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**Credits**

Viral electron microscopic images © Mateja Poljšak-Prijatelj, Marko Kolenc, Ljubljana
Macroscopic/microscopic images © Ángel Ros Die, Valencia (page 82 Credits)
Message from the President

“A unique European approach to bring together clinical microbiologists and infectious disease specialists in one society and a joint annual congress are the foundation of ESCMID’s and ECCMID’s success and continued prosperity.”

Mario Poljak
ESCMID President
mario.poljak@escmid.org

On the right track
ESCMID is on the right track. ESCMID has the largest number of members ever, and we are heading towards another very successful annual ECCMID congress – and looking forward to what will probably be the largest attendance ever. I strongly believe that the success and continued prosperity of ESCMID and ECCMID are the result of the society’s unique approach, which brings together clinical microbiologists and infectious disease specialists from all settings under one roof for timely diagnosis, treatment, and prevention of infection-related diseases. Our renowned comprehensive, and multidisciplinary strategy is mirrored in the society’s structure, its committees and study groups, its research, educational and professional activities, and ECCMID.

Born in Europe, acting globally
Although European in name and in its general spirit, ESCMID at the same time also understands that it can only be successful in fighting infectious diseases, which spread across the globe without regard for political or geographical borders, if it continuously promotes international cooperation and expands its reach beyond its home continent. The results of these efforts are seen in the truly international ECCMID Programme Committee and its faculty. ESCMID’s delegates from over 100 countries, the location of the society’s workshops and postgraduate courses, in more than 100 ESCMID collaborative centres of excellence throughout the world and the prominent role of ESCMID members at major international meetings, on guideline committees, as well as in national and international scientific and professional bodies.

Science is our priority
ESCMID brings together the best scientists in infectious diseases and in clinical/medical microbiology in its 30 dedicated study groups. Participating in one or more of ESCMID’s study groups offers the opportunity to find collaborative research partners, to set the agenda of research conferences under the auspices of ESCMID, and to receive one of our generous research grants. Our younger members are eligible for research and travel grants, and they benefit from the experience and expertise of mentors at ESCMID’s mentorship centres. Altogether, ESCMID funds its members’ research projects, education, and training with more than EUR 700,000 every year. About EUR 300,000 of this is reserved every year for ESCMID’s grant programme to finance promising research projects of young ESCMID members.

Shaping the profession
ESCMID’s two committees, EUCAST and EUCIC, are progressing well. Under the auspices of ESCMID itself and the European Committee on Antimicrobial Susceptibility Testing (EUCAST), several countries outside Europe are also establishing national antimicrobial susceptibility testing committees, and increasingly more laboratories are implementing European breakpoints and methods. Among many other projects, our second committee, the European Committee on Infection Control (EUCIC), has just launched a comprehensive two-year training programme with the goal of certifying individuals trained in current infection prevention and control practices and providing them with meta-competences from a European perspective.

ESCMID collaborates closely with the European Union of Medical Specialists (UEMS) to promote common European curricula and exams for clinical/medical microbiology and infectious diseases across the continent, and to ensure that both specialties are well recognized and attractive for generations to come. ESCMID’s trainee association (JAE) and parity commission are testimony to our commitment to trainees and young specialists and to our support for groups that risk being underrepresented in training, research, educational, and professional activities.

Sharing knowledge without limits and borders
We are fortunate to have one of the best jobs in the world: working in microbiology laboratories or hospital wards as clinical/medical microbiologists or infectious disease specialists. Our demanding occupation requires constant education and peer-to-peer knowledge dissemination and discussion. Is there any better place to learn and discuss new approaches and practices on how to diagnose, treat and prevent infection-related diseases than at ECCMID? Thank you for making ECCMID 2018 one of the top scientific events of the year!

Ready for future challenges
After six years of serving on the ESCMID Executive Committee, the last two as ESCMID President, it is time to hand over the reins to my successor, esteemed colleague and friend President-elect Jesús Rodríguez Baño, who has accepted the challenging task of leading the society for the next two years. Under my presidency, the ESCMID Executive Committee has continued to abide by the principle of primus inter pares – we decide and act as one family, as we have done over the years. These two years have been very demanding and busy, and I do not believe my family and colleagues at my home laboratory would have looked kindly on a longer term. However, I am privileged to have been part of an exceptional team, greatly supported by the ESCMID Office, which has helped advance ESCMID on its path to becoming the most influential society in clinical microbiology and infectious diseases.

Past President Murat Akova is completing his term on the ESCMID Executive Committee at ECCMID 2018. ESCMID’s current success would not have been possible without his vision, diplomacy, commitment and inexhaustible energy – thank you Murat for your dedication and hard work over the past decade!

Finally, I wish to congratulate Emmanuelle Cambau, clinical microbiologist from the University of Paris Diderot School of Medicine, Paris, France, and Onder Erginöyl, infectious disease specialist from Koç University School of Medicine, Istanbul, Turkey, who will join the ESCMID Executive Committee in April 2018. I am looking forward to working with them towards our common goals.

The centenary of the 1918 influenza pandemic is a moment to pause and reflect carefully on our capacity to respond to another worldwide epidemic. Such a prospect is troubling, even alarming. This is why we are here, united in our unique society, to hope for the best but also prepare for the worst. This yearbook offers an overview of ESCMID’s activities between two ECCMID’s. Enjoy your read and thank you for your interest in and contribution to our society.
Message from the incoming President

At this year’s ECCMID I will be taking over the presidency from my admired colleague Mario Poljak. I am looking forward to fulfilling this challenging role and to serving our members’ needs. As he has said, leading ESCMID is teamwork: the joint effort of the ESCMID Executive Committee with the valued assistance of our staff in Basel, and the collaboration of committees, subcommittees, study groups and our valued members. Having my name added to the list of my distinguished predecessors is an honour.

Support members

Under my leadership the society will continue to provide support to its members in research, education and their endeavours to advance their professional careers, and we will do so whilst reinforcing our commitment to providing and promoting equality of opportunities for all our members regardless of their gender, race, nationality or any other irrelevant aspect through our Parity Commission.

Tackle challenges

Fulfilling our goals has become more challenging and complex over the years, with global tasks affected by globalization, global warming, migration and refugee crises, overpopulation, and economic crises. The outbreaks caused by emergent and re-emergent pathogens, the number of sexually-transmitted infections and the increasing number of problems related to infectious diseases and microbiology move up the agendas of decision-makers. We want ESCMID to be a transparent and open society, open to its members worldwide, especially its young members, with interest in any area of clinical microbiology and infectious diseases. Our study groups continue to welcome new members, promoting their active contributions and providing them with opportunities to make their activities more visible to the scientific community. We will do our best to continue building a society our members can feel proud to be a part of.

ESCMID’s Activities

We are proud to see that ECCMID has been breaking all records in recent years, and has become the annual highlight for experts in the field from all over the world, the most important congress combining clinical microbiology and infectious diseases. This is obviously a consequence of the outstanding job done by the Programme Director, the Programme Committees and everyone involved in the organization of this huge event. Our journal Clinical Microbiology and Infection has continuously and significantly increased its influence and prestige thanks to the outstanding work of all authors, reviewers and members of the editorial board, and it is clearly a priority for us to continue supporting its growth and relevance. We will reinforce the development of medical guidelines, a portfolio where ESCMID’s expertise has received new impetus in recent years, another one of our current priorities. All these activities are possible only with the work and assistance of the ESCMID managers at our executive office whose commitment has contributed greatly to the success of our enterprises.

Homogenization

ESCMID will continue to work towards the homogenization of board-certified training in the medical specialties of infectious disease and clinical microbiology in all European countries and beyond, in collaboration with UEMS-ID and UEMS-CM. Beyond that we will work to promote the homogeneity of portfolios of services, performance and the quality of the clinical microbiology and infectious diseases department everywhere according to each society’s needs. We must increase our political influence so that the health problems related to infectious diseases and microbiology move up the agendas of decision-makers. We want ESCMID to be a transparent and open society, open to its members worldwide, especially its young members, with interest in any area of clinical microbiology and infectious diseases. Our study groups continue to welcome new members, promoting their active contributions and providing them with opportunities to make their activities more visible to the scientific community. We will do our best to continue building a society our members can feel proud to be a part of.

Changes in the Executive Office

Samina Ahmed started as Professional Affairs Manager at the ESCMID Executive Office in July 2017, taking over from Dianne White, who left after 15 years at the society. Science Manager Henri Saenz and Finance and HR Manager Milena Griffiths left the society in April 2018. Henri has been with the society for almost 12 years, while Milena joined ESCMID three years ago. We thank them for their valuable work and dedication to the society. In July 2017 Executive Director Judith Zimmermann and Office Administration Officer Marc Balmer left to pursue careers outside ESCMID. We thank them for their contributions and wish them all the best in their future careers. We warmly welcome Agnès Combebias, who joined the society as Accountant in October 2017 and Simone Brüderli who started as Office Manager in March 2018.

Thanks

I want to take this opportunity to thank all current and former Executive Committee members for their support and trust. ESCMID’s success today would not have been possible without the vision, commitment and inexhaustible energy of all the superb leaders the society has seen over the years – with some of whom I have had the privilege to work. I also want to thank all those colleagues who over many weekends and late evenings wrote up or reviewed abstracts, manuscripts, research proposals or finalized the ESCMID scientific programme. Above all I want to thank Mario Poljak for his hard work and dedication to the society. During my term we will proudly build on the work he and others started and follow the path to fulfill our vision. The other members of the Executive Committee and I are looking forward to working with you towards our common goals and we will do our very best to live up to the trust you have placed in us.
Changes to the ESCMID Executive Committee

At the end of 2017 elections were held among the membership to fill three positions on the ESCMID Executive Committee, one for clinical microbiology and two representing infectious diseases. The members duly elected were Emmanuelle Cambau, a professor of microbiology at the School of Medicine of the University of Paris Diderot and Senior Medical Officer Bacteriology and Hygiene at Lariboisière Hospital in Paris, France as well as Önder Erginçöl, a professor of infectious diseases and clinical microbiology at the Keş University School of Medicine, Istanbul, Turkey.

Emmanuelle and Önder will join the ESCMID Executive Committee in April 2018. Scientific Affairs Officer, Annelies Zinkernagel, from University Hospital Zurich, Switzerland, was successfully re-elected for a second term representing infectious diseases. We congratulate the newly and re-elected officers and are looking forward to their contributions to the society.

New EC members

Emmanuelle Cambau (CM)
Emmanuelle has been an ESCMID member for two decades. She has been instrumental in the initiation of several activities, including the study group on mycobacterial infections and the EUCAST antimicrobial susceptibility testing committee, where she also acted as chair. She was an active member of ESCMID’s Professional Affairs Subcommittee, the study group on antibiotic resistance surveillance and the ECDM Programme Committee. Emmanuelle wants to further reinforce the link between clinical microbiology and infectious diseases by merging microbiological, epidemiological and clinical aspects in the development of scientific, educational and professional activities. She is deeply involved with teams in several European countries, but is particularly interested in the promotion of ESCMID around the world. Emmanuelle would like to improve the share of women and underrepresented countries in all ESCMID-related educational, professional and scientific activities. Emmanuelle’s goals are to support and train younger colleagues and those from countries with less access to knowledge and innovation to improve the outcome of patients suffering from infectious diseases and to raise the profile of ESCMID and recognition of clinical microbiology worldwide.

Önder Erginçöl (ID)
Önder is an active infectious diseases physician, who also performs clinical and epidemiological research. He was the president of KILIMIK, the Turkish society of clinical microbiology and infectious diseases between 2013 and April 2017. He lives and works in Turkey, a country that connects different cultures and is confronted with huge challenges in the field of infectious diseases and clinical microbiology. Önder embraces these challenges and sees an opportunity to develop new approaches and solutions to tackle infection-related diseases. He is interested in organizing meetings that will increase motivation for the profession. He helped organize courses, all of which helped increase the professional and scientific capacity among the participants: on viral haemorrhagic fever in 2008, Acinetobacter infections in 2010, and antimicrobial stewardship in 2017. Önder aims to promote the activities of ESCMID’s Trainee Association and help extend ESCMID’s reach through its research and educational activities in his region and throughout the world.

Message of appreciation

Murat Akova
At this year’s ECCMID in April 2018, Publications and Communications Officer and Past-President Murat Akova will complete his term on the ESCMID Executive Committee. We thank him for his much appreciated accomplishments and hard work as officer and president, and we have no doubt that he will continue to stay closely connected to the society.

One of longest terms
Murat has been a member of the ESCMID Executive Committee since 2007. As one of the longest serving executives of the society in its more recent history, Murat contributed significantly to the society’s successful development for more than a decade. He helped shape ESCMID with his expertise and experience in the management of infectious diseases. When he was responsible for the education portfolio he was instrumental in the set-up, development and streamlining of a process which allowed for a more effective evaluation of the society’s postgraduate educational courses and the annual Summer School. As Scientific Affairs Officer he successfully aligned the research activities to focus on the outcomes of ESCMID’s projects and increase the number of publications in renowned journals.

ECCMID relocation
As ESCMID President, he oversaw the organization of two highly successful ECCMIDs, 2015 in Copenhagen and 2016 in Amsterdam. The latter was successfully relocated to the Netherlands from its originally planned location in Istanbul following political unrest in his home country, Turkey. During his presidency the society’s congress for the first time clearly surpassed the 11,000-participant mark.

Founding member of ESGICH
Murat was one of the founding members of the society’s study group on immunocompromised hosts, ESGICH, which today is one of ESCMID’s most active research groups. He initiated the cooperation between ESCMID and the European Organisation for Research and Treatment of Cancer (EORTC) and the European Conference on Infections in Leukaemia (ECIL), a partnership that resulted in the production of a series of game-changing guidelines on the management of infectious diseases in immunocompromised patients.

Service to the society
He was a driving force for the ESCMID Summer School in Cappadocia in 2010. He used his good connections in the region to organize the educational event in this historical region in Central Anatolia, which was an unforgettable experience for everybody, participants and faculty alike. He repeated this once again in his home country in 2015, where he gave his full support to the school directors for another successful Summer School in Istanbul. More recently, as Publications Officer and Past-President, he shared his expertise and experience to modernize and rejuvenate the society’s journal Clinical Microbiology and Infection, which today is a publication with an excellent reputation in the field. He was also instrumental in the reinforcement of the society’s medical guidelines activities. He helped set up an effective professional process allowing ESCMID to produce high-quality guidelines alone and in cooperation with selected partners. As Communications Officer he successfully raised the society’s profile through both traditional and modern forms of communication. Thanks to his initiative, ESCMID is seen today as a reference organization in the fight against antimicrobial resistance by the public and policy makers alike. We are sure that we will continue to see Murat at ESCMID’s educational events, which he will support with his experience, skills and kind personality.

Murat Akova
Professor of Medicine
Department of Infectious Diseases and Clinical Microbiology
Hacettepe University School of Medicine
Ankara, Turkey
Member ESCMID Executive Committee 2007 – 2018
ESCMID President 2014 – 2016
Organizational chart

Executive Committee members

Current Members

- Mario Poljak
  Ljubljana, SI
- Jesús Rodríguez Baño
  Seville, ES
- Alex M. Friedrich
  Groningen, NL
- AnnaLisa Zinkernagel
  Zurich, CH
- Evelina Tacconelli
  Tübingen, DE
- Maurizio Sanguinetti
  Rome, IT
- Murat Akova
  Ankara, TR

Members as of 23 April 2018

- Jesús Rodríguez Baño
  Seville, ES
- Maurizio Sanguinetti
  Rome, IT
- Alex M. Friedrich
  Groningen, NL
- AnnaLisa Zinkernagel
  Zurich, CH
- Önder Ergönül
  Istanbul, TR
- Emmanuel Cambou
  Paris, FR

Executive Office

- Simone Brüderli
  Office Manager
- Chantal Britt
  Communications Manager
- Samina Ahmed
  Professional Affairs Manager
- Henri Saenz
  Scientific Manager
- Helene Griffiths
  Finance & HR Manager
- Thomas Graef
  Education Manager
- Nancy Gerits
  Publications & Medical Guidelines Manager
- Carla Seiler
  Event Coordination Manager
- Agathe Combisneau
  Accounting Manager
- Önder Ergönül
  Istanbul, TR
- Chantal Britt
  Communications Manager
- Samina Ahmed
  Professional Affairs Manager
- Henri Saenz
  Scientific Manager
- Helene Griffiths
  Finance & HR Manager
- Thomas Graef
  Education Manager
- Nancy Gerits
  Publications & Medical Guidelines Manager
- Carla Seiler
  Event Coordination Manager

Ad hoc EC members

-_winfried v. Kern
  Freiburg, DE
- Leonard Løbenzni
  Tel Aviv, IL
- Luong Scudeller
  Pavia, IT
- Christian Giske
  Stockholm, SE
- Murat Akova
  Ankara, TR

ESCMID Council

- Scientific Affairs Subcommittee
  Study Groups
- Professional Affairs Subcommittee
  Parity Commission, TAE
- Education Subcommittee
- Publication Subcommittee

Publications

- Publications Officer
  & Immediate Past President
- Medical Guidelines Officer

ESCMID Programme Committee

- ECCMID Programme Director
- CMI Editor-in-Chief
- Medical Guidelines Director

International Affairs Director

- International Affairs Director
- International Affairs Subcommittee
Research grants
Annually around 15 excellent researchers receive a research grant for their submitted proposals; this programme continues to be highly popular with our members (see page 66 Awards & Grants) and very productive in terms of publications (see page 29 Publications).

Study groups
Last year I wrote that a medical society is a network of peers, who collaborate to advance knowledge and help translate it into practice. Our study groups are the core of our society with many diverse activities (following pages) and are the key drivers of scientific and medical progress. During the past year, we saw the foundation of two new groups, one on public health microbiology and one on respiratory viruses (see page 14 New Study Groups) — so now there are 30 study groups active within ESCMID.

The ESCMID network
All the above is led and facilitated by the network of ESCMID committees and subcommittees. The groups within this network interact with and influence each other.

EUCAST (see page 22 EUCAST) per se was originally the network of a study group which has spread its net very successfully worldwide. The latest development is EUCAST’s proposal to modify the definitions of susceptibility categories S, I and R and to introduce an area of technical uncertainty (ATU).

EUCIC (see page 26 EUCIC) — founded in 2014 — now offers a training programme allowing the sharing of expertise and competencies amongst training centres, countries and professions closely reflecting ESCMIDs spirit. This collaborative effort will result in the training of a new generation of infection prevention and control specialists.

The objectives of the recently established ESCMID emerging infections task force (see page 28 EITaF) are to provide up-to-date information on outbreaks with epidemic or pandemic potential, to evaluate threat levels and to stimulate research on emerging infections, including surveillance and diagnostics.

Awards
The Young Investigator Award acknowledges outstanding individual researchers and both honours as well as spreads ground-breaking work. This year we honour Evgeny Idelevich, a clinical microbiologist from the University Hospital Münster, Germany, for his work on rapid sepsis diagnostics and susceptibility testing; and James Price, a research lecturer at the Brighton and Sussex Medical School, United Kingdom, for developing strategies to prevent healthcare-associated infections by multidrug-resistant organisms (see page 69 Young Investigators). Quick action to prevent or diagnose life-threatening infections is most relevant today.

Scientific Affairs Subcommittee
Finally I would like to thank the Scientific Affairs Subcommittee (SAS) for their never-ceasing dedication to advance our projects and embrace new ideas. Thank you! Following suggestions by SAS members, we have, among other things, adapted the format of the Scientific Affairs Meeting at ECCMID, the most important platform within Scientific Affairs, bringing together the SAS and representatives of all study groups plus the ECCMID Programme Director and Medical Guidelines Director to exchange new ideas. The new format allows more sharing of information and includes networking time to follow up individually on potential collaborative project ideas. We all look forward to another productive year.

ESCMID sections and section leaders
• Bacteria & bacterial diseases (Örjan Dyar, Stockholm, Sweden)
• Fungi & fungal diseases (Andreas Groll, Münster, Germany)
• Parasites & parasitic diseases (Luigi Graderi, Rome, Italy)
• Viruses & viral diseases (Adriana Vince, Zagreb, Croatia)

ESCMID themes and theme leaders
• Pathogenesis & immunology (Mona Johannessen, Tromsø, Norway)
• Epidemiology, public health & vaccination (Carolina Garcia Vidal, Barcelona, Spain)
• Infections & nosocomiality (Souha Kanj, Beirut, Lebanon)
• Diagnostics (Gilbert Greub, Lausanne, Switzerland)
• Antimicrobial resistance & susceptibility testing (Frédéric Laurent, Lyon, France)

For more information see www.escmid.org/science.

“In addition to awards and funding which provide great motivation it is the ever expanding ESCMID network of very knowledgeable scientists and specialists relying on the scientific affairs subcommittee and our study groups which is the key driver of the scientific and medical progress.”

Annelies Zinkernagel
ESCMID Scientific Affairs Officer
annelies.zinkernagel@escmid.org
ESCMID fighting antimicrobial resistance (AMR)
www.escmid.org/fightingresistance

ESCMID’s role in the fight against AMR
• Conducts research and organizes courses and conferences on surveillance, infection control, stewardship
• Holds annual congress ECCMID, the largest platform for AMR research presentations and discussions
• Provides expert advice on One Health antimicrobial resistance policies at a national, European and international level (WHO priority list on resistant pathogens)
• Partner in WHO’s antimicrobial resistance surveillance project CACER
• Supports and organizes public and specialist awareness campaigns
• Helps assess and speed up the development of new diagnostic methods and drug therapies

Excessive agricultural use & One Health

EUCAST Veterinary Subcommittee on Antimicrobial Susceptibility Testing VetCAST
• Received funding within the joint programming initiative on antimicrobial resistance
• Position paper on proposed VetCAST approach on breakpoints

Study Group for Veterinary Microbiology ESGVM
• Educational antimicrobial stewardship project PREPARE VET on antimicrobial use and resistance at over 100 veterinary schools in 31 European countries
• Funding of research project to evaluate tools to identify veterinary pathogens
• Co-organized workshop on antimicrobial susceptibility testing in Toulouse
• Course on antimicrobial stewardship in veterinary medicine

Fungal Infection Study Group EFISG
• Antifungal stewardship
• Research and information on emerging fungal resistance
• Study of interactions between agricultural use of antifungals and human medicine

Lack of new antimicrobials

PK/PD of Anti-Infectives Study Group EPASS
• Article on role of infection models and PK/PD modelling for optimizing care of critically ill patients with severe infections
• Annual study grant of EUR 1,000 to foster collaboration across laboratories and help mentor young investigators
• Anti-infective PK/PD conference on 21 April 2017 in Vienna
• Pipeline Seminar at ECCMID

Prescription and therapy

Study Group for Antimicrobial Stewardship ESGAP
• Surveys of antibiotic prescribing
• Training in antimicrobial stewardship, diagnosis and management of drug-resistant infections, antimicrobial susceptibility testing and surveillance
• Nine articles in several scientific journals and antimicrobial stewardship book
• Over ten research projects, including several surveys on antimicrobial stewardship
• Surveys on antibiotic prescribing

Lack of rapid diagnostics

Study Group for Genomic and Molecular Diagnostics ESGMD
• Project for AMR rapid diagnostic test, consortium AMR-RDT within joint programming initiative on AMR JPIAMR
• Study of whole-genome and phenomic investigations of the traits that favoured the predominance and shift to OXA-23-producing IC2 updates in carbapenem-resistant Acinetobacter baumannii

Non-compliance & lack of hygiene

Study Group for Antibiotic Policies ESGAP
• Public campaigns on AMR and antimicrobial stewardship

Post infection control

European Committee on Infection Control EUCIC
• Implements infection control and preventive measures to reduce the burden of healthcare-associated infections
• Launched the EUIC Infection Prevention and Control Certificate, the first European training programme of its kind, which will integrate courses at an international level with national courses in selected EUIC excellence centres, creating a network of faculty and trainees in different European regions to enable trainees to acquire European competence in the field of infection prevention and control
• Updating the recommendations on the practices and rituals in the operating theatre, jointly with the Healthcare Infection Society, UK

European Committee on Antimicrobial Susceptibility Testing EUCAST
• Definition and review of optimal dosing of antibiotics to treat existing and newly emerging bacterial species
• Optimization of antibiotic susceptibility testing methods
• Surveys on antibiotic susceptibility

Study Group for Antimicrobial Resistance Surveillance ESgars, Study Group for Bloodstream Infections and Sepsis ESGSBI, Study Group for Infections in Compromised Hosts ESGIC
• Contributes to INCREMENT-SOT project, which studies bloodstream infections caused by multidrug-resistant Enterobacteriaceae in solid organ transplantation

Study Group for Implant-Associated Infections ESGIAI, Study Group for Antimicrobial Stewardship ESGAP, Study Group for Infections in the Elderly ESGIE, Study Group for Nosocomial Infections ESGNI, Study Group for Critically Ill Patients ESGCIP, Study Group for Bloodstream Infections and Sepsis ESGSBI, Study Group for Chromobacillus difficile ESGCD
• Contribute to project on antimicrobial prescribing and stewardship (ESCAPS) to explore a consensus for antimicrobial prescribing and stewardship competencies

Study Group for Staphylococci and Staphylococcal Diseases ESGS
• Articles about MRSA infections among patients
• Co-organized course on diagnosis of bloodstream infections
• Contributions to study on multi-resistant neonatal sepsis-associated Staphylococcus capitis

European Committee on Infections EUCIC, Study Group for Infections in the Elderly ESGIE, Study Group for Nosocomial Infections ESGNI, Study Group for Critically Ill Patients ESGCIP, Study Group for Bloodstream Infections and Sepsis ESGSBI, Study Group for Chromobacillus difficile ESGCD
• Surveys on antibiotic susceptibility
• Defining and review of optimal dosing of antibiotics to treat existing and newly emerging bacterial species
• Optimization of antibiotic susceptibility testing methods
• Surveys on antibiotic susceptibility

Study Group for Antimicrobial Resistance Surveillance ESgars, Study Group for Bloodstream Infections and Sepsis ESGSBI, Study Group for Infections in Compromised Hosts ESGIC
• Contributes to INCREMENT-SOT project, which studies bloodstream infections caused by multidrug-resistant Enterobacteriaceae in solid organ transplantation

Study Group for Implant-Associated Infections ESGIAI, Study Group for Antimicrobial Stewardship ESGAP, Study Group for Infections in the Elderly ESGIE, Study Group for Nosocomial Infections ESGNI, Study Group for Critically Ill Patients ESGCIP, Study Group for Bloodstream Infections and Sepsis ESGSBI, Study Group for Chromobacillus difficile ESGCD
• Contribute to project on antimicrobial prescribing and stewardship (ESCAPS) to explore a consensus for antimicrobial prescribing and stewardship competencies

Study Group for Staphylococci and Staphylococcal Diseases ESGS
• Articles about MRSA infections among patients
• Co-organized course on diagnosis of bloodstream infections
• Contributions to study on multi-resistant neonatal sepsis-associated Staphylococcus capitis

European Committee on Infections EUCIC, Study Group for Infections in the Elderly ESGIE, Study Group for Nosocomial Infections ESGNI, Study Group for Critically Ill Patients ESGCIP, Study Group for Bloodstream Infections and Sepsis ESGSBI, Study Group for Chromobacillus difficile ESGCD
• Surveys on antibiotic susceptibility
• Defining and review of optimal dosing of antibiotics to treat existing and newly emerging bacterial species
• Optimization of antibiotic susceptibility testing methods
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Here we look back over the many activities performed by our study groups in the calendar year 2017. 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 ECCMID’s scientific programme by proposing symposia, educational workshops and meet-the-expert sessions. They organize the majority of courses/workshops for the ESCMID education programme (see page 40 Education) and publish a number of scientific articles in ESCMID’s name (see page 29 Publications).

**New Study Groups**

**ESGPHM**
European Society of Clinical Microbiology and Public Health Medicine

The newly founded ESCMID study group for public health microbiology (ESGPHM) started its activities earlier this year. Main objectives are to:

- create an interdisciplinary platform for collaboration of clinical microbiologists, infectious disease epidemiologists and infectious disease clinicians on public health issues,
- provide information and training about the principles of microbiology, epidemiology and public health practice towards the detection, surveillance, investigation, and control of microbial diseases,
- increase awareness of the crucial role of public health microbiology in infectious disease control in outbreak detecting, emerging infections, and treatment failures, in addition to strengthening laboratory capacity on a global level,
- create a platform for public health microbiology trainees to present their research results to clinical microbiologists/infectious disease specialists and other affiliated disciplines,
- improve the transfer of knowledge between different countries in Europe regarding new methods and insights in public health microbiology.

**ESGREV**
European Society of Clinical Microbiology and Infectious Diseases

The ESCMID study group for respiratory viruses (ESGREV) was established very recently. Main objectives are to:

- bring together Europe’s leading experts on respiratory viruses
- help reduce the burden of respiratory viruses in society by – advancing scientific knowledge – raising public awareness through educational activities – stimulating collaborative projects and communication between scientists who are interested in this field

**Existing Study Groups**

**EFISG**
European Society of Clinical Microbiology and Infectious Diseases

- Published an editorial – Diagnosing fungal infections in haematology patients – another case of less is more in the clinical setting? (Clin Microbiol Infect 2017;23:896-7).
- Organized the IV Meeting of the ECMM/ISHAM working group fungal respiratory infections in cystic fibrosis (Fri-CF), 5–6 June 2017 in Osuna, Spain, and co-organized three ESCMID workshops and courses jointly with several other study groups.
- Currently there are four active research projects including – Medical Guideline project EFISG, MoliYest: a multicentre survey on mixed yeast infections in Europe, European survey on antifungal therapy duration for invasive aspergillosis and Scedosporium lung: practice survey on Scedosporium colonization and infection in lung transplant recipients.

**EFWISG**
European Society of Clinical Microbiology and Infectious Diseases

- Completed the study group research project – Discrimination of Salmonella non-typhoid high-risk clones by high-throughput spectroscopic techniques (MALDI-TOF and FTIR-ATR).
- Runs European, multi-centre, prospective prevalence pilot-study of Cronobacter sakazakii infections in humans (ECURGIN).

**ESFACH**
European Society of Clinical Microbiology and Infectious Diseases

- Distributed an EPASG study grant of EUR 1,000 annually to foster collaboration across laboratories and help mentor young investigators.
- Organized the conference Anti-infective PK/PD – integrating knowledge and innovating therapies, held on 21 April 2017 in Vienna, Austria.

**ESGAI**
European Society of Clinical Microbiology and Infectious Diseases

- Published an article – The role of infection models and PK/PD modelling for optimising care of critically ill patients with severe infections – in collaboration with ESGCH and ESGCIP (Intensive Care Med 2017;43(7):1021-32).
- Distributed an EPASG study grant of EUR 1,000 annually to foster collaboration across laboratories and help mentor young investigators.
- Organized the conference Anti-infective PK/PD – integrating knowledge and innovating therapies, held on 21 April 2017 in Vienna, Austria.

**ESGMD**
European Society of Clinical Microbiology and Infectious Diseases

- Co-organized the ESCMID capacity-building workshop – Application of MALDI-TOF MS in clinical microbiology – together with ESGMD and ESGEM, 13 – 15 March 2017 in Basel, Switzerland.
- Runs joint initiative of seven laboratories with specific expertise – ENRIA (European network for the rapid identification of anaerobes), which is supported by ESGAI and ESGEM.
- Runs the research project – Isolation and analysis of antibiotic resistance and presence of the resistance genes in Rec-teroides/Parabacteroides strains from faecal samples collected from eight European countries.
• Published nine original articles in several scientific journals and a book, Antimicrobial Stewardship [published in April 2017 by Elsevier].
• Co-organized several educational and ESCMID courses on various aspects of antimicrobial stewardship.
• Runs over ten research projects, including several surveys in the area of antimicrobials and antimicrobial stewardship.

• Co-organized two ESCHMID courses and EORTC/ESCMID brainstorm meeting jointly with several other study groups.
• Participates in the surveillance system for Eastern Europe and Central Asia (CAESAR) in collaboration with WHO Europe and RIVM with microbiological capacity building as well as methodology for surveillance and interpretation of the data.
• Runs joint project INCREMENT-5OT [an international consortium for the clinical study of bloodstream infections caused by multidrug-resistant Enterobacteriaceae in solid organ transplantation] together with ESGBIS, ESGICH and the Spanish Network for Research in Infectious Diseases (REIPS).

• Published and contributed to seven publications in various scientific journals.
• Co-organized two courses in 2017 jointly with several other study groups.
• Currently there are nine active international collaborative projects coordinated or co-organized by ESGBIS where many European countries are represented, including two large clinical studies on bloodstream infections: INCREMENT and BICHROME.

• Published and contributed to several articles in various scientific journals, including – Use of nebulized antimicrobials for the treatment of respiratory infections in invasively mechanically ventilated adults: a position paper from ESCMID. (Clin Microbiol Infect 2017;23(9):629-39).
• Co-organized three ESCMID courses jointly with several other study groups.
• Completed several study group research projects in 2012 including Prospective evaluation of incidence, risk factors and outcomes for patients with ventilator-associated events in European intensive care units.

• Published four articles in 2012, including – To test or not to test? Laboratory support for the diagnosis of Lyme borreliosis: a position paper of ESGBOR, the ESCMID study group for Lyme borreliosis. (Clin Microbiol Infect 2018;24(2):118-24).
• Co-organized the international symposium on ticks, tick-borne pathogens and disease (ITPD 2017), 24 – 26 September 2017 in Vienna, Austria.
• Runs five collaborative projects, including IDSA’s Lyme borreliosis medical guideline project.

• Published a review – How to: establish and run a stool bank. (Clin Microbiol Infect 2017;23(12):924-30) and contributed to six other publications in various scientific journals.
• Co-organized workshop on microbiological support to European surveillance of Clostridium difficile with ECDC, 11 – 12 May 2017 in Vienna, Austria.
• Currently runs several research projects, including standardization of fecal microbiota transplantation in collaboration with United European Gastroenterology (UEG) and European surveillance of CDI in collaboration with ECDC.
• Co-organized an ESCMID course – Update on infections associated with orthopaedic implants: diagnosis and management – jointly with Clínica Universidad de Navarra, GEIH and SEIMC, 7 – 9 June 2017 in Pamplona, Spain.
• Runs several multi-centre studies, including a retrospective cohort study on late acute prosthetic joint infections that includes more than 30 centres from different countries. The study results are in the publication stage.
• Runs a project – ESCMID study groups’ competencies in antimicrobial prescribing and stewardship (ESCAPS) to explore a consensus for antimicrobial prescribing and stewardship competencies – together with ESGAP, ESIGNI, ESGIAI, ESGCIP, ESGBIS, and ESGCD.
• Published two research articles, including – Multinational case-control study of risk factors for the development of late invasive pulmonary aspergillosis following kidney transplantation. (Clin Microbiol Infect 2018;24(2):192-198).
• Runs two projects, including an INCREMEN-SOT study, and is currently preparing ESCMID guidelines for the diagnosis and management of Aspergillus diseases in collaboration with EFSIG, ECMM and ERS.
• Co-organized an ESCMID course on viral infections in immunocompromised patients, 8 – 9 June 2017 in Bratislava, Slovakia, and an EORTC/ESCMID brainstorming meeting on 14 February 2017 in Brussels, Belgium.
• Published an article – An update on bacterial brain abscess in immunocompetent patients (Clin Microbiol Infect 2017;23(9): 614-620) and contributed to nine other publications.
• Organized an ESCMID course – Omics of host and pathogens during infections – jointly with ESGMD and Medical University of Grenoble, 6 – 8 September 2017 in Grenoble, France.
• Runs a research project – Infectious diseases screening and vaccination policy for migrants in Europe.
• Secured 20 free registrations to ECCMID 2018 for refugee medical professionals.
• Prepared an ESGITM-ESGICH consensus document – Recommendations on travel medicine and management of endemic diseases in solid organ transplant recipients, currently in the publication process.
• Published five research articles, including – Rapid detection and evolutionary analysis of Legionella pneumophila serogroup 1 sequence type 47. (Clin Microbiol Infect 2017;23(4): 264.e1-264.e9), and a revision of ESGLI/EWGLI technical guidelines for control and prevention of travel associated Legionnaires’ disease.
• Co-organized an ESCMID course – Regional capacity-building for integration of next-generation sequencing in the clinical microlab, 30 Oct – 1 Nov 2017 in Herzliya, Israel.
• Runs a research project – Microbiome analysis of drinking water systems: evaluation of new approaches for prevention and control of Legionnaires’ disease.
• Organized an EORTC/ESCMID brainstorming meeting on 14 February 2017 in Brussels, Belgium, and co-organized five ESCMID courses, including a capacity-building workshop – Applications of MALDI-TOF mass-spectrometry in clinical microbiology, 13 – 15 March 2017 in Basel, Switzerland.
• Completed the project – Pilot study on the microbiome of the appendix and gut in acute appendicitis.
• Currently runs two research studies – Improvement of species-level detection and identification of non-tuberculous mycobacteria using matrix-assisted laser desorption/ionization time-of-flight mass spectrometry (MALDI-TOF MS), and Carbapenem-resistant Acinetobacter baumannii: whole-genome and phenomic investigation of the traits that favoured the predominance and shift to OXA-23 producing IC2 isolates.

• Published a research article – Multi-centre evaluation of one commercial and 12 in-house real-time PCR assays for detection of Mycoplasma pneumoniae. [Diagn Microbiol Infect Dis 2017, 88(2):111-114].
• Published an editorial – Mycoplasma pneumoniae clinical manifestations, microbiology and immunology. [Front Microbiol 2017, 8:1916].

• Runs a research study – Development of a reference method for MIC-testing of Mycobacterium tuberculosis as a basis for evidence based clinical breakpoints.
• Collaborates with WHO on drug resistance in leprosy and with EMA and WHO on new antimycobacterial drugs.
• Runs a medical guideline project – Non-tuberculous mycobacteria, and a study – MDR-TB in migrants to Europe: a database analysis and systematic review.

• Co-organized an ESCMID course – Hospital-acquired infections: understanding the magnitude and needed interventions, 24 – 25 March 2017 in Muscat, Oman.
• Runs a research study on a consensus for antimicrobial prescribing and stewardship competencies together with several different study groups.
• Is currently updating the recommendations on the practices and rituals in the operating theatre, jointly with the development committee of HIS, UK.

• Published two research articles, including – MRSA infections among patients in the emergency department: a European multicentre study. (J Antimicrob Chemother 2017;72(2):372-375).
• Co-organized an ESCMID course – Improving the diagnosis of bloodstream infections – advancing technology and quality for better care, 28 – 31 March 2017 in Nice, France.
• Runs two projects jointly with other study groups – ESCMID practice guideline on the management of S. aureus bloodstream infection, and Evolution history and large-scale phylogeography of the multiresistant, neonatal sepsis-associated Staphylococcus capitis clone MRC-2.

• Published a research article – Multi-centre evaluation of one commercial and 12 in-house real-time PCR assays for detection of Mycoplasma pneumoniae. (Diagn Microbiol Infect Dis 2017; 88(2):111-114).
European Committee on Antimicrobial Susceptibility Testing (EUCAST) in 2017 – 2018

EUCAST provides breakpoints and antimicrobial susceptibility testing methods. ESCMID is the administrative, financial and scientific framework for EUCAST ESCMID (www.escmid.org), the ESCMID Förderverein (www.escmid-ev.org) and the European Centre for Disease Prevention and Control (ECDC, www.ecdc.europa.eu) supported EUCAST financially in 2017. ESCMID supports the development of the EUCAST disk diffusion method.

EUCAST Steering Committee

The steering committee met five times during 2017 and dealt with many aspects of breakpoints and antimicrobial susceptibility testing. “Visiting” general committee members, European Medicines Agency (EMA) representatives and/or ECDC representatives attended several meetings. Two groups from pharmaceutical companies presented to the committee; one provided data on a new agent, and the other discussed proposals for assessing treatment endpoints other than those used conventionally for PK/PD.

In 2017 Christian Giske was the chairman, Rafael Cantón was the European NACs Chair and Andrašević and Deniz Gür from Turkey.

EUCAST General Committee

The annual open meeting for national representatives on the general committee was held during ECLMO, where the preceding year’s activities and future plans were reviewed. The general committee representatives on the steering committee were Aladár MacGowan (United Kingdom), Gerald Lina (France), Sören Gatermann (Germany), Christoffer Lindemann (Norway), and Johan Mouton (Netherlands).

EUCAST Network Laboratories

EUCAST has two loosely constructed networks of microbiology laboratories with particular expertise and training in EUCAST antimicrobial susceptibility testing for bacteria and fungi respectively. EUCAST Network Laboratories, listed on the EUCAST website, are committed to help develop, validate and troubleshoot EUCAST methods and/or to help train and educate other laboratories in EUCAST methods. These laboratories also play an important role in the development of improved methods and/or assist clinical breakpoint development by providing MIC datasets.

EUCAST breakpoints

Version 8.0 of the MIC and zone diameter breakpoint tables for bacteria and QC tables were published on the EUCAST website in January 2018.

Breakpoints for new agents are set by EUCAST as part of the marketing authorization process by the EMA. In the past year breakpoints were updated for ceftaroline and breakpoints for cefotaxime–tazobactam and Pseudomonas aeruginosa were added. The breakpoints for several other agents are in the process of being evaluated.

National AST committees (NACs)

Most European countries have established NACs. Further efforts on recruiting the remaining EU/EEC member countries are ongoing. Interest in EUCAST in countries outside the European Union continued to increase, leading to the establishment of NACs in countries such as China, FYR Macedonia, New Zealand and Serbia. NACs provide national input to all aspects of EUCAST, promote national strategies for susceptibility testing and help to implement EUCAST breakpoints and methods.

EUCAST consultations

Many of the EUCAST documents on the website were updated in 2017 and this is an ongoing process. Rationale documents, giving background data and providing the rationale for EUCAST breakpoints, continue to be developed. EUCAST expert rules are being updated by the steering committee. Proposed changes to intrinsic resistance tables were accepted following public consultation and then released on the website. A review of the EUCAST guidelines on the detection of resistance mechanisms was also completed and published online. A summary of consultations can be found on the website www.eucast.org/documents/consultations/. All EUCAST documents are freely available on the EUCAST website.

EUCAST network laboratories

Work on developing the structure of the EUCAST network of laboratories was continued in 2017. These labs have specific expertise and training in EUCAST antimicrobial susceptibility testing (AST) for bacteria and EUCAST antifungal susceptibility testing (AFST) methods, respectively. EUCAST network laboratories are committed to help develop, validate and troubleshoot EUCAST AST/AFST methods and/or to help train and educate other laboratories in EUCAST methods. They also play an important role in improving methods and/or assisting clinical breakpoint development by providing species-specific MIC datasets. For more information and for laboratories interested in participating, please visit the EUCAST network laboratories page under the organization tab on the EUCAST website. Currently 14 bacterial and 11 mycology laboratories have been adopted in the network.
The AFST subcommittees continued their work on breakpoints and methods for antimicrobial agents. The AFST general subcommittee met once, during ECCMID 2017 in Vienna. The AFST steering committee met twice, for a one-and-a-half-day meeting and once during ECCMID. Current members include Maiken Cavling Arendrup (chair), Jesús Guinea (scientific secretary), Joseph Meletiadis (data coordinator), Johan Mouton (EUCAST steering committee representative), Petr Hamal (EUCAST AFST representative from the Czech Republic, 2016–2018) and Katrien Lagrou (EUCAST AFST representative from Belgium, 2015–2017) followed by Francesco Barchiesi (EUCAST AFST representative from Italy, 2017–2018).

The EUCAST AFST worked on evaluating azole screening agars and microdilution trays have been evaluated and appear promising provided a 95% growth inhibition endpoint is adopted for quality control, both with the aim of simplifying routine testing. The results of the study were published in the Journal of Antimicrob Chemotherapy (2017;72(12):3325-3333), and a method document is being prepared. Moreover spectrophotometer readings of Aspergillus microdilution trays have been evaluated and appear promising provided a 95% growth inhibition endpoint is adopted (Meletiadis J, Leth Mortensen K, Verweij PE, Mouton JW, Arendrup MC. Clin Microbiol Infect. 2017;23(3):154-160). The primary task of the committee currently is the development of a reference MIC testing method.

Subcommittee on antimicrobial agents

The subcommittee, chaired by Emmanuelle Cambau, was established early in 2016 with the objectives to develop reference susceptibility testing method guidelines, to interact with the EUCAST steering committee in the setting of breakpoints for antimicrobial agents and to define the relevance of molecular testing. The work so far has resulted in a publication in Clinical Microbiology and Infection on state-of-the-art susceptibility testing of M. tuberculosis (Schin T, Mettor P, Käser CJ, et al. Mycobacterium tuberculosis drug resistance testing: challenges, recent developments and perspectives. Clin Microbiol Infect. 2017;23(3):154-160).


8. A summary of the planned approach to breakpoint setting for veterinary antimicrobials by VetCAST

9. A published proposal from the EUCAST steering committee on the planned revision of the definition of ‘Intermediate’.

Subcommittee on wild type MIC distributions and epidemiological cut-off values (ECOFFs)

The subcommittee, chaired by Gunnar Kahlmeter, was established early in 2016 with the remit to define standards for MIC distributions required for ECOFF calculation, to define the methods used to set ECOFFs and to define the conditions for their revision. The subcommittee finalized a proposal on how to accept MIC distributions (www.eucast.org/mic distributions and eCOFFs) and on how to define tentative and established ECOFFs. The SOP (10.0) has now been published.

Subcommittee on antimicrobial susceptibility testing by whole genome sequencing (WGS)

The VetCAST subcommittee and meeting attendees, April 2017

The anti fungal susceptibility testing subcommittee, April 2017

As part of the regular review of EUCAST documents, the posaconazole rationale documents for Candida and Aspergillus have been reviewed and amalgamated. This included a breakpoint change for Candida albicans.

Veterinary subcommittee on antimicrobial susceptibility testing (VetCAST)

The subcommittee, chaired by Dirk Mevius, was established at ECCMID in 2015 and is a standing committee, which deals with all aspects of breakpoint setting and antimicrobial susceptibility testing related to veterinary use of antimicrobial agents. VetCAST received funding in October from the call for transnational networks/working groups within the Joint Programming Initiative on Antimicrobial Resistance (4th joint call, JPIAMR). A position paper on the proposed VetCAST approach to the setting of breakpoints was developed and published (Toutain PL, Bousquet-Mélou A, Damborg P, Ferran AA, Mevius D, Pettigrew L, Vedel J, Lane P. En Route towards European clinical breakpoints for veterinary antimicrobial susceptibility testing: a position paper explaining the VetCAST approach. Front Microbiol. 2017;8:2344).

2. A paper describing the results of investigation and analyses of Kingella related to breakpoint setting.


3. A paper describing the results of investigation and analyses of Aerococcus related to breakpoint setting.


4. A paper describing the results of investigation and analyses of Aerococcus related to breakpoint setting.


5. A paper describing the issues around the susceptibility testing of colistin.


The VetCAST subcommittee and meeting attendees, April 2017

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5. A paper describing the issues around the susceptibility testing of colistin.

European Committee on Infection Control (EUCIC)
Infection Prevention & Control: an ESCMID priority!
www.escmid.org/eucic

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EUCIC training
We are pleased to announce that the European Committee on Infection Control (EUCIC) has made substantial progress over the past year. The EUCIC Infection Prevention and Control Certificate – European Training Programme has been launched and, by January 2018, the envisaged 15 trainees had already registered for the full programme. For the first time in Europe, the EUCIC Infection Prevention and Control Certificate will integrate courses at an international level with national courses in selected EUCIC excellence centres, creating a network of faculty and trainees in different European regions. This will enable the trainees to acquire European competence in the field of infection prevention and control.

In addition we are delighted to announce that the European Centre for Disease Control (ECDC) will contribute to our training programme. ECDC’s contribution will be in the areas of epidemiology, data analysis and surveillance and through the provision of observerships and speakers for several of the modules.

The training programme started in February 2018 in Groningen, Netherlands, with the basic and compulsory module. Advanced modules and observerships follow in 2018 and 2019 in Freiburg, Ljubljana, Geneva and Vienna; see Figure 1. Finally the programme is complemented with e-learning and local modules, which represent in-house expertise and teach country-specific aspects. For more information check this link: www.escmid.org/research_projects/eucic/training_programme/.

EUCIC UEMS working group
Nicola Petrosillo, Jean-Paul Stahl, Davorka Dusek, Truls Leegard, Hédi Routelin
The Union Européenne des Médecins Spécialistes (UEMS) council approved the implementation of a multidisciplinary joint committee (MJIC) on infection control on the initiative of EUCIC. UEMS infectious diseases and UEMS medical microbiology. The goal is to contribute to reaching an agreement on European standards for medical education and training in infection control in collaboration with ECDC. This will be a cornerstone for disseminating and harmonizing infection prevention and control training and education in Europe.

EUCIC and WHO
The World Health Organization founded the Global Infection Prevention and Control (GIPC) Network. Through various actions, it enhances local, national, international and collaborative support towards WHO member states’ efforts for infection prevention and control. EUCIC became an official member of the GIPC Network and Nico Mutters was appointed as liaison officer for EUCIC. With a commentary in the Lancet Global Health, the GIPC network highlights the global infection prevention and control priorities. Membership of this network will strengthen the cooperation between WHO and EUCIC.

EUCIC internally
EUCIC has elected a new advisory board chair: Vincent Jarlier from the Pitié-Salpêtrière Hospital in Paris, France, and had some regular changes in the steering committee (SC). Jesús Rodríguez-Bahía (Spain) and Herman Goossens (Belgium) left the EUCIC SC at the end of their terms. They were replaced by elected members Anders Johansson (Sweden) and Elisabeth Presterl (Austria). Evelina Tacconelli and Alex Friedrich were confirmed as EUCIC chair and clinical coordinator, respectively.


EUCIC, ESGAP and EUCAST conducted a European survey exploring in which countries selective reporting of antibiotic susceptibility testing results had already been implemented and how it had been organized. For more details see the published survey (Pulcini, C. et al., Int J Antimicrob Agents, 2017 Feb;49(2):162-166; www.ncbi.nlm.nih.gov/pubmed/28703208).


The EUCIC implementation working group finished a survey providing an overview of major limitations in the implementation of infection prevention and control measures against the spread of multidrug-resistant Gram-negative bacteria among hospital patients. The project will be presented at this year’s ECCMID.

Our new communication officers Gabriel Birgand (United Kingdom) and Konstantinos Tsirou (Cyprus) have increased EUCIC’s internet and social media presence. They have also provided reviews of important infection control conferences and papers with important updates on epidemiology, microbiology and prevention. Lastly we would like to thank Nancy Gerits from the ESCMID office, who has helped significantly with all EUCIC activities.

EUCIC members were also actively involved in providing proposals for this year’s ECCMID. Infection control education workshops and symposia have been highlighted in the ECCMID programme.

We are aware that there is plenty to do and we look forward to making further progress with all our partners against infections in 2018. Suggestions and contributions are very welcome! Feel free to contact us at any time at eucic@escmid.org.

Figure 1.
Overview of the different module locations

- Advanced & basic
- Local
- Observerships
Emerging infections task force (EITaF) 2017

“EITaF tackles the threat of emerging infections, providing guidance on identification, diagnosis and treatment and ensures this knowledge is evaluated and communicated effectively.”

Nicola Petrosillo, Eskild Petersen
Co-chairs of ESCMID’s emerging infections taskforce

In response to an increasing medical need to react quickly to new emerging and re-emerging infectious threats, ESCMID’s executive committee (EC) established the emerging infections task force (EITaF) in March 2017. The taskforce is headed by Nicola Petrosillo (Italy) and Eskild Petersen (Denmark/Oman) and consists of a panel of experts who have both knowledge and access to laboratories equipped with state of the art technologies able to provide a rapid response to outbreaks (including e.g. rapid analysis of any specimen and assistance in outbreak investigations, for instance through the ECDC European Medical Corps).

EITaF’s expert panel consists of 13 members. Together these experts:

• provide background material on emerging threats through regular updates to ESCMID members with up-to-date information on out-

• provide regular updates to the ESCMID EC on emerging infections, including threat evaluation.

• are expanding the group of experts who can help evaluate emerging infection threats and provide guidance on their identification, diagnosis and treatment.

• provide background material on emerging threats through review papers.

• organize workshops on emerging infections in collaboration with ESCMID study groups.

• stimulate research on emerging infections, including surveillance and diagnostics.

EITaF’s outcomes in 2017

• EITaF published its first article in Clinical Microbiology and Infection entitled “ESCMID Emerging Infections Task Force Expert Panel: Emerging infections – an increasingly important topic.”

• EITaF’s Expert Panel was established. It consists of 13 members. Together these experts:

• provide ESCMID members with up-to-date information on outbreaks of epidemic or pandemic potential, or outbreaks posing a threat to individuals travelling to an outbreak area.

• provide regular updates to the ESCMID EC on emerging infections, including threat evaluation.

• are expanding the group of experts who can help evaluate emerging infection threats and provide guidance on their identification, diagnosis and treatment.

• provide background material on emerging threats through review papers.

• organize workshops on emerging infections in collaboration with ESCMID study groups.

• stimulate research on emerging infections, including surveillance and diagnostics.


• Since its establishment, EITaF has shared 27 news items about emerging infections on the ESCMID website. The purpose of the news service is to provide ESCMID members with a single source of news gathered from many other sources, including from WHO, ECDC, ProMED, IDSA etc. Aside from links to the original source, these news items may also contain a short comment placing the news into a wider context. The outbreak news link is directly accessible on ESCMID’s homepage.

With the increasing success of our journal Clinical Microbiology and Infection (CMI), and the appointment of a new guidelines director, we are continuing our efforts to increase our publication output. Ensuring the availability of ESCMID’s medical guidelines will no doubt affect treatment decisions in Europe and, through our collaboration with partner societies, worldwide. In this way, we hope to maintain our contribution to improving patients’ lives.

Society journals

In 2017 ESCMID transferred the ownership of New Microbes and New Infections (NMNI) to its publisher Elsevier, focusing attention primarily on the success of its main journal Clinical Microbiology and Infection (CMI). For his contribution and services relating to NMNI, ESCMID sincerely thanks Michel Drancourt.

As a result of the continued dedication and hard work of Editor-in-Chief Leonard Leibovici, the profile of CMI has risen considerably since he took over the journal. His successful efforts are reflected in the rise of the impact factor from 4.575 to 5.292. CMI continues to improve its timelines and attractiveness, as evidenced by the recent launch of the new CMI website. All relevant figures about the Journal from last year can be found in the message from the Editor-in-Chief on the following pages.

Medical Guidelines

Over the past year, drafting groups were working diligently on the ongoing guidelines on the management and decolonization of multidrug-resistant Gram-negative infections as well as on the treatment of Staphylococcus aureus bacteremia. In addition, two guidelines, the management of Aspergillus disease and the prevention of C. difficile infections in acute healthcare settings are nearing publication.

We were sad to see William Hope, our medical guidelines director since 2014, leave his position and thank him for his enthusiasm, motivation and efforts in bringing ESCMID medical guidelines up to speed with the current guideline requirements. We wholeheartedly welcome his successor, Luigi Scudeller, ESCMID Medical Guidelines Director as of January 1 2018, to the ESCMID family and look forward very much to working with her. Her guidelines report can be found on page 33.

Publications

“Our journal CMI and our medical guidelines lead the way, supported by the significant internet and social media presence, to make ESCMID publications easily accessible and increasingly effective.”

Murat Akova
ESCMID Publications and Communications Officer
murat.akova@escmid.org

ESCMID publications

For the second year in a row, we are featuring a list of all scientific publications resulting from ESCMID’s activities over the past year. This comprehensive list includes medical guidelines, papers on research financed through ESCMID’s research grants and study group grants as well as publications by the society’s study groups and committees, including EUICD and EUCAST. We recorded nearly 100 publications in ESCMID’s name over the past year.

You can help us be more efficient in tracking these publications by clearly acknowledging ESCMID’s role in your publication and by informing ESCMID’s Publications and Medical Guidelines Manager when your manuscript is published. The undeniable reward is more visibility for your work, as it will be announced on our website and social channels.
Clinical Microbiology and Infection

Clinical Microbiology and Infection (CMI) publishes original research and review articles to assist physicians and microbiologists in their management of patients and the prevention of infectious diseases. We aim to promote the use of good methods in basic and clinical research, and to publish interesting and thought-provoking material with the potential to change clinical practice.

Submissions
2017 saw a 14% increase in the number of submissions compared to 2015 [Fig. 1]. We have also shortened the time from submission to a decision on revision to an average of 29 days in 2017 (32 days in 2016, 41 days in 2015) and from submission to rejection after peer-review to 26 days in 2017 (28 days in 2016, 45 days in 2015, Fig. 2).

Impact factor
Our 2016 impact factor was 5.292 compared with 4.575 in 2015.

Reviews
We have begun a new series of reviews: ‘How to...’ articles are an in-depth explanation on how to do things that are of interest to our readers. These topics of interest might be new laboratory techniques in the clinical or research laboratory, new programmes (e.g. how to establish an antibiotic stewardship effort in a hospital in which there is none) or new data analyses (e.g. how to use interrupted time-series analyses). We will also continue to have themed issues. As in past years, these issues consist of 3 – 5 narrative reviews addressing the different aspects of one topic. To serve as guest editor of a themed issue, please contact me with an outline of the proposed topic, including the names of proposed authors for each of the reviews.

Website
The CMI journal website has been redesigned. The new user-friendly look, starting with the February 2018 issue, was designed to improve navigation and the experience of authors and readers alike. We also predict this will increase article submissions to CMI.

We welcome the feedback of all readers and ESCMID members. Please write to our editorial office, Julia Friedman, with any comments or queries: jilubom2@gmail.com.

“Due to our continued efforts in 2017, the number of submissions and the efficiency with which we reached a decision on them increased and we were rewarded with an impact factor of 5.292. We hope to continue this trend now that the new ‘how to’ series, the re-emergence of themed issues and the new CMI website are implemented.”

Leonard Leibovici
CMI Editor-in-Chief
leonard.leibovici@escmid.org

Clinical Microbiology and Infection

Figure 1. Total manuscript submissions

Figure 2. Number of days from submission to final decision

<table>
<thead>
<tr>
<th>Decision</th>
<th>2015</th>
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<td>Outside Journal Accept</td>
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Check out the April issue, freely available for ECCMID!

CLINICAL MICROBIOLOGY AND INFECTION

Editor-in-Chief: Leonard Leibovici

Clinical Microbiology and Infection (CMI) is a monthly publication of the European Society of Clinical Microbiology and Infectious Diseases and publishes peer-reviewed papers that present basic and applied research relevant to therapy and diagnostics in the fields of microbiology, infectious diseases, virology, parasitology, immunology and epidemiology.

Stay up to date on outbreak news and visit the ESCMID Emerging Infections Task Force (EITaF) at www.clinicalmicrobiologyandinfection.com

READ FOR FREE ONLINE

Top 5 most cited articles:

1. European society of clinical microbiology and infectious diseases: Update of the treatment guidance document for Clostridium difficile infection
2. Rapid spread of emerging Zika virus in the Pacific area
3. ESCMID guidelines for the management of the infection control measures to reduce transmission of multidrug-resistant Gram-negative bacteria in hospitalized patients
4. EUCAST expert rules in antimicrobial susceptibility testing
5. The difficult-to-control spread of carbapenemase producers among Enterobacteriaceae worldwide

Key papers, selected by our Editor-in-Chief:

1. The role of whole genome sequencing in antimicrobial susceptibility testing of bacteria: report from the EUCAST Subcommittee
2. Observational studies examining patient management in infectious diseases
3. Clinical considerations for optimal use of the telavancin: A focus on agent selection and dosing
4. Fair reporting of study results
5. Ensuring universal access to old antibiotics: a critical but neglected priority
6. Use of nebulized antimicrobials for the treatment of respiratory infections in invasively mechanically ventilated adults: a position paper from the European Society of Clinical Microbiology and Infectious Diseases
7. How to: Establish and run a stool bank

Visit the new-look website at www.clinicalmicrobiologyandinfection.com

Medical Guidelines

www.escmid.org/guidelines

“It is a great responsibility to be ESCMID guidelines director. The great challenge is to produce valid and useful documents based on a stringent ethical policy: to deliver the best available care to patients in sustainable health systems in Europe and worldwide.”

Luigia Scudeller
ESCMID Guidelines Director
l.scudeller@smatteo.pv.it

It is an honour to have been appointed as Medical Guidelines Director of ESCMID. I am both grateful to the EC for granting me this opportunity and fully aware of the great responsibility that comes with this position. Together with the EC, our medical guideline subcommittee, our study groups and our drafting groups, I am sure we can produce methodologically accurate documents, relevant to clinical practice and public health in ID and CM.

2017 in a nutshell

Last year saw the publication of three guidelines and the continuation of ongoing medical guideline projects, two of which are now near publication, the management of Aspergillus disease and the prevention of C. difficile infection in acute healthcare settings. The ESCMID guidelines on spondylodiscitis, osteomyelitis and prosthetic joint infections and guidelines for the management of infections due to non-tuberculous mycobacteria (in conjunction with IDSA, ATS and ERS) are also scheduled for publication in 2018. ESCMID also endorsed three guidelines: the ISF/ESCMID guideline on the management of sepsis, and septic shock, the ERS/ESICM/ESCMID international guidelines on HAP/VAP and the ERS/ESCMID European bronchiectasis guidelines. For a full overview of current medical guidelines, please see the table below.

Guideline Owner Status

Management of sepsis and septic shock ISF/ESCMID Published in March 2017 in ECM and CCM
International guidelines on HAP/VAP ERS/ESCMID/ESCMID Published in September 2017
European bronchiectasis guidelines ERS/ESCMID Published in September 2017
Diagnosis and management of Aspergillus diseases ESMO/ESMO4-ERS (EFIS) Accepted for publication in 2018
C. difficile infection control/measures - update ESMO (ESCCO) Submitted for publication in 2018
Guidelines on spondylodiscitis, osteomyelitis and prosthetic joint infections ESMO Published in 2018
Management of infections due to non-tuberculous mycobacteria IDSA/ATS/ERS/ESCMID Published in 2018
Treatment of multiresistant Gram-negative bacteria ESMO Ongoing 2018
Decolonization of multiresistant Gram-negative bacteria ESMO Ongoing 2018
Clinical practice guideline on S. aureus bacteremia IDSA/ESCMID Ongoing 2018
Rituals and behaviours in the OR to reduce infection ESMO/HR Approval 2018
Zygomycosis ESMO/ESCMID Proposal approved
Decolonization of multidrug-resistant Gram-negative bacteria ESCMID Ongoing 2018

At the end of 2017 my predecessor William Hope handed ESCMID’s medical guidelines portfolio over to me. I would like to thank him sincerely for all his work over the years and for his support in helping me get acquainted with the portfolio.

Looking forward

Building on the experience of my predecessor, and in agreement with the Executive Committee, we have set the following priorities to further develop the global role of ESCMID in developing guidelines in CM and ID. We plan to strengthen the cooperation with ESCMID’s study groups, establish new partnerships with other scientific networks, implement certified training courses for CM or ID professionals interested in the many and complex issues involved in medical guidelines development, and prioritize upcoming (updated and new) guidelines.

In order to achieve these exciting and challenging objectives, I look forward to a fruitful collaboration with all of you. So if you have any ideas, suggestions or comments, I am happy to be contacted by email.

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SEXSS
The 26th European Congress of Medical Microbiology and Infectious Diseases (ECCMID) in Amsterdam, the Netherlands.

ESGASM

ESGIC

ESGO
How to identify non-tuberculous Mycobacterium species using MALDI-TOF mass spectrometry.

ESGQ
Mycobacterium microti as an alternative pathogen in patients with B-cell lymphoma.

ESGSS
Association of S. aureus bacteremia with late-onset meningitis and multi-drug resistance among the patients:

ESGR
How to: identify non-tuberculous Mycobacterium species using MALDI-TOF mass spectrometry.

ESGR
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ESGA
Mycobacterium microti as an alternative pathogen in patients with B-cell lymphoma.

ESGA
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The 2017 education programme again had many highlights and offered participants high-quality courses in the field of infectious diseases, clinical microbiology and infection control. ESCMID is very proud of having delivered 37 courses involving experts from multiple countries and backgrounds. We would like to thank the ESCMID Study Groups and ESCMID members who contributed to the great programme we were able to offer our members in 2017! Following suggestions and requests from students in previous courses, the ratio of technical workshops to postgraduate courses has shifted towards the latter [4 technical workshops and 13 postgraduate courses]. The number of participants varied depending on the topic and format of the course. Most of the educational courses attracted between 30 and 70 participants, whereas the attendance numbers for technical workshops were deliberately kept a little smaller to guarantee close interaction during the practical sessions.

More than 700 delegates from over 65 countries attended our educational courses in 2017. The events were rated 3.50/4.00 on average, confirming the high-quality educational content of ESCMID educational events.

For the very first time, a course was held in the city of ESCMID’s headquarters in Basel. As many as 55 delegates from 20 countries attended this highly rated event mid-March, which tackled a new topic, applications of MALDI-TOF Mass-Spectrometry. The course on the diagnosis of bloodstream infections held in Nice was a great example of the successful collaboration among several ESCMID Study Groups. Co-organized in a joint effort by ESGIS, EFISG, ESGBS, ESSEGM, ESSGM and the University of Nice- Sophia Antipolis/Université Côte d’Azur, the course proved to be one of the best-rated events in ESCMID’s history (3.73/4.00). Congratulations to all who made it so successful!

ESCMID’s educational activities are also integrated in many European funded projects. One successful example this year was the 16th ESCMID Summer School – another record-breaking highlight! The 16th Summer School took place in Borstel, Germany, from 1 – 8 July 2017. The event covered a broad range of topics in CM and ID and attracted a record-breaking number of 80 participants (78 last year in Seville) from 26 countries all over the world! As usual the Summer School programme included lectures by international experts on diverse and highly interesting topics in infectious diseases and clinical microbiology, workshops and student presentations, all in a relaxed atmosphere. The participants not only had the opportunity to attend the state-of-the-art lectures by experts in these fields and network with renowned specialists, but also enjoyed the sightseeing activities in the idyllic surroundings in northern Germany.

ESCMID Educational Activities

“...We believe that appropriate education of young members is essential to improving the quality of patient care.”

Evelina Tacconelli
ESCMID Education Officer
evelina.tacconelli@escmid.org

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ESCMID supports young scientist members

We believe that appropriate education of young members is essential to improving the quality of patient care and reduce medical errors. ESCMID’s educational events implement a translational and multi-faceted approach to education. This year ESCMID once again provided numerous grants for junior colleagues to attend courses and workshops. We are aware that they often experience economic difficulties and for this reason ESCMID is glad to provide funding for its educational events. The education programme provides excellent opportunities for young members to extend their training and interact with international experts. While attending courses and workshops in person is the most beneficial, all members have access to the ESCMID eLibrary, which includes presentations of all educational activities and is available at www.escmid.org/eLibrary.

EUCIC Certification in Infection Control

This started in March 2018! For full details see page 26.

Outlook for 2018

Once again the education programme looks very exciting. Have a look at the calendar section on the society’s website for full details of the 2018 education programme (www.escmid.org/calendar).

The e-learning pilot projects were defined and study group members are currently finalizing the activities in collaboration with external experts. We are looking forward to launching the first activities, probably around this year’s ECCMID.

I am very pleased to announce that the next Summer School will be held in Paris, France, 1 – 7 July 2018. Registration is open and details can be found online at www.escmid.org/education.

We have already contacted all the study groups and affiliated societies to ask for their ideas for the 2019 programme to be submitted by the end of May 2018, so we can meet our mid-July deadline for the full programme. Individual members are welcome to contact us with their own ideas for future courses and workshops and, of course, we highly recommend taking part in this year’s programme.

I would like to end by thanking all members of the Education Subcommittee for their work and help in building the ESCMID education programme.
ESCMID Courses and Workshops

Antimicrobial resistance across Europe and the Far East: target audience issues and solutions
ESCMID Postgraduate Education Course
27 – 28 May 2017, Taipei, Taiwan
Organized by the ESCMID fungal infection study group (ESFGIS), ESCMID study group for antimicrobial resistance surveillance (ESGARS), ESCMID International Affairs Subcommittee, Global Chinese Association for Clinical Microbiology and Infectious Diseases (GCACMID)

Advanced technical workshop: infection and resistance prevention in the regional healthcare network
ESCMID Postgraduate Technical Workshop
1 – 2 June 2017, Groningen, Netherlands
Organized by the ESCMID study group for epidemiological markers (ESGEM), European Committee on Infection Control (EUCIC), University Medical Center Groningen

Sepsis 2017: from pathogenesis to treatment
ESCMID Postgraduate Education Course
1 – 3 June 2017, Amsterdam, Netherlands
Organized by the ESCMID PK/PD of anti-infectives study group (EPAIG), ESCMID study group for bloodstream infections and sepsis (ESGSBS), ESCMID study group for infections in critically ill patients (ESGCIP), European Sepsis Academy

Update on infections associated with orthopaedic implants: diagnosis and management
ESCMID Postgraduate Education Course
7 – 9 June 2017, Pamplona, Spain
Organized by the ESCMID study group for implant-associated infections (ESGIAI), Clínica Universidad de Navarra, Spanish nosocomial infection study group (GEIH), Spanish Society for Clinical Microbiology and Infectious Diseases (SEIMC)

Viral infections in immunocompromised patients
ESCMID Postgraduate Education Course
8 – 9 June 2017, Bratislava, Slovakia
Organized by the ESCMID study group for infections in compromised hosts (ESGCH), ESCMID study group for viral hepatitis (ESGVH)

Emerging antibiotic resistance in Gram-negative bacteria: problems and solutions
ESCMID Postgraduate Technical Workshop
14 – 15 September 2017, Fribourg, Switzerland
Organized by the ESCMID study group for antimicrobial resistance surveillance (ESGARS), University of Fribourg

Migration health
ESCMID Postgraduate Education Course
1 – 4 October 2017, Palermo, Italy
Organized by the ESCMID study group for infections in travellers and migrants (ESGTM), UNESCO Chair “training and empowering human resources for health development in resource-limited countries”, University of Brescia, Italy, International Organization for Migration (IOM) – the UN Migration Agency, International Society of Travel Medicine (ISTM), Italian Society of Migration Medicine (SIMM), University of Palermo, Italian Society of Infectious and Tropical Diseases (SIMT), Italian Society of Tropical Medicine and Global Health (SIMET)

Antimicrobial stewardship: principles and practice
ESCMID Postgraduate Education Course
5 – 6 October 2017, Istanbul (Kadıköy), Turkey
Organized by the ESCMID study group for antibiotic policies (ESGAP), Turkish Society of Clinical Microbiology and Infectious Diseases (KILMK)

Capacity-building workshop: whole-genome sequencing for clinical microbiology and hospital epidemiology
ESCMID Postgraduate Technical Workshop
10 – 13 October 2017, Freiburg, Germany
Organized by the ESCMID study group for epidemiological markers (ESGEM), ESCMID study group for genomic and molecular diagnostics (ESGMD), University of Freiburg Medical Center, University Medical Center Groningen (UMCG)

Regional capacity-building for integration of next-generation sequencing in the clinical microbiol
ESCMID Postgraduate Education Course
30 October – 1 November 2017, Herzliya, Israel
Organized by the ESCMID study group for genomic and molecular diagnostics (ESGMD), ESCMID study group for epidemiological markers (ESGEM), ESCMID study group for forensic and post-mortem microbiology (ESGFPMB), ESCMID study group for legionella infections (ESGLI), Israeli Society for Infectious Diseases (ISID)

Antibiotic therapy in practice
ESCMID Postgraduate Technical Workshop
2 – 4 November 2017, Madrid, Spain
Organized by the ESCMID study group for antibiotic policies (ESGAP), Hospital Universitario Ramón y Cajal, Madrid, Spain, University Medical Center Utrecht, Trainee Association of ESCMID (TAE)

3rd course on principles of molecular microbiological diagnostics
ESCMID Postgraduate Education Course
17 – 19 January 2018, Maastricht, Netherlands
Organized by the ESCMID study group for epidemiological markers (ESGEM), ESCMID study group for genomic and molecular diagnostics (ESGMD), Maastricht University Medical Centre

Workshop on migrant health
ESCMID Postgraduate Education Course
8 – 10 March 2018, Muscat, Oman
Organized by the ESCMID study group for clinical parasitology (ESGCP), ESCMID study group for epidemiological markers (ESGEM), ESCMID study group for infections in travellers and migrants (ESGTM), ESCMID study group for mycobacterial infections (ESGMYC), ESCMID study group for viral hepatitis (ESGHV), the European Centre for Disease Prevention and Control (ECDC), WHO EMRO, ESCMID Task Force for Emerging Infections, Ministry of Health, Muscat, Oman

Adult immunization: new and old challenges
ESCMID Postgraduate Education Course
16 – 17 March 2018, São Paulo, Brazil
Organized by the ESCMID vaccine study group (EVSAG), Brazilian Society of Infectious Diseases (SBII), Brazilian Immunization Society (SBIM)

Update on endocarditis and endovascular infections
ESCMID Postgraduate Education Course
20 – 23 March 2018, Münster, Germany
Organized by the ESCMID study group for bloodstream infections and sepsis (ESGSBS), ESCMID study group for implant-associated infections (ESGIAI), ESCMID study group for staphylococci and staphylococcal diseases (ESGS), University Clinics Münster, Institute of Microbiology

Preparing for (re-)emerging arbovirus infections in Europe
ESCMID Postgraduate Education Course
21 – 23 March 2018, Bucharest, Romania
Organized by the ESCMID study group for infections in travellers and migrants (ESGTM), Erasmus MC, University Medical Center Rotterdam, University of Oxford

Challenges in veterinary hospital infection control and antimicrobial stewardship
ESCMID Postgraduate Education Course
4 April 2018, Birmingham, United Kingdom
Organized by the ESCMID study group for antimicrobial stewardship (ESGAP), ESCMID study group for veterinary microbiology (ESGVM)

Antimicrobial stewardship: implementing the change
ESCMID Postgraduate Education Course
19 – 20 April 2018, San Lorenzo de El Escorial, Spain
Organized by the ESCMID study group for antimicrobial stewardship (ESGAP), GERAS, study group on healthcare-associated infections of the Spanish Society of Infectious Diseases and Clinical Microbiology (SEIMC), Madrid, Spain
16th ESCMID Summer School
Borstel, Germany, 1 – 8 July 2017

Christoph Lange, Bernd Salzberger
and Laurent Pairel
16th ESCMID Summer School Directors

A week of inspiration and team building. The 16th ESCMID Summer School took place at the beautiful Borstel Research Center in rural northern Germany. The 80 participants came from 26 different countries and stayed on the former farm estate, today one of the prestigious Leibniz Institutes and the National Reference Center for Mycobacteria in Germany. ESCMID financially supported 20 of the delegates so they could attend the Summer School. The German Center for Infection Research (DZIF) provided 13 additional scholarships. Each year the ESCMID Summer School is one of the finest events for young clinicians and scientists working in the field of clinical microbiology and infectious diseases. With 42 international members of the ESCMID faculty, we reached the highest number of teaching staff at a Summer School so far.

Christoph Lange (Borstel), Bernd Salzberger (Regensburg) and Laurent Pairel (Fribourg) co-directed this Summer School with the help of the ESCMID Education Subcommittee. ESCMID’s President Mario Poljak was active at the Summer School throughout the week. The scientific programme covered all important aspects of clinical microbiology and infectious diseases, from bench to bedside, including hot topics. Highlights were parallel small group tutorials on modern tools for bacterial identification and antibiotic susceptibility testing, radiology for infectious diseases specialists, hands-on visits to the mycobacteriology lab and interactive ID teaching ward rounds at Borstel’s internationally renowned medical clinic. As in previous years, participants at the ESCMID Summer School took on the role of teachers and were encouraged to present a clinical case or research project in which they had been involved. Those presentations offered the opportunity for lively discussions and provided feedback from peers and experts in the field. The level of presentations, the quality of comments and the atmosphere of respect and learning together was outstanding.

The programme was rounded off by visits to the harbour in Hamburg, the medieval city centre of Lübeck and its Hanseum, a Wild West open-air theatrical performance at the Karl-May festival in Bad Segeberg and with BBQ and sports in the Borstel gardens behind the Manor House.

In 2018 we move from the countryside to one of the most beautiful cities in the world: from 1 – 7 July 2018 the 17th ESCMID Summer School will take place in Paris, France. Watch out for the interesting programme and apply in time! The ESCMID Summer School offers the best opportunity to remain up-to-date in your field and to get to know your peers.

17th ESCMID Summer School
Paris, France
1 – 7 July 2018

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

Please register at www.escmid.org/education.
Places are limited, apply until 1 June 2018!

Organized by the ESCMID Education Subcommittee
Hosted at FIAP; 30 rue Cabanis, 75014 Paris, France
The 4th ESCMID Conference on Vaccines, which was devoted to the topic New and old diseases in children and adults – unmet needs, took place in Dubrovnik, Croatia, from 8 – 10 September 2017. More than 100 participants attended the conference where over 30 internationally renowned experts presented and debated the most recent data and approaches that will protect generations to come from vaccine-preventable diseases.

**Scientific programme**

Novel inventions, better understanding of disease pathogenesis, and improved surveillance are constantly redefining vaccine strategies. The European section of the World Health Organization (WHO) and the European Centre for Disease Prevention and Control (ECDC) helped develop a scientific programme that addressed the most pressing questions. The most important topics were equity in immunization, exposing the gaps in vaccine-preventable diseases, vaccines for new global threats, innovative approaches for vaccines against old diseases, approaches and communication for the implementation of vaccines, and non-specific effects of vaccines. Highlights included presentations on the progress that has been made in the management of viral diseases, including the Zika and Ebola viruses, which have caused recent difficult-to-contain outbreaks.

**Zika management**

Marco Aurelio Safadi from São Paulo reviewed the tragedy of congenital Zika syndrome in Brazil, showing that the only intervention currently available to decrease the burden of Zika and other arboviruses is mosquito control. So far this has been unsuccessful.

**New vaccines**

Top experts discussed the current status of some new vaccines of the utmost importance. One of the highlights was the presentation by vaccinology legend Stanley Plotkin on the challenges faced in the development of a human cytomegalovirus (CMV) vaccine. He pointed out that although many lessons have been learned from prior trials there are still unanswered questions regarding the cellular immune response in maternal-foetal transmission. Research needs to be conducted to assess whether maternal-foetal infection in seropositive women can be prevented by boosting antibody or cell-mediated immunity and whether protective immune responses can be prolonged beyond child-bearing age. Still, he stressed that there is ample need for a CMV vaccine. There is already proof of concept for a CMV vaccine and there are many candidate vaccines currently in development.

Adrian Hill from the Jenner Institute in Oxford reviewed the challenges and progress in the development of a malaria vaccine that would offer protective efficacy of at least 75 percent. Another goal for the vaccine would be to reduce transmission of the parasite and thereby substantially reduce the incidence of human malaria infection. He outlined that there has been considerable progress. The anti-sporozoite vaccine RTS,S/AS01 is leading the way, although it may not reach the market before 2023, while experimental candidate R21 with adjuvant vaccine candidate matrix M could be licensed by then as well. Components focusing on vectored liver-stage, conserved blood-stage antigen, and mosquito-stage should increase the efficiency of potential vaccines, he explained.

Miguel O’Ryan from Chile discussed the need for vaccines to fight noroviruses, the most common cause of gastroenteritis, which strikes almost 200 million times every year. He stressed that a vaccine would reduce the number of primary care visits, emergency room visits as well as hospitalizations and emergency

**Polio eradication**

Other highlights included a presentation by Ananda Bandypadhyay from the Bill & Melinda Gates Foundation, who showed that we are closer than ever to reaching the goal of the Global Polio Eradication Initiative, which the foundation actively supports. The main strategies are the interruption of transmission through intense vaccination efforts and preparedness for vaccine policy changes. This requires adequate supply and optimum utilization of routine immunization and mass campaigns, innovation around newer formulations and delivery technologies, and risk mitigation and containment measures. This effort will allow historic progress to be made and sustainably eradicate the disease from the globe.

**Non-specific vaccine effects**

Federico Martin-Torres from Spain addressed unexpected, non-specific benefits vaccines may have or develop. He discussed the heterologous vaccine effects of products against Bacilli Calmette-Guerin (BCG), measles, polio, diphtheria-tetanus-pertussis (DTP) and rotavirus. He showed that unknown direct and indirect effects of vaccines may result in true heterologous effects. BCG vaccination at birth in well developed countries may for example decrease hospitalizations in children due to respiratory viral infections and established for the very first time. He stated that the true burden of the congenital disease associated with Zika is probably underestimated and that there are still unanswered questions regarding the role of co-infections, previous infections and other risk factors in the neurological outcomes and for congenital disease.

**Organizing committee**

This conference was organized with the help of the ESCMID Vaccine Study Group (EVASG) with the support and active participation of the ECDC and WHO Europe. Ron Dagan, an international figure in paediatric vaccines from Israel, chaired the organizing committee, which also includes Robb Butler from WHO Europe in Denmark, ESCMID President Mario Poljak from Slovenia, EVASG study group chair Susanna Esposito from Italy, and Lucia Pastore Celentano from ECDC in Sweden.
27th ECCMID from 22 – 25 April 2017 in Vienna, Austria

"ECCMID is developing into one of the most important infectious diseases meetings in the world, bringing together modern diagnostics, medical microbiology, clinical infectious diseases, public health and infection control specialists from different settings to tackle today’s communicable health challenges."

Winfried V. Kern
ECCMID Programme Director
winfried.kern@escmid.org

The 27th edition of the European Congress of Clinical Microbiology and Infectious Diseases (ECCMID) was held in Vienna, Austria, from 22 – 25 April 2017. ECCMID is today the largest infectious disease meeting in the world, bringing together clinicians, scientists, public health experts and delegates from diagnostic and drug companies as well as other experts in infection and microbiology from around the globe.

Attendees
As many as 12,494 people from 126 countries attended ECCMID, with the top 10 countries of provenance being the United Kingdom, the United States of America, Germany, France, Italy, Spain, Austria, Switzerland, the Netherlands and Belgium. More than 70 journalists were registered for the congress.

Scientific programme
The congress featured more than 200 sessions covering the entire field of infectious diseases and clinical microbiology, including 12 keynote lectures, more than 100 symposia and oral sessions, 20 educational workshops and 20 meet-the-expert sessions. It also offered attendees 26 industry-organized symposia and an exhibition with 194 exhibitors. As many as 381 speakers and 188 chairs participated in the congress and about 32% of this total of 569 were women.

Abstracts
Of the 5,223 regular and late-breaking abstracts received from 106 different countries, 3,393 abstracts were presented in oral, ePoster and paper poster sessions. A record number of 33 late-breaking abstracts with exciting recent findings were presented in three dedicated oral sessions on clinical trials, diagnostics, and vaccines, attracting many interested delegates.

Highlights
The highlights of ECCMID 2017 included the keynote speech by Thierry Calandra, winner of the ESCMID Excellence Award for his outstanding lifetime achievements in the field of sepsis. Key topics at last year’s congress were antimicrobial resistance with a focus on susceptibility testing, antimicrobial stewardship and infection control and prevention. They were presented as keynote sessions, original research papers and in workshops. The congress also extensively covered different aspects of the big four in infectious diseases: HIV, viral hepatitis, tuberculosis and malaria. Nobel prize winner Françoise Barré-Sinoussi held a keynote about the HIV epidemic, Sir Nicholas White talked about the elimination of malaria and Wenhui Li discussed his discovery of the hepatitis B virus receptor, while tuberculosis was covered in more than 100 presentations. We had crowd-drawing sessions on emerging infections and novel diagnostic techniques as well as the role of microbiota during the keynote by Eric G. Pamer, just to name a few.
I want to take this opportunity to thank everyone who made ECCMID 2017 such a success. My thanks in particular go to my friends and colleagues on the programme committee, who spent considerable time and effort to develop such an attractive programme, to all the dedicated reviewers, who helped assess the submitted abstracts, and to the people in the ESCMID Executive Office, whom I kept busy all the time and who organized the meeting in a highly professional manner. Looking back at the record-breaking congress we achieved in Vienna, I have a good feeling about what we can do in Madrid in 2018. Hasta luego!

Outlook

It is my pleasure and a great privilege to welcome you to the 28th European Congress of Clinical Microbiology and Infectious Diseases in Madrid. As the organizers of the leading congress combining clinical microbiology and infectious diseases, we strive to continually increase the scientific excellence of our annual meeting. To achieve this goal, the ECCMID programme committee has selected the very best proposals for invited symposia, educational workshops and meet-the-expert sessions, and I am sure you will be excited by this year’s timely and top-quality keynote presentations by speakers from all over the world. Leaders and specialists from all disciplines in the fields of microbiology and infectious diseases will be discussing the latest developments and hot topics. Again we expect more than 12,000 participants who are keen to learn about recent findings in therapeutic approaches and strategies in the battle against infectious diseases.

The ECCMID programme committee has once again prepared an accompanying series of classical oral sessions and poster presentations, representing a superb cross section from among the best-rated submitted abstracts. Participants will have the opportunity to meet researchers from many parts of the world to discuss methods, results and the impact on clinical and laboratory practice. Interactive sessions will allow participants to get involved and obtain the maximum benefit from the sessions. Scientists, including clinicians, and public health specialists will present findings, recommendations and award-winning research projects and will respond to the most pressing scientific questions on diagnosis, prevention, clinical care and management of infection.

As in previous years, young professionals will have the opportunity to discuss their ideas and projects with renowned experts in meet-the-expert sessions and during round table discussions. The most popular sessions include keynote lectures, presentations from Young Investigator Awardees, Clinical Grand Rounds as well as our famous “Year in…” sessions. The keynote speeches will include presentations on what viruses can teach us about immunology, the Spanish influenza, global action against antimicrobial resistance, the microbiome, the management of resistant bacteria and one of the big four infectious diseases: tuberculosis.

A variety of topics have been accepted for this year’s late-breaking abstracts and we particularly want to provide a stage for the most recent findings on vaccine-preventable diseases and from recently completed clinical trials. For the third time, ECCMID will feature a pipeline corner where innovative companies and research groups will be offered a platform to present their early-stage antimiicrobial therapies, their diagnostic products in development and research opportunities to a wider audience. The ECCMID workshops, organized by ESCMID’s study groups and the Trainee Association of ESCMID (TAE) and ESCMID partner groups and organizations will offer superb networking opportunities. Visit our new partner village in the ECCMID World and listen to the talks and debates about research funding opportunities, health policy issues and new perspectives in various fields of infectious diseases.

We hope that after a day full of inspiring sessions and fruitful discussions you will have time to explore Madrid, a cosmopolitan city with a rich history in art, architecture, culture and cuisine. You may stroll through Europe’s third-largest city, which serves as the political, economic and cultural centre of the country. We warmly welcome you to Madrid and are excited that you are part of our annual highlight. Thank you for again making this congress one of the top scientific events of the year.

### Table 1. Key ECCMID figures

| Attendance | Attendees | 12,494 |
| Press | Registered journalists | 70 |
| Sponsorship & Exhibition | Exhibitors | 194 |
| Scientific programme | Abstracts submitted | 5,223 |
| Abstracts accepted | 3,393 |
| Sessions | Educational workshops | 20 |
| Oral sessions | 36 |
| Integrated Symposia | 26 |
| Poster sessions | 101 |
| Top 10 attendee countries | Attendees | 12,494 |
| United Kingdom | 1 |
| Spain | 6. |
| Switzerland | 8. |
| Germany | 3. |
| Italy | 10. |
| Belgium | 15. |

### ECCMID 2018 Programme Committee

- Murat Acar, Antakya, Turkey
- Seksep Arslan, Ankara, Turkey
- Robert Barrow, Cleveland, OH, United States
- Thayil Calema, Louvain-la-Neuve, Belgium
- Jordi Caratala, Barcelona, Spain
- Francesco Castelli, Brescia, Italy
- Jan Fijnheer, London, United Kingdom
- Alexander Friedrich, Groningen, Netherlands
- Ana Galas, São Paulo, Brazil
- Carolina García-Viedma, Barcelona, Spain
- Christina Gehrke, Stockholm, Sweden
- Mary Heggs, Cork, Ireland
- Po-Bin Huang, Taipei, Taiwan
- Winfried Kern, Freiburg, Germany
- Jan Kluytmans, Breda, Netherlands
- Dimitrios Kontogiannis, Houston, TX, United States
- Jaime Lakatza, Santiago, Chile
- Poul Laursen, Copenhagen, Denmark
- Maria Ledda, Pisa, Italy
- Alfredo Lombardo, Naples, Italy
- Satoru Murayama, Tokyo, Japan
- Yves Morel, Vevey, Switzerland
- Akira Nakayama, Tokyo, Japan
- Andrey Panov, Moscow, Russia
- A. Peracchi, Ferrara, Italy
- Sara Piñeiro, Madrid, Spain
- Kristine Morch, Bergen, Norway
- Hugo Rodríguez, Madrid, Spain
- Mehmet Ruhollah, Hamburg, Germany
- Maurizio Sangiorgi, Rome, Italy
- Katja Sieme, Ljubljana, Slovenia
- Mark Sherriff, Baltimore, MD, United States
- Maria Sole, Athens, Greece
- Artemis Sondeljord, Tromsø, Norway
- Suporn Supaphol, Bangkok, Thailand
- Esmeralda Taraj, Velenje, Slovenia
- Ayse Tanriverdi, Antalya, Turkey
- Kate Templeton, Edinburgh, United Kingdom
- Jean-François Timoté, Paris, France
- Franziska van Bambahke, Brunswick, Belgium
- Lina Vandekerschef, Ghent, Belgium
- Anneëls Zeelenberg, Zürich, Switzerland

### 28th ECCMID from 21–24 April 2018 in Madrid, Spain

Winfried V. Kern
ECCMID Programme Director
winfried.kern@escmid.org
Programme Committee
Murat Akova, Ankara, TR
Maiken Arendrup, Copenhagen, DK
Sujata Bhavnani, Schenectady, NY, US
Marco Cavaleri, London, UK
Herman Goossens, Edegem, BE
David Hooper, Boston, MA, US
William Hope, Liverpool, UK
Sumathi Nambiar, Washington D.C., US
John Rex, Welleseley, MA, US
Jesús Rodríguez Baño, Seville, ES
Keith Rodvold, Chicago, IL, US
Judith Steenbergen, Boston, MA, US

Including:
• Discovery efforts in the face of AMR
• Pharmacokinetics and pharmacodynamics
• Update on regulatory processes by EMA and FDA
• Breakpoints for new agents
• Clinical trial design for AMR
• Development of new drugs for special populations
• Getting AMR research funded
• Interactive sessions: bring your drug development problem and ask!

Contact: lisbon2018@escmid.org
Find more information and registration information on our website www.escmid.org/Lisbon2018

The past year has been full of changes for ESCMID. The most important one within Professional Affairs has been the relaunch of the observership programme. This is one of the most popular activities of our society and the ESCMID Executive Committee has gradually increased its budget every year (by 30% in 2016) and has sponsored more than 600 visits since the programme began. As has been the trend in previous years, we were once again inundated with applications in 2017. The previous process led to a situation where a large part of the 2018 observership budget (about EUR 100,000) had already been spent by November 2017. For this reason, the Executive Committee decided to stop accepting applications before year-end, and to find an alternative way of managing the observerships to allow a fairer application process and a more sustainable programme.

To be more inclusive, the new-look observership programme offers both funded and non-funded observerships. The non-funded applications are open throughout the year to all members, regardless of age and career stage. Applications for the funded observerships, for which we will hold two calls annually, are open to young scientist members. This new process will allow us to assess the candidates more fairly and award observerships to those who best demonstrate how the visit to their chosen ESCMID Collaborative Centre (ECC) will improve their own learning as well as benefit their home institution. The process will undergo consistent evaluation as we strive to make this valuable offering the best that it can be for our members, and to provide this opportunity to bring individuals together from all over the world to advance healthcare and research. We thank our members and ECCs for their understanding and continued support during this time of transition.

Seven new ECCs from both Europe and the rest of the world joined us in 2017. The support of our ECCs enables us to offer our members an attractive variety of skills and expertise to choose from when applying for an observership. Through our communication with hosts and from the reports we receive from the observers, we are proud to say that the observership programme offers both parties an ideal opportunity to exchange learning, ideas and discuss future collaboration. We’re also pleased to see that many returning observers encourage their institutes to apply to become an ECC, meaning that the community continues to grow and benefit more and more people.

“Supporting the educational and career development of our members, and creating a platform for them to connect with experienced professionals in their field and establish strong ties, continues to be the driving force of our activities.”

Maurizio Sanguinetti
Professional Affairs Officer for Clinical Microbiology and Infectious Diseases

The Mentorship pilot programme has been a success with 20 mentorships awarded since the pilot began in 2015. In 2018 we will be relaunching the programme with the emphasis on a more structured mentorship between a young scientist member and an expert in the field of clinical microbiology and infectious diseases. We will begin with a limited number of mentorships so keep an eye on our website and newsletter to ensure you don’t miss the chance to apply.

Throughout the year, I have had the pleasure of meeting the Parity Commission and the Trainee Association of ESCMID (TAE) steering committee. Both groups continue to work on projects to widen the opportunities available to those in training and in the early stages of their career, and to those who could face discrimination in the field due to gender, age, sexual orientation, race, religion, and/or political beliefs without consideration of their personal achievements.

The following pages contain further details about ESCMID’s professional affairs activities, as does our website.
The ESCMID Collaborative Centre (ECC) and Observership initiative reached an important milestone in 2017 and provided us with the opportunity to create a fairer and more sustainable programme. Almost 120 ECCs will be offering both funded and unfunded observerships in 2018, including seven new ones in Argentina, China, the Republic of Korea, Portugal, Sweden, Switzerland and Turkey. With ECCs in almost 40 countries across all five continents, the programme continues to expand with the society and we’d like to warmly welcome our new ECCs and encourage more institutes to join.

In 2017, observers visited 17 countries within Europe (five more than last year) and eight outside the region (three more). The table on page 58 shows the top ten hosting centres of 2017: Sweden (16), Germany (15) and the United Kingdom (12) were the most popular countries to visit last year. Of the 16 observers visiting Sweden, 14 went to the ECDC (see the report on page 59). Almost 35% of the total of 118 observers came from countries outside Europe. The top countries of provenance around the globe were Spain and Turkey with 11 each and, showing that our support of international members is continuing to increase, Brazil and Iran, each with nine observers (see map overleaf for observer country of origin).

The programme continues to attract more female participants (72) than male (46, Figure 1). The most popular length of visit was between 16 and 31 days with 49 observers taking the opportunity for a longer learning programme whilst 27 observers chose visits of 10–15 days, with 40 preferring shorter visits of 3–10 days (Figure 2).

We relaunched the application process in 2018 with funded observerships being offered to ESCMID Young Scientist Members only through two calls per year. There are 50 places available per call and we request that you prepare the application pack carefully. For full details of the criteria, please visit the observership pages on our website: escmid.org/observerships. All members are eligible to apply for our unfunded observerships throughout the year. Our new-look observership application platform includes an interactive map which makes looking for the right ECC based on core competencies even easier.

The end-of-visit reports completed by our observers continue to show the immeasurable benefits of this programme. Observers are able to learn from our ECCs, which have all been carefully selected to ensure a high-quality exchange. I’d like to thank our ECCs for their continued support, especially the staff who provide invaluable assistance during the visits. ESCMID appreciates the time and resources the ECCs spend on each visit and is grateful for each collaboration.
The European Centre for Disease Prevention and Control (ECDC) hosted a group of 14 ESCMID members for the ESCMID ECDC observership initiative between 4–8 September 2017 at the ECDC headquarters in Stockholm, Sweden. These 14 ESCMID observers were joined by observers from the European Society for Clinical Virology (ESCV) for a five-day orientation programme designed to introduce the ECDC’s activities, role and mandate in supporting public health actions to control and prevent infectious disease in the EU and globally.

The scope of the 2017 visit covered the general activities of the centre, such as surveillance, microbiology support, production of scientific advice and epidemic intelligence to detect emerging communicable disease threats to the EU. Observers also attended presentations on the work of specific programmes at the centre, addressing issues including antimicrobial resistance, vaccine-preventable diseases and influenza. In addition to formal presentations, the programme included several hands-on exercises. The presentations and the hands-on exercises facilitated interaction with ECDC experts and other observers who gained practical experience in creating rapid risk assessments, interpreting molecular typing data, integrating typing data in European-level surveillance and public-health decision making.

The ESCMID observers travelled to the ECDC from all over the world, half came from EU member states, while the other half travelled from the US, Turkey, Uzbekistan, India and Oceania. Their visit reports are available on ESCMID’s website. This is the fifth year of the ESCMID-ECDC observership initiative with feedback from both ECDC staff and ESCMID observers continuing to be positive. Therefore we are pleased to report that the ECDC observership programme will continue in 2018 from 3–7 September.

More information can be found at www.escmid.org/ECDC_observer and in the advertisement on page 61.

Top 10 ESCMID Collaborative Centres

<table>
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<td>14</td>
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ECDC/ESCMID Observership 2017

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<tr>
<td>Female</td>
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<th>Figure 2. Length of stay in 2017</th>
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<td>16 – 31 days</td>
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<td>Medical Microbiology and Infection Prevention</td>
<td>University Medical Centre Gröningen</td>
<td>Gröningen, Netherlands</td>
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<tr>
<td>3</td>
<td>Jordi Bellmunt</td>
<td>Critical Care Department and Clinical Research and Innovation in Pneumonia and Sepsis</td>
<td>Vall d’Hebron University Hospital,</td>
<td>Barcelona, Catalonia, Spain</td>
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Mentoring

www.escmid.org/mentorship

The mentorship programme was launched in 2014. Currently 27 ESCMID Mentorship Centres (EMCs) are registered with ESCMID throughout the world. There are 14 ongoing mentorships and the progress reports from the mentees have so far been very positive. Two of the main motivations for being mentored are getting career advice and to acquire specific expertise from a well-established specialist. Any ESCMID young scientist member has the opportunity to be mentored by a senior expert at one of the EMCs. A typical example is a mentee being mentored through their research project from the initial phase of approval by the ethics committee through the planned activities of case inclusion, statistical analyses and publication.

In 2018 we will be offering a handful of two-year mentorships to those with a specific educational aim. Up to EUR 3,000 will be reimbursed against original receipts for costs incurred over the maximum two-year period, including telephone bills, telephone conference invoices and travel costs (train, air ticket).

Maurizio Sanguinetti
ESCMID Professional Affairs Officer
maurizio.sanguinetti@escmid.org

Increasing the range of ESCMID Mentorship Centres is important to us. If your centre has experience in mentoring or is a centre of excellence in a specific area of infectious diseases, clinical microbiology or infection control, please apply to be recognized as an ESCMID Mentorship Centre and contribute to the research and career development of up-and-coming scientists. Applications are easily submitted online at www.escmid.org/mentorship.

Take advantage of this new programme to discover your strengths and fulfill your potential. Look out for the call for applications on our website and in our newsletter.

WHO/ESCMID Observership 2017

Nine ESCMID observers spent three days at the World Health Organization (WHO) in Copenhagen, Denmark from 24 – 26 October 2017. The visit gave them an insight into the operations of the organization through informative sessions regarding the special interests of WHO. It also provided an invaluable networking opportunity.

On the first day WHO staff presented the various activities to observers, with a focus on the division of health emergencies and communicable diseases, and lectures about AMR and emergency preparedness for emerging infectious diseases. On the second day, they delved into more specific topics, including influenza and other respiratory pathogens, malaria and other vector-borne parasitic diseases, and tuberculosis. On the last day, observers had the opportunity to give a 5-minute presentation about their backgrounds and the context of their work, their perceptions of WHO before and after the visit, and to discuss potential collaborations in the future. All reports from the observers, which can be viewed on our website, are very positive and highlight the value of such collaborations.

In 2017, four ESCMID members from Europe and one each from Indonesia, India, Australia, South Africa and Peru, successfully completed the WHO Regional Office for Europe observership, as listed below.

ESCMID-supported observers who visited WHO in 2017

Tika Aditrya, Balikpapan, Indonesia
Jayakanth Chany, Jodhpur, India
Geoffrey Coombs, Murdoch, Australia
Tracy King, Pietermaritzburg, South Africa
Alejandro Martin-Quirós, Madrid, Spain
Laura Melissa Mori Llontop, Callao, Peru
Prajwal Prajwal, Schlieren, Switzerland
Stephanie Sian Thomas, Manchester, United Kingdom
Arkadii Vodianyk, Kiev, Ukraine

Visit ECDC Observerships in 2018

www.ecdc.europa.eu

A group of 15 observers (ESCMID members) are offered a five-day programme at the European Centre for Disease Prevention and Control (ECDC) in Stockholm, Sweden. 3 – 7 September 2018

Applications accepted from: May 2018

Applicants must be ESCMID Young Scientist Members and active in the infectious disease and public health fields beyond a regional level.

To apply, visit the ESCMID website.

www.escmid.org/ECDC_Observer

www.ecdc.europa.eu
The parity commission’s (PC) primary aim is to promote fairness in the working environment of all clinical microbiology and infectious disease professionals. It undertakes its own research and examines the research of others to find out what and where the problems are, raises awareness of the issues, develops strategies both to address them and to encourage change, diversity and mentoring. Closer to home, the parity commission exerts its influence to increase diversity at ESCMID events and activities, including educational courses and workshops, the Summer School and ECCMID itself. Its involvement leads to insights, which in turn can be translated into guidelines for best practice to obtain a balanced professional population.

In the period 2010 – 2016, the ESCMID PC promoted a variety of research projects to discover detailed information about inequality in the sector of clinical microbiology and infectious diseases (CM/ID). These projects focused mostly on gender balance but highlighted that, due to the growing mobility of health care workers, discriminatory mechanisms based on national origin are also an increasing problem. Around 15,000 physicians are affected each year and with around 150,000 qualified foreign doctors presently working in Europe, there is still very little information available so far on the actual professional and living conditions of expatriate doctors.

The PC is therefore carrying out a study specifically aimed at filling this gap. The study includes a literature review on inter-European mobility of physicians and a set of in-depth interviews with clinical microbiologists and infectious disease specialists who have spent or are spending a working period in another European country. The study is expected to be completed in May 2018.

Despite the fact that for many years women have made up the majority of medical school graduates, leadership positions in academic and other medical research institutions are overwhelmingly dominated by male physicians and microbiologists. It seems that gender parity is not advancing as it should be in medical academic settings. The PC will therefore conduct a two-stage process whose goal is to review and reform in a rational and balanced fashion the application restrictions currently responsible for the continued imbalance observed in senior/leadership positions in clinical microbiology and infectious disease workplaces. The first stage will assess the current situation and determine what improvements need to be made. The second will involve communicating formally with identified medical societies and implementing a rational solution, allowing those who have taken career breaks fair access to career development tools (awards and grants for instance) leading towards senior posts.

The PC continues to be active on its blog, to look at disparity due to gender or provenance. It invites members to contribute their experience of good practice for gender and geographic balance or of being denied access to the professional assets essential to make progress in their career by commenting on the blog at http://profession-issues.escmid.org.

For further information about PC activities, such as publications, projects or simply to contact us, please visit the ESCMID website www.escmid.org/parity.

The Trainee Association of ESCMID (TAE) aims to improve the training in clinical microbiology (CM) and infectious diseases (ID), and to create a large network of young professionals to facilitate and promote international collaboration and effective use of resources. The TAE responds to concerns of trainees in particular and the challenges they face, but also represents the interests of young medical specialists who have recently finished their training, medical students, PhD students and other young researchers within ESCMID.

This past year, TAE steering committee members have represented the interests of trainees at several important meetings, including the annual meetings of the European Union of Medical Specialists’ Medical Microbiology and Infectious Diseases sections, and at those of both the ESCMID Educational and Professional Affairs subcommittees. During ECCMID 2017 the TAE organized the Trainees Day with over 115 participants. Round table sessions were held with recognized experts in CM and ID, who led discussions about career development and shared their own work-life experiences. The TAE awards for Training Achievement were also presented during this event and the Young Investigator Awards presented their research accomplishments.

For the first time, TAE representatives attended the ESCMID Summer School 2017 to inform participants about TAE’s activities. Furthermore, we co-organized a successful Postgraduate Education Course about “Antibiotic therapy in practice” in November 2017. Between June and September 2017, the TAE launched a survey among European trainees focusing on the topics of supervision, mentorship and management. Up to 400 respondents participated in this survey and the main findings will be shared at ECCMID 2018. Our interest to study these specific areas arose from earlier observations obtained during a previous TAE survey, the results of which were published in 2016 and 2017 (PMID: 27704297 and PMID: 28233138, respectively).

In 2018 the TAE is collaborating with ESGAP and EUICID in a new survey of antimicrobial stewardship and infection control, which also includes training-related aspects. Furthermore, the TAE plans to assess the associations between income, work satisfaction and migration desires of (young) medical specialists in different European countries.

Last year the TAE steering committee increased its use of social media to share interesting news from CM, ID and other topics relevant for young professionals and to endorse interaction among peers. We invite you to visit our website [www.escmid.org/tae] and to follow us on Facebook [www.facebook.com/ESCMID.TAE] and Twitter (@TAEescmid).

Finally, 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.

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maurizio.sanguinetti@escmid.org

David Ong
President of the TAE
davidyang@gmail.com

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Finally, 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.
Update and improve your clinical and laboratory skills!

The ESCMID Observership programme is an opportunity for ESCMID members to visit an ESCMID Collaborative Centre and to learn good clinical and laboratory practice.

www.escmid.org/observerships

In 2017/2018 the international affairs subcommittee has continued to initiate and nurture relationships on all continents. Thanks to the subcommittee’s continued efforts ESCMID has been able to extend its reach and presence across the world.

Over the past year the ESCMID international affairs subcommittee has continued to develop ESCMID’s international relations. Strong links have been forged on every continent, particularly in the Far East, Middle East, India, the Russian Federation and South and Central America, by contributing to or organizing conferences, symposia and training as well as establishing ESCMID collaborative centres.

Cooperation throughout Europe is well established, while the societies’ partnerships on the North American continent need to be further reinforced. On 6 October 2017 ESCMID and the Association of Medical Microbiology and Infectious Disease Canada (AMMIC Canada) signed a memorandum of understanding. Potential areas of cooperation between the two societies are contributions to the scientific programmes of annual meetings, the development of medical guidelines and the organization of conferences, education courses and observerships.

Giuseppe Cornaglia stepped down as chairperson to follow other pursuits and we wish him well in his endeavours.

Past Events

• 18th congress of the Asociación Panamericana de Infectología (API) from 16 – 20 May 2017 in Panama City, Panama

ESCMID representatives participated in a co-organized symposium. Juan A. Pineda discussed new paradigms in hepatitis C and Dominique Salmon held a talk about new approaches in the treatment of chronic hepatitis B.

• 18th International Congress of Microbiology from 29 – 31 August 2017 in Tehran, Iran

Luis Martinez-Martinez gave a talk on phenotypic and genotypic methods for the detection of carbapenemases in enterobacteria, on susceptibility testing of polymyxins and heteroresistance, persistence and toxin-antitoxin systems. He also participated in panel discussions on the management of microbial resistance and the identification of antimicrobial drugs from natural resources.

• ASM/ESCMID Conference on Drug Development to Meet the Challenge of Antimicrobial Resistance from 6 – 8 September 2017 in Boston, United States

ESCMID co-sponsored the conference with the American Society for Microbiology (ASM) and William Hope acted as ESCMID Co-Chair.

• Annual Meeting of the Korean Society of Clinical Microbiology in October 2017 in Seoul, South Korea

ESCMID co-organized and co-chaired a symposium on the shift of management paradigm in the clinical microbiology laboratory. Katja Seme talked about laboratory automation, ESCMID executive committee member Maurizio Sanagiueetti discussed the 24-hour laboratory and Sunjoo Kim from the Korean society held a lecture on responsible management. Mario Poljak co-chaired the symposium and held a keynote lecture on the ongoing revolution in clinical microbiology.

• 2nd Gulf Congress of Clinical Microbiology and Infectious Diseases (GCCMID) from 1 – 4 November 2017 in Bahrain

During the congress organized by the Saudi Society for Medical Microbiology and Infectious Diseases (SSMMID), Maurizio Sanagiueetti gave a talk about infections related to therapy with biological agents and Paul Verwey held a presentation about prophylaxes for Aspergillus in haematological cancer.

• Ministerial Conference on TB and Global Health from 17 – 18 November 2017 in Moscow, Russia

Delia Goletti gave a talk on biomarkers for tuberculoses in HIV-TB infected patients.

• 41st Congress of Indian Association of Medical Microbiologists, IAMM (Microcon) from 22 – 26 November 2017 in Ranchi, India

Surbhi Malhotra-Kumar gave a presentation about the transmission of plasmid-borne antimicrobial resistance and Katja Jeannot discussed mechanisms of resistance to polymyxins in Gram-negative bacteria.

• 30th International Congress of Chemotherapy and Infection from 24 – 27 November 2017 in Taipei, Taiwan

ESCMID co-organized a symposium entitled Drug resistance in the microbial world, which included a lecture by Giuseppe Cornaglia on antibacterial resistance, a talk by ESCMID President Mario Poljak on antiviral resistance and a presentation by Alan Hauser on new therapeutic approaches for bacterial infections. In addition Mario Poljak gave a keynote address reviewing vaccines for HPV.
ESCMID supports young clinicians, researchers and established scholars with awards and grants to acknowledge past achievements and provide an incentive for future accomplishments. ESCMID supports its members’ research projects and training in the disciplines of clinical microbiology and infectious diseases with a total of some half a million euros every year. About EUR 330,000 of that is reserved for its grant programme to finance several promising research projects. ESCMID is pleased to announce the recipients of the society’s awards and grants for the year 2018.

**Young Investigator Awards**

The executive committee selected two recipients for this year’s Young Investigator Awards for research in clinical microbiology and infectious diseases. The winners are Evgeny A. Idelevich, a clinical microbiologist from the University Hospital Münster, Germany, who has a strong interest in rapid sepsis diagnostics and susceptibility testing; and James R. Price, a research lecturer at the Brighton and Sussex Medical School, United Kingdom who develops strategies to prevent healthcare-associated infections by multidrug-resistant organisms. We congratulate the winners and look forward to their valuable contributions to the society in the coming years.

**Excellence Award**

Our most prestigious award is the ESCMID Award for Excellence in Clinical Microbiology and Infectious Diseases. The ESCMID executive committee selected Dimitrios P. Kontoyiannis from the University of Texas MD Anderson Cancer Center in Houston, United States, as well as Claudio Viscoli from the University of Genova in Italy to receive this year’s distinction in recognition of their achievements. Kontoyiannis is an international expert in clinical and experimental mycology. His research group is credited with sustained and impactful contributions to medical and translational mycology through advances in antifungal pharmacology, the study of host defences against fungi, novel diagnostics, clinical trials, dedicated mentoring, organizational service and life-saving patient care. Viscoli is an expert for infectious disease in children and adults with special expertise in infections in the compromised host, fungal infections, infections in cancer and neutropenia, infections in liver transplant recipients, opportunistic infections in HIV and HIV vertical transmission. The awards pay tribute to their accomplishments in the field. Congratulations!

**TAE Awards**

The two winners of this year’s TAE Awards for training achievements are Robbert Bentvelsen, a resident in clinical microbiology at the University Medical Center in Leiden, Netherlands, and Maroun Sfeir, infectious diseases trainee at the Weill Cornell Medical College in New York, United States.

**ISF Sepsis Award**

Vinod Kumar from the Department of Genetics at the University of Groningen is the winner of this year’s ISF Sepsis Award for his abstract about a functional genomics approach to identify novel susceptibility pathways for fungal infections.

You can find details of all recipients of awards and research grants for 2018 on the following pages.

We received 162 applications for 2018 ESCMID research grants, which are awarded for outstanding research projects by young ESCMID members. Fifteen colleagues with basic or applied research projects were chosen. Special thanks to all the experts and reviewers (listed on page 70 – 71), who did a tremendous job evaluating all these submissions.

As happens every year, one of the research grant recipients with a highly rated project proposal is also awarded the ESCMID/FEIMS Fellowship and this year it goes to Natalia Muñoz-Wolf from Trinity College Dublin, Ireland, for her project investigating the role of Mal/TIRAP and the Mal-S180L SNP as determinants of susceptibility to pneumococcal disease and antipneumococcal vaccine efficacy.

In addition ESCMID supports junior colleagues with merit-based travel grants and free registration to enable them to attend ECCMID. We are giving 91 young scientists travel grants and free registration for ECCMID 2018 in Madrid, where they will present the results of their work. ESCMID also supports its members early in their careers with attendance grants for other ESCMID conferences, the Summer School, post-graduate educational courses and other educational and/or scientific events.
ESCMID Award for Excellence in Clinical Microbiology and Infectious Diseases

Claudio Viscoli, University of Genova and Ospedale Policlinico San Martino, Italy

Claudio Viscoli is an expert in the field of infectious disease in children and adults with special expertise in infections in the compromised host, fungal infections, infections in cancer and neutropenia, infections in liver transplant recipients and opportunistic infections in HIV and HIV vertical transmission.

He attended medical school at the University of Genova and after graduation worked for 15 years in the paediatric infectious disease department at the G. Gaslini Institute in Genova, Italy, first as a fellow at the post-graduate school of infectious disease and then as attending physician in the same department. As the position of consultant in infectious disease in Italy was basically non-existent at that time, Viscoli and others became pioneers in this new field, particularly in haematology, oncology and HCT. A short period as an observer at the Sloan Kettering Research Center in New York allowed him to further understand the role of the infectious disease consultant.

Claudio Viscoli has focused his research activity mainly on adult and paediatric immunocompromised host infections and has an h-index of 46 (Scopus), number of citations: 9385, total IF: 1182. Claudio Viscoli is author of over 330 original articles or reviews in peer review journals [Pub-Med; Scopus] and 21 books or chapters. He is also a reviewer for several journals including JID, CID, Lancet ID and CID.

He is currently the designated member for Italy on the advisory board of EUIC [European Committee on Infection Control, President of SITA – Società Italiana per la Terapia Antinfettiva Italiana (Italian society for antimicrobial therapy)] and, among other roles, consultant to the scientific advisory board for anti-infectives of the committee for medicinal products for human use [CHMP] of the European Medicine Agency.

He leads the infectious diseases team at the University of Genova where his main activities are teaching, patient care and research as well as giving presentations around the world.

He will receive his award on Sunday, 22 April 2018 at a dedicated awards session at ESCMID in Madrid. During the ceremony he will give his recipient lecture Changing epidemiology and management of fungal infections in the compromised host.

Dimitrios P. Kontoyiannis, University of Texas M. D. Anderson Cancer Center, United States

Dimitrios Kontoyiannis is one of the world’s leading authorities on invasive mycoses and an innovative investigator in this critical area. He is the Texas 4000 Distinguished Endowed Professor for Cancer Research and Deputy Head Research in the Division of Internal Medicine at The University of Texas MD Anderson Cancer Center. He is also an adjunct professor at Baylor College of Medicine and University of Houston College of Pharmacy in Houston, Texas. He received his medical degree summa cum laude from the National and Kapodistrian University of Athens in Greece. He also completed a post-doctoral clinical research fellowship at his current institute, followed by training in internal medicine at Baylor College of Medicine, also in Houston, TX, where he served as a chief medical resident.

Dimitrios Kontoyiannis has authored more than 520 peer-reviewed manuscripts and been invited to give over 320 lectures at international conferences and prestigious institutions in the US and abroad. He serves as an associate editor for Mycoses and Journal of Infection and sits on the editorial boards of many journals. He is one of the two most highly cited investigators in the area of mycology with over 36 000 citations [Google Scholars, accessed December 22, 2017] with an h index of 93.

His research group is credited with sustained and impactful contributions to medical and translational mycology through advances in antifungal pharmacology, the study of host defences against fungi, novel diagnostics, clinical trials, dedicated mentoring, organizational service and life-saving patient care. Dimitrios Kontoyiannis is the recipient of many awards including most recently being named a fellow of both the American Academy of Microbiology and the American Association for the Advancement of Science (AAAS).

For the last 20 years Dimitrios Kontoyiannis has led a highly productive and innovative research programme in both clinical and translational mycology. His investigations in clinical mycology encompass studies in epidemiology, natural history, prognosis, and management of nearly all opportunistic fungal infections affecting immunocompromised cancer patients.

He will receive his award on Sunday, 22 April 2018 at a dedicated awards session at ESCMID in Madrid. During the ceremony he will give his recipient lecture How transformation in care of haematological cancers will impact the invasive fungal disease ecosystem.

ESCMID Young Investigator Awards for Research in Clinical Microbiology and Infectious Diseases

Evgeny A. Idelevich, Münster, Germany

Evgeny Idelevich is a board-certified specialist for clinical microbiology at the Institute of Medical Microbiology at the University Hospital Münster in Germany. He is a very promising, up-and-coming young scientist physician, whose excellent translational research on the development of novel methods for infectious disease diagnostics has already found use in everyday laboratory practice. Evgeny has a strong interest in the translational approach used to develop new methods to diagnose infectious diseases.

His research focuses on the rapid diagnosis of bloodstream infections and sepsis, rapid susceptibility testing and the potential of novel antimicrobials to treat multidrug-resistant microorganisms. He has developed novel principles of sepsis diagnostics and detection of multidrug-resistant organisms, which have led to patent applications and technology transfer from academia to industry. Some methods are currently in further development, funded by the German Ministry of Education and Research, and some have already been introduced into routine diagnostics.

Evgeny is an active member of the society. He participates in the ESCMID study group for bloodstream infections and sepsis (ESGMR) where he currently coordinates activities for an international survey of diagnostics of bloodstream infections in European laboratories. Within this project he has built a strong network of clinical microbiologists in 26 European countries.

Evgeny will receive his award during the ESCMID Young Investigator Awards session from 11:30 – 12:30 on Monday, 23 April 2018 in Hall G and will give a presentation on Acceleration of microbiological diagnostics: It’s time to rethink!

James R. Price, Brighton, United Kingdom

James Price, a National Institute for Health Research clinical lecturer in infectious diseases and microbiology at the Brighton and Sussex Medical School, United Kingdom, possesses the full range of talents needed to succeed in clinical research and has already built an impressive CV of completed and ongoing studies.

James’s research is focused on the prevention of healthcare-associated infections, including S. aureus and other multidrug-resistant organisms. He combines developing his research interests with completing specialist training in infectious diseases and microbiology. His work utilizes whole-genome sequencing and epidemiological data to evaluate carriage, acquisition and transmission of pathogens in healthcare settings with the aim of developing interventions to reduce nosocomial infections. James led a detailed prospective study evaluating a nosocomial outbreak of MRSA that led to novel insights into S. aureus epidemiology and the biology of dominant MRSA lineages. He successfully gained competitive funding from the British Infection Association to undertake a novel project, and his current research projects are generating some very exciting results that may challenge our current perceptions of S. aureus infection. James is currently contributing to the development of evidence-based ESCMID guidelines on management of multidrug-resistant Gram-negative organisms.

James will receive his award during the ESCMID Young Investigator Awards session from 11:30 – 12:30 on Monday, 23 April 2018 in Hall G. James will give a talk on Unravelling Staphylococcus aureus transmission: a game of catch or hide and seek?
The following ESCMID members have received a research grant in 2018 for the indicated project.

**ESCMID Research Grants**

### Davide Roncarati
Department of Pharmacy and Biotechnology, University of Bologna, Italy
**Project:** In search of melioidosis in Nigeria: an environmental, clinical and sero-epidemiological surveillance of Burkholderia pseudomallei

### Amaia Zuñiga-Ripa
Department of Microbiology and Parasitology, University of Navarra, Pamplona, Spain
**Project:** Role of erythritol, glutamate, lactate and glycerol in the genital tropism of Brucella

### Anca Lelia Riza
Department of Infectious Diseases, Radboud University Medical Centre, Nijmegen, Netherlands
**Project:** Tuberculosis in Romania: improved drug-resistance detection and molecular epidemiological understanding through whole-genome sequencing (DRD-ME)

### Carsten Kröger
Department of Microbiology, Moyne Institute of Preventive Medicine, Trinity College Dublin, Ireland
**Project:** Are regulatory RNAs crucial for antibiotic resistance and virulence gene expression in the nosocomial pathogen Acinetobacter baumannii?

### Nico Lachmann
Hannover Medical School, Hannover, Germany
**Project:** iPSC-derived macrophages targeting antibiotic resistant Pseudomonas aeruginosa in cystic fibrosis

### Santiago Ramón-García
Vice-chancellor of Research, University of Zaragoza, Zaragoza, Spain
**Project:** Identification of novel therapeutics for difficult-to-treat cystic fibrosis pulmonary infections caused by mycobacteria, using an innovative technology: screening of clinically approved drugs

### Mireia Coscollá
Institute for Integrative Systems Biology (I2sysBio), University of València, Paterna, Spain
**Project:** Decoding the peptidoglycan patterns associated with beta-lactams hypersusceptibility in drug-resistant Mycobacterium tuberculosis

### Sara Dias
Department of Neurology, Centre for Infection and Immunity Amsterdam (CINIMA)
Academical Medical Centre, Amsterdam, Netherlands
**Project:** The role of sex steroid hormones in bacterial meningitis

### Genoveva Garro
Karolinska Institutet, Stockholm, Sweden
**Project:** Role of bacteriophages in the evolution and virulence of the human pathogen Streptococcus pneumoniae

### Emma Bircus
Division of Infectious Diseases, Center for Experimental Molecular Medicine & Center for Travel and Tropical Medicine, Academic Medical Center, Amsterdam, Netherlands
**Project:** Elucidating the dynamics of foodborne transmission of ESBL plasmids using a gnotobiotic mouse model

### Geneviève Garriss
Karolinska Institutet, Stockholm, Sweden
**Project:** Role of bacteriophages in the evolution of resistance to antibiotics in the human pathogen Streptococcus pneumoniae

### Christian Lesterlin
Department of Molecular Microbiology and Structural Biochemistry, National Center for Scientific Research, Lyon, France
**Project:** Acquisition and establishment of drug resistance through bacterial gene transfer

### Natalia Holst-Wolf
Department of Biochemistry and Immunology, Trinity Biomedical Science Institute, Trinity College Dublin, Ireland
**Project:** Investigating the role of MIF/MAF and the MIF/MAF SNP as determinants of susceptibility to pneumococcal disease and antimicrobial vaccine efficacy

### Emma Birns
Division of Infectious Diseases, Center for Experimental Molecular Medicine & Center for Travel and Tropical Medicine, Academic Medical Center, Amsterdam, Netherlands
**Project:** In search of melioidosis in Nigeria: an environmental, clinical and sero-epidemiological surveillance of Burkholderia pseudomallei

### Santiago Ramón-García
Vice-chancellor of Research, University of Zaragoza, Zaragoza, Spain
**Project:** Identification of novel therapeutics for difficult-to-treat cystic fibrosis pulmonary infections caused by mycobacteria, using an innovative technology: screening of clinically approved drugs

### Anna Lalia Riza
Department of Infectious Diseases, Radboud University Medical Centre, Nijmegen, Netherlands
**Project:** Tuberculosis in Romania: improved drug-resistance detection and molecular epidemiological understanding through whole-genome sequencing (DRD-ME)

### Davide Roncarati
Department of Pharmacy and Biotechnology, University of Bologna, Italy
**Project:** The essential transcriptional regulator HP1043 of Helicobacter pylori: a new target for the design of a new antibacterial drug

### Núria Coscollà
Institute for Integrative Systems Biology (I2sysBio), University of València, Paterna, Spain
**Project:** Genetic basis of host pathogen interaction of tuberculosis in West Africa

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**YEARBOOK 2017/2018**

**AWARDS & GRANTS**

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**YEARBOOK 2017/2018**

**AWARDS & GRANTS**

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ISF-ESCMID Sepsis Award

Vinod Kumar, Groningen, Netherlands

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

This year’s winner is Vinod Kumar from the Department of Genetics at the University of Groningen, Netherlands. He submitted an abstract about a functional genomics approach to identify novel susceptibility pathways for fungal infections. In his research, Vinod aims to identify human genes and molecular mechanisms that regulate appropriate immune responses and may contribute to susceptibility to sepsis and other infectious diseases. As traditional approaches to find causal genes for sepsis and other infectious diseases have not been very successful, Vinod and colleagues take advantage of state-of-the-art technologies, simultaneously assessing genetics, transcriptomics and immune-profiling in the context of host-pathogen interaction using population-based cohorts and integrating the obtained data with patient-genetics. Vinod is discovering new avenues for further investigation and targeted drug discovery for sepsis.

For the paper he will present at ECCMID, Vinod and colleagues investigated susceptibility factors for Candida albicans, the most common opportunistic fungal pathogen causing candidaemia bloodstream infection. Not all at-risk patients develop candidaemia, suggesting that genetics influences their susceptibility. Cytokines play a critical role in anti-fungal host defence, but a comprehensive approach to understanding the genetic architecture of cytokine responses against fungi and their role in fungal disease susceptibility is still lacking. That is why Vinod and colleagues performed the first genome-wide association analysis (GWAS) using the largest candidaemia cohort of European ancestry to date to identify susceptibility genes. They assessed the cytokine production capacity in different cellular systems following stimulation with three different opportunistic fungal pathogens: Candida albicans, Aspergillus fumigatus and Cryptococcus neoformans. The study suggests that genetic loci which affect cytokine responses to C. albicans can partly explain an individual’s disease susceptibility.

Following his PhD in Germany in the field of host-pathogen interactions, Vinod moved to the Netherlands (UMCG, Groningen) to further investigate the complex process of host-pathogen interactions from a genetics point of view to understand the mechanisms of infections. As part of his project, he established strong collaborations with clinicians and computational scientists to perform studies using large patient and population-based cohorts. He demonstrated that genetic variations contribute the most to the variability in innate immune responses to infectious agents, and he identified susceptibility genes to fungal sepsis in the European population.

Vinod Kumar will present his abstract after receiving his award during the session ‘Trending topics in sepsis’ on Sunday, 22 April 2018 at 17:00 in Hall A at the 28th ECCMID in Madrid.
ESCMID can look back on a financially well managed year. With an operational surplus of EUR 438,886, the society can not only absorb last year’s shortfall, it can also rebuild the reserves for the years to come. To improve transparency, ESCMID improved the bookkeeping of the funding of its study group activities. The funds allocated to the ESCMID study groups were moved from the general capital of the organization to the assigned capital to create a more transparent picture of the association’s finances.

Best financial result ever
The executive committee’s decision to bring the organization of the society’s annual congress in-house had a positive impact on the society’s financial results: thanks to ECCMID 2017 in Vienna, ESCMID achieved the highest operating profit from its congress in its history.

Costs declined
While the overall expenses for key activities decreased by 3% to EUR 2.8 million in 2017, expenses for the education portfolio were up 18% from last year. This reflects greater expenditure as the society insourced the processing of its educational courses. The income from educational courses increased in line with the budgeted spending on them. Spending in scientific affairs shows a decline in 2017 against the exceptionally high outlay on research grants in 2016. However scientific affairs in 2017 still accounted for the largest share of financial resources of all activities. Spending on communications and professional affairs showed minimal reductions.

New accounting standard for non-profit organizations
As we announced last year, we have started preparing for the transition to a new accounting standard, GAAP FER 2, which will improve the informative value and transparency of the society’s performance reports. While ESCMID will postpone the switch to GAAP FER 2 by one year to prepare its systems for the change, it has already started to build its internal control system. In addition the society has introduced a code of conduct and implemented clear policies on procurement, expenses and communication. Finally the society has initiated an audit of its information technology systems to better control its costs.

Outlook: science and professional development remain central
The budgeted expenses for 2018 are similar to 2017. The largest share of ESCMID’s expenses in 2018 will again be spent on the portfolios that allow the society to fulfill its mission. As may be seen from Figure 3 below, scientific affairs will again account for the largest portion of the society’s expenses, followed by education and professional affairs. The costs of the society’s administration, including finance, communication, publishing and the executive committee, will comprise about 30% of total spending.

“As a non-profit organization, ESCMID supports many scientific and educational activities and is able to provide grants for research projects and observership visits. This is only possible because of a solid financial basis. In 2017 the society returned to a positive financial result on an operational level as a result of its successful activities.”

Alex W. Friedrich
ESCMID Treasurer
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29th **ECCMID**

Amsterdam, Netherlands
13 – 16 April 2019
RAI – Amsterdam

30th **ECCMID**

Paris, France
18 – 21 April 2020
Paris Convention Centre

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**Postgraduate Education Courses and Workshops**
Receive state-of-the-art knowledge from expert educators. Gather hands-on experience in your field of interest. Discuss your work with senior and peer colleagues.

- **25 – 26 May**
  - Colistin: the Last Barrier for MDR
  - Beijing, People’s Republic of China
  - ESCMID Postgraduate Education Course

- **12 – 14 Sep**
  - Infection in the Elderly: the Next Challenges
  - La Tronche, France
  - ESCMID Postgraduate Education Course

- **14 – 16 Sep**
  - ESCMID/ASID Course on Infectious Diseases in Pregnant Women, Fetuses and Newborns
  - Sydney, Australia
  - ESCMID Postgraduate Education Course

- **19 – 21 Sep**
  - Antifungal Resistance in Candida and Aspergillus: from Clinic to Clinical Laboratory
  - Delhi, India
  - ESCMID Postgraduate Technical Workshop

- **25 – 28 Sep**
  - Diagnostic Microbiology: MALDI-TOF, Bacterial Genomics, Metagenomics, Automation and Molecular Microbiology
  - Lausanne, Switzerland
  - ESCMID Postgraduate Technical Workshop

- **25 – 28 Sep**
  - Antimicrobial Susceptibility Testing and Surveillance: from Laboratory to Clinic – a EUCAST, ESGARS and EPASG Perspective
  - Bochum, Germany
  - ESCMID Postgraduate Technical Workshop

- **27 – 28 Sep**
  - Management of Mycobacterial Infections and Associated Comorbidities
  - Rome, Italy
  - ESCMID Postgraduate Education Course

- **11 – 13 Oct**
  - Acute Bacterial CNS Infections of the Brain
  - Munich, Germany
  - ESCMID Postgraduate Education Course

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An intense one-week course covering diverse topics in the infection field. The high faculty/student ratio and the high level of interactivity make it so popular.

- **1 – 7 Jul**
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  - Paris, France

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Get the latest news about your field of work delivered from selected experts. Exchange ideas with your colleagues on hot topics.

- **18 – 21 Apr 2020**
  - ESCMID/ASM Conference on Drug Development to Meet the Challenge of Antimicrobial Resistance
  - Lisbon, Portugal

- **26 – 27 Sep**
  - Conference on Antimicrobial Resistance: from Bench to Practice
  - Havana, Cuba

**Future ECCMIDs**

- **13 – 16 Apr 2019**
  - 29th ECCMID
  - Amsterdam, Netherlands

- **18 – 21 Apr 2020**
  - 30th ECCMID
  - Paris, France

More detailed information can be found on the ESCMID website: [www.escmid.org](http://www.escmid.org)
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Special thanks go to microbiologist and photographer Ángel Ros Die who let us use his photographs.

My name is Ángel Ros Die and I work as a microbiologist at the Microbiology Service of the University Hospital Dr. Peset in Valencia, Spain. My hobby, photography, has been with me for many years and in the department, with the collaboration of all my colleagues, I have been able to put together a comprehensive collection of more than 5,000 scientific photographs. I have obtained prizes (3rd in 2010, 2014 and 2nd in 2016) in the scientific photography contest of the Faculty of Sciences of the National University of Distance Education in Madrid. I exhibited some of my photographs under the title “Microbiology in images” at the Faculty of Medicine of the University of Valencia. A selection of my pictures can be viewed on my website: www.angelrosdie.com