Hansen, Kristina, Denmark   
 Ochoa, Theresa J., Peru   
 Oggioni, Marco Rinaldo, Italy   
 Oliver, Antonio, Spain   
 Ostergaard, Christian, Denmark   
 Ostrosky-Zeichner, Luis, United States   
 O'Sullivan, Denise, United Kingdom   
 Otelea, Dan, Romania   
 Overesch, Gudrun, Switzerland   
 Özkaya Sahin, Gülsen, Sweden 

## P

Pagani, Leonardo, Italy   
 Pagliara, Stefano, United Kingdom   
 Paixão, Paulo, Portugal   
 Pál, Tibor, Hungary   
 Pallecchi, Lucia, Italy   
 Palos, Carlos, Portugal   
 Pandey, Lalit, India   
 Papadopoulos, Antonios, Greece   
 Papagiannitsis, Costas, Greece   
 Papa-Konidari, Anna, Greece   
 Papaparaskevas, Joseph, Greece   
 Papic, Neven, Croatia   
 Papp-Wallace, Krisztina, United States   
 Pascual Hernandez, Alvaro, Spain   
 Patel, Robin, United States   
 Patsoula, Eleni, Greece   
 Payne, Lara, United Kingdom   
 Pea, Federico, Italy   
 Peiffer-Smadja, Nathan, France   
 Peixe, Luisa Maria Vieira, Portugal   
 Peppelenbosch, Maikel, Netherlands   
 Perez-Romero, Pilar, Spain   
 Petersen, Eskild, Denmark 

Petosa, Carlo, France   
 Petrosillo, Nicola, Italy   
 Pierard, Denis, Belgium   
 Pirnay, Jean-Paul, Belgium   
 Pistello, Mauro, Italy   
 Pitout, Johann, Canada   
 Pletz, Mathias, Germany   
 Poirel, Laurent, Switzerland   
 Pomba, Constança, Portugal   
 Portillo, Maria Eugenia, Spain   
 Pournaras, Spyros, Greece   
 Power, Nicholas, Ireland   
 Poyart, Claire, France   
 Prendki, Virginie, Switzerland   
 Presterl, Elisabeth, Austria   
 Price, James, United States   
 Price, James, United Kingdom   
 Proctor, Richard A., United States   
 Puca, Edmond, Albania   
 Puchhammer-Stöckl, Elisabeth, Austria 

## R

Raglio, Annibale, Italy   
 Rahman, Ayesha, United Kingdom   
 Ramage, Gordon, United Kingdom   
 Ramirez, Mario, Portugal   
 Rasa, Huseyin Kemal, Turkey   
 Rasmussen, Magnus, Sweden   
 Rautelin, Hilpi, Sweden   
 Ravinetto, Raffaella, Belgium   
 Rawson, Timothy, United Kingdom   
 Raymaekers, Marijke, Belgium   
 Reffuveille, Fany, France   
 Reigadas, Elena, Spain   
 Reinehr, Michael, Switzerland   
 Rello, Jordi, Spain   
 Reno, Chiara, Italy   
 Repetto, Ernestina Carla, Belgium   
 Reuter, Sandra, Germany   
 Rex, John H., United States   
 Rey, David, France   
 Ricaño-Ponce, Isis, Netherlands   
 Richert, Laura, France   
 Rizzi, Valentina, Italy   
 Roca, Ignasi, Spain   
 Rocha-Pereira, Joana, Belgium   
 Rockstroh, Juergen, Germany   
 Rodrigues, Charlene, United Kingdom   
 Rodrigues, Camilla, India 

Rodrigues, Liliana, Portugal   
 Rodriguez, Christophe, France   
 Rodriguez Iglesias, Manuel, Spain   
 Rodríguez-Baño, Jesús, Spain   
 Rodriguez-Sanchez, Belen, Spain   
 Roger, Thierry, Switzerland   
 Rogers, Thomas R., Ireland   
 Rohde, Holger, Germany   
 Roilides, Emmanuel, Greece   
 Romdhani, Meriam, Tunisia   
 Römling, Ute Maria, Sweden   
 Rosch, Jason, United States   
 Rose, Warren, United States   
 Rossen, John W. A., Netherlands   
 Ruiz-Camps, Isabel, Spain   
 Rumbaugh, Kendra, United States   
 Rupali, Priscilla, India   
 Rupnik, Maja, Slovenia   
 Ruppe, Etienne, France   
 Ruta, Simona, Romania   
 Ruybal, Paula, Argentina   
 Ryom, Lene, Denmark 

## S

Sader, Helio, United States   
 Saegeman, Veroniek, Belgium   
 Said, Zeinab, Egypt   
 Salas Coronas, Joaquín, Spain   
 Sa-Leao, Raquel, Portugal   
 Sánchez-Martínez, Francesca, Spain   
 Sanglard, Dominique, Switzerland   
 Savelkoul, Paul, Netherlands   
 Schaffer, Kirsten, Ireland   
 Schön, Thomas, Sweden   
 Schrenzel, Jacques, Switzerland   
 Schwartz, Stefan, Germany   
 Schweitzer, Valentijn, Netherlands   
 Scudeller, Luigia, Italy   
 Sendi, Parham, Switzerland   
 Sereno, Denis, France   
 Sester, Martina, Germany   
 Severini, Carlo, Italy   
 Shafiq, Nusrat, India   
 Shankar Hari, Manu, United Kingdom   
 Sheppard, Mary, United Kingdom   
 Sheppard, Samuel, United Kingdom   
 Sherwin, Catherine, United States   
 Shindo, Nahoko, Switzerland   
 Shrivastava, Jaya, United Kingdom 

Sim, Jean, Singapore   
 Simões, Daniel, Portugal   
 Sintchenko, Vitali, Australia   
 Sipahi, Oguz Resat, Turkey   
 Skevaki, Chrysanthi, Germany   
 Skiada, Anna, Greece   
 Skov, Robert Leo, Denmark   
 Smani, Younes, Spain   
 Snelders, Eveline, Netherlands   
 Snyderman, David R., United States   
 Snygg-Martin, Ulrika, Sweden   
 Soki, Jozsef, Hungary   
 Solbrig, Marylou, United States   
 Sonnevend, Agnes, Hungary   
 Soriano, Alex, Spain   
 Srinivasan, Arjun, United States   
 Stahl, Jean Paul, France   
 Stecher, Bärbel, Germany   
 Stefani, Stefania, Italy   
 Šterbenc, Anja, Slovenia   
 Stewart, Adam, Australia   
 Stoesser, Nicole, United Kingdom   
 Stone, Neil, United Kingdom   
 Strowig, Till, Germany   
 Stupica, Daša, Slovenia   
 Sundqvist, Martin, Sweden   
 Sundsfjord, Arnfinn, Norway   
 Suputtamongkol, Yupin, Thailand 

## T

Tacconelli, Evelina, Italy   
 Tahar, Rachida, France   
 Tamarozzi, Francesca, Italy   
 Tambyah, Paul A., Singapore   
 Tängdén, Thomas, Sweden   
 Tattevin, Pierre, France   
 Taylan Özkan, Aysegül, Turkey   
 Tenson, Tanel, Estonia   
 Tessema, Sofonias, Ethiopia   
 Theuretzbacher, Ursula, Austria   
 Thiebaut, Rodolphe, France   
 Thompson, George, United States   
 Thomsen, Trine Rolighed, Denmark   
 Timsit, Jean-Francois, France   
 Tomas Carmona, Maria del Mar, Spain   
 Torres, Antoni, Spain   
 Toubiana, Julie, France   
 Trampuz, Andrej, Germany   
 Trcek, Janja, Slovenia 

Trubiano, Jason, Australia   
 Tsalik, Ephraim, United States   
 Tschudin-Sutter, Sarah, Switzerland   
 Tsioutis, Constantinos, Cyprus   
 Tunney, Michael, United Kingdom   
 Tuon, Felipe, Brazil   
 Tzanakaki, Georgina, Greece 

## U

Ullmann, Andrew J., Germany   
 Uribe Pulido, Natalí, Colombia   
 Uy, Almira, Philippines 

## V

Vaidya, Viplov, India   
 Van Bambeke, Françoise, Belgium   
 Van der Gast, Christopher, United Kingdom   
 Van der Hoek, Wim, Netherlands   
 Van Dijck, Patrick, Belgium   
 Van Duin, David, United States   
 Van Herp, Michel, Belgium   
 Van Ingen, Jakko, Netherlands   
 Van Leer Buter, Coretta, Netherlands   
 Van Lieshout, Lisette, Netherlands   
 Van Mourik, Maaïke, Netherlands   
 Van Prehn, Joffrey, Netherlands   
 Van Schaik, Willem, United Kingdom   
 Van Sorge, Nina, Netherlands   
 Vandenesch, Francois, France   
 Vatcheva-Dobrevska, Rossitza, Bulgaria   
 Veeraraghavan, Balaji, India   
 Velikov, Petar, Bulgaria   
 Veloo, Alida C.M., Colombia   
 Vergnano, Stefania, United Kingdom   
 Veziris, Nicolas, France   
 Vilaplana, Cristina, Spain   
 Villegas, Maria Virginia, Colombia   
 Viveiros, Miguel, Portugal   
 Vlahovic-Palcevski, Vera, Croatia   
 Vognbjerg Sydenham, Thomas, Denmark   
 Von Müller, Lutz, Germany   
 Vos, Margreet C., Netherlands   
 Voss, Andreas, Netherlands 

## W

Wagenlehner, Florian, Germany   
 Walczak, Andrew, Australia   
 Walia, Kamini, India 

Wallis, Steven, Australia   
 Wallon, Martine, France   
 Walsh, Thomas, United States   
 Walsh, Fiona, Ireland   
 Warris, Adilia, United Kingdom   
 Wauters, Joost, Belgium   
 Wechsler-Fördös, Agnes, Austria   
 Weese, Scott, Canada   
 Wejse, Christian, Denmark   
 Werner, Guido, Germany   
 Wertheim, Heiman, Netherlands   
 Westendorp, Willeke, Netherlands   
 Westh, Henrik, Denmark   
 White, Lewis, United Kingdom   
 Wicha, Sebastian, Germany   
 Wichmann, Dominic, Germany   
 Willmann, Matthias, Germany   
 Wilson, Michael L., United States   
 Wilusz, Jeffrey, United States   
 Woerther, Paul-Louis, France   
 Wootton, Mandy, United Kingdom   
 Wouthuyzen-Bakker, Marjan, Netherlands 

## Y

Yahara, Koji, Japan   
 Yahav, Dafna, Israel   
 Yazdanpanah, Yazdan, France   
 Yurdaydin, Cihan, Turkey   
 Yusuf, Erlangga, Belgium 

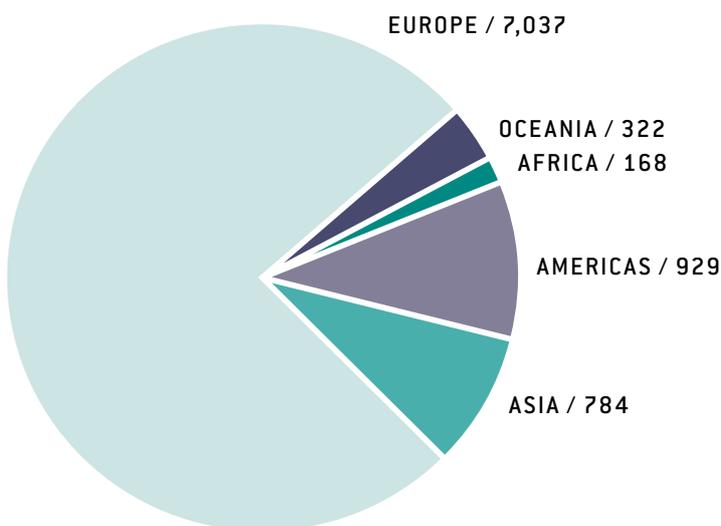
## Z

Zaccarin, Matthias, Denmark   
 Zadoks, Ruth, Australia   
 Zajkowska, Joanna Maria, Poland   
 Zeitlinger, Markus, Austria   
 Zhou, Kai, China   
 Zidovec Lepej, Snjezana, Croatia,   
 Zimmermann, Stefan, Germany,   
 Zingg, Walter, Switzerland   
 Zinkernagel, Annelies, Switzerland 

# Facts & Figures\*



## MEMBERSHIP BY CONTINENT



LAST YEAR OVER

# 13,500

ATTENDEES AT ECCMID

\* as of 22 March 2023

TOP TEN MEMBERSHIP COUNTRIES

1. United Kingdom
2. Italy
3. Spain
4. United States
5. Netherlands
6. France
7. Switzerland
8. Australia
9. Denmark
10. Belgium



IN TOTAL THERE ARE

9,240

ESCMID MEMBERS



ENGAGED IN

32

STUDY GROUPS



SO FAR FROM

143

COUNTRIES

“*If it is a professional issue, it is also an ESCMID issue.*”

Robert Leo Skov

# Wishes for the future? ESCMID aims high.

It is important to be able to speak the scientific language, but that is not enough if the general public cannot understand it. Furthermore, if you don't understand a person's reasoning, how can you hope to change their views or opinions in the long run? This was made apparent in the course of the COVID-19 pandemic and over the past years. However, this is an imperative problem to solve as emerging infections are a constant threat that will always be around in some form. With this in mind, ESCMID will strengthen this angle within the new strategy following three pillars of growth.

**Being at the forefront of preparedness and response to emerging infections**

**Driving forward the response to antimicrobial resistance**

**Global leadership in guiding practice, education and training**

**You are the future of ESCMID!**

# Imprint

## **ESCMID Yearbook**

Annual publication of the European Society of Clinical Microbiology and Infectious Diseases.

## **Editorial office**

ESCMID Executive Office  
Gerbergasse 14  
4001 Basel, Switzerland  
info@escmid.org  
www.escmid.org

## **Editorial Board**

Simone Brüderli  
Patrick Kudyba  
Alessandro Piroso

## **Editorial Concept, Project Management and Graphic Design**

Code Red. Agency for Communication and Technology, Düsseldorf/Hamburg, Germany

## **Printing**

Hofmann Druck, Emmendingen, Germany

## **Photos/Image Sources**

Joseph Carr  
Fernando Costa  
Frederico Domingues  
Thomas Ecke  
Uta Grütter  
Unsplash

## **Editorial statement**

Despite careful editing and setting, ESCMID, Code Red. and Hofmann Druck cannot be liable for any errors or inaccuracies in this publication. Opinions expressed are those of the contributing authors.

## **Manuscripts and copyright**

The editorial team welcomes your manuscripts, graphics and photographs for publication, especially from ESCMID Study Groups, collaborators and third parties. Copyright for articles accepted for publication is shared between ESCMID and the author(s).

Copyright © European Society of Clinical Microbiology and Infectious Diseases 2023.

All rights reserved. Non-commercial reproduction authorised, subject to acknowledgment of source.

ESCMID  
Executive Office  
Gerbergasse 14  
4001 Basel  
Switzerland

