

ESCMID's mission is to improve the diagnosis, treatment and prevention of infectious diseases by promoting and supporting research, education and training in the infection disciplines. This is achieved by scientific exchange, educational programmes, grants and awards, certification and consultation with professional and government agencies.

# ESCMID NEWS

**SOCIETY**  
**ESCMID Assembly of Members  
 2008 – Invitation**

**ESCMID Awardees 2008**

**SCIENCE**  
**Early Diagnosis of Infectious  
 Diseases in Air Travellers**



Front Page: Infrared monitoring of skin temperature as a possible method for mass screening of sick persons at airports (infrared image courtesy of FLIR Systems GmbH, Frankfurt)

Below: Members of the Executive Committee at the Assembly of Members 2007 in Munich. The Executive Committee urges all ESCMID members to attend the 2008 meeting and make their voices heard.



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# Table of Contents

<b>Society</b>		<b>Professional Affairs</b>	
3	Editorial	17	Joint Statement in Support of the Proposed Joint Technology Initiative on Innovative Medicines
4	ESCMID Assembly of Members 2008 – Invitation	19	Marie Curie Actions: The Purple Square in the 7th EU Framework Programme
6	ESCMID Awardees 2008	22	Professional Affairs Advisory Committee Kick-off Meeting
10	Tribute to Pentti Huovinen, ESCMID Excellence Awardee 2008	<b>Science and Education</b>	
14	European Council Extraordinary Meeting 2007 – Minutes	23	Course Report: Update on Invasive Fungal Infections
		24	Early Diagnosis of Infectious Diseases in Air Travellers
		26	Course and Symposium Report: Bacterial Adaptation Mechanisms: Biofilms, Hypermutability and Antibiotic Resistance
		28	Conference Report: 3rd Conference on New Frontiers in Microbiology and Infection - <i>Streptococcus pneumoniae</i>
		32	Book review: <i>The Microbiological Safety of Food in Healthcare Settings</i>
		<b>Calendar</b>	
		43	Forthcoming Events

## Imprint

### ESCMID News

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# Infectious Diseases and Professional Affairs

Editorial



Robert C Read,  
Professional Affairs Officer,  
Infectious Diseases,  
r.c.read@sheffield.ac.uk

Amongst our membership, approximately 1'200 are Infectious Disease Physicians. Within the Executive Committee of ESCMID it is my role to promote the professional interests of this sector. Over the last couple of years there have been a number of developments. Of central importance has been the formation of a Professional Affairs Advisory Committee, the purpose of which is to advise the Professional Affairs Officers and the Executive of ESCMID. This Committee, which I chair alongside Professor Gunnar Kahlmeter, met for the first time in October and we were delighted by the enthusiasm and creativity of the group. The remit and activity of this new Committee is described in full on page 22.

### Practice Guidelines in Infectious Disease

It has been a very busy year in the development of ESCMID practice guidelines. The Society has earmarked a budget of approximately EUR 100'000 per annum for this purpose to cover costs associated with writing, group meetings, and professional literature searches. The Executive Committee has approved a *modus operandi* for guideline development. We are currently contributing to a number of international joint guidelines including collaborations with the Infectious Disease Society of America (Catheter-related urinary tract infection and Urinary tract infection), the European Respiratory Society (Lower respiratory tract infection), the European Society for Critical Care Medicine (Surviving sepsis campaign), and the European Cardiology Society (Endocarditis). In addition we have commissioned ESCMID guidelines on the diagnosis and management of *Clostridium difficile*, a project led by Professor Ed Kuijper. It is expected that further guidelines will be commissioned later in the year and suggestions from the ESCMID membership for submission to the Professional Advisory Affairs Committee are most welcome.

### ESCMID Training & Career Centre Platform

ESCMID, as the only internationally-active European professional organization in Infectious Diseases and Clinical Microbiology, can provide a valuable service in terms of international recruitment and we have recently upgraded the ESCMID website to enhance job recruitment and exchange. The Executive Committee considers professional mobility to be an important remit of the Society. Within the website, the recruitment platform is currently heavily trafficked and we have been delighted with the use to which it has been put, for international recruit-

ment of both scientists and clinicians. Another domain of the ESCMID website is concerned with advertisement of exchange opportunities. We initiated this idea during the summer of 2007 to allow those who wish to offer or take part in professional exchanges (both senior doctors and scientists, and trainees) to use the website to make contacts and arrange professional exchange. The exchange platform is linked to fellowship opportunities to enable application for travel grants. Unfortunately the traffic on this part of the website has not been particularly heavy and over the coming few months we will be looking into ways of improving this.

### Professional Observerships

One idea that came out of the inaugural meeting of the Professional Affairs Advisory Committee was the concept of the professional observership. These are envisioned to be short-term (i.e. 2-6 week) visits to internationally recognized centres of excellence in Infectious Diseases and Clinical Microbiology. This will be an excellent opportunity for trainees and senior doctors to enjoy a short period of professional refreshment in a centre that can offer experiences that are outside their regular realm in their home environment. The first step in achieving this will be to invite individuals and centres throughout Europe to nominate themselves as "ESCMID Centres of Excellence". Thus the centre will be able to post on the ESCMID website their unique offering to prospective observers. We plan to invite nominations during the summer of 2008. Once this is up on the website, individuals will be able to apply to the ESCMID Centres of Excellence to travel for short term visits, and applications can be linked to ESCMID travel grant opportunities.

### Professional Affairs Questionnaire

One of the taxing challenges for our profession in Europe is that countries vary greatly in the accreditation, recognition and training in Infectious Diseases and Clinical Microbiology. ESCMID has a very keen interest in these matters and we are represented at the Union of European Medical Specialist (UEMS) Sections of Infectious Diseases and (hopefully soon) Clinical Microbiology. ESCMID collaborates fully with the aims and objectives of UEMS. Over the last ten years ESCMID Executive Members (most recently Giuseppe Cornaglia and Elisabeth Nagy) have conducted surveys of the status of specialists in Infectious Diseases and Clinical Microbiology in all of the different countries represented by ESCMID. These surveys provided valuable information and highlighted a number of countries where our individual specialties are poorly represented and in some cases at a great disadvantage. This coming year we will be repeating this survey and in collaboration with Gunnar Kahlmeter, I will be surveying professional affairs across all of the different countries in Europe.

The last year has been an exciting journey for me as Professional Affairs Officer and I would like to thank my colleagues, especially Giuseppe Cornaglia, Gunnar Kahlmeter, Peter Schoch and Karin Werner for all of the helpful support that I have received.

# ESCMID Assembly of Members 2008

## ESCMID Assembly of Members 2008

Dear ESCMID Member,

On behalf of the Executive Committee, I cordially invite you to the next regular Assembly of Members of the European Society of Clinical Microbiology and Infectious Diseases, which will be held during the 18th European Congress of Clinical Microbiology and Infectious Diseases in Barcelona.

In addition to the reports of the Executive Officers, the Agenda also features amendments to the Statutes proposed by the Executive Committee (see information on the next page). I am counting on your attendance and look forward to seeing you in Barcelona.

Yours sincerely, Giuseppe Cornaglia, President



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**Date and Time:**

Sunday, 20 April 2008, 18:15 h – 19:30 h

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**Location:**

Lecture Hall 115,  
Centre Convencions International Barcelona (CCIB),  
Barcelona, Spain

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**Ad 13: Amendment to the Statutes**

*The Executive Committee proposes the following amendments to the Statutes, also taking into consideration a proposal submitted by Pramod Shah in 2007. Changes compared to the Statutes approved in 2007 are underlined.*

## Excerpt from the Statutes of the European Society of Clinical Microbiology and Infectious Diseases (Non-Profit Society)

**§ 4 Organisation**

The Society will be organised by an Executive Committee, a European Council, and an Assembly of Members. Executive power of the Society is vested in the Executive Committee, which shall consist of the President, the Past President, the President-elect, who also acts as the Secretary General, the Treasurer, and four additional members.

The selection of candidates to be considered for election to the Executive Committee shall be made by a Nominating Committee. The membership may also nominate candidates, who must be put on the ballot if the following requirements are fulfilled: i) The nomination must be supported in writing by at least 30 members in good standing of at least one year, and sent by either fax or regular mail to the Secretary General by 31 August of the election year, ii) At least 15 supporting members must come from countries other than the country of the nominated candidate, iii) Nominees who fail to be elected may not be nominated again for the immediate following term of office.

**Agenda**

- 
- 1 Welcome and President's report  
(G. Cornaglia)

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  - 2 Report of the Secretary General  
(J. Garau)

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  - 3 Presentation of the ESCMID Awardees  
(R. Norrby)

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  - 4 Financial report of the Treasurer (E. Nagy)

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  - 5 Approval of the accounts (vote)  
(G. Cornaglia)

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  - 6 Report of the Education Officer (M. Akova)

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  - 7 Report of the Professional Affairs Officer,  
Clinical Microbiology (G. Kahlmeter)

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  - 8 Report of the Professional Affairs Officer,  
Infectious Diseases (R. Read)

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  - 9 Report of the Scientific Affairs Officer  
(J. Vila)

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  - 10 Report of the Chair of the Publication  
Committee (R. Norrby)

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  - 11 Report of the President of the 18th ECCMID  
(F. Baquero)

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  - 12 Report of the Chair of the 18th ECCMID  
Programme Committee (A. Voss)

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  - 13 Amendment to the Statutes (vote)  
(G. Cornaglia)

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  - 14 Formal approval of the actions and  
discharge of the Executive Committee  
(vote) (G. Cornaglia)

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  - 15 Other business (G. Cornaglia)
-

# ESCMID Awardees 2008

We are delighted to present the Awardees and Research Grant recipients 2008 and congratulate them on their success.  
*The ESCMID Awards and Executive Committees*

## Award for Excellence in Clinical Microbiology and Infectious Diseases



### Pentti Olavi Huovinen

born 1956 in Helsinki, Finland; MD, PhD, Professor and Director of the Department of Bacterial and Inflammatory Diseases at the National Public Health Institute (KTL), Finland, in recognition of his outstanding contribution to understanding antibiotic resistance, especially resistance towards macrolides. His laboratory has published breakthrough results on the mechanisms and surveillance of resistance, molecular epidemiology of important pathogens, relationship between antibiotic consumption, and resistance and impact of antibiotic resistance on clinical practice. In addition, Pentti Huovinen has great merits for promoting Clinical Microbiology in the medical community and the general public and thus for the development of our discipline.

Pentti Huovinen will be presented the ESCMID Excellence Award by the ESCMID President, Giuseppe Cornaglia, during the 18th ECCMID in Barcelona on which occasion he will give his award lecture on *Microbes and man; from unexpected to unknown*.

### Research Interests

From his early years on Pentti Huovinen has been interested in the spread of resistant bacterial pathogens and their mechanisms of resistance. Up to his postdoctoral period (1986-87) at the Harvard Medical School and during his years as a research associate at the University of Turku his main research focus was on plasmid- and transposon-mediated resistance. In 1990, KTL started a nationwide surveillance network of 25 clinical microbiology laboratories to control bacterial resistance. Thereafter, this network has supported studies on the relationship between antibacterial use and resistance and on the molecular background of resistance as well as an intervention to control macrolide resistance among group A streptococci. In 1998, the MIKSTRA-programme was started to guide optimal use of antibiotics in outpatients according to national current care recommendations. From 1995, outpatient usage of antibacterials has continued to decrease in Finland. Today his research interests include the control of bacterial resistance at an individual level and the protection of normal microbiota.

## ESCMID and bioMérieux Award for Advances in Clinical Microbiology in East Central and Central Europe



### Ivan Nikolaev Ivanov

born 1978 in Sofia, Bulgaria; researcher at the National Reference Centre for Diagnosis and Control of Nosocomial Infections, Sofia, in recognition of his outstanding contribution to improving PCR assays for rapid detection and typing of microbial DNA in clinical and environmental samples. He improved molecular techniques for studying pathogens such as *Bacillus anthracis*, *Francisella tularensis*, *Yersinia pestis* and *Brucella* spp. and was pivotal in mastering a recent brucellosis outbreak in Bulgaria.

Ivan Ivanov will be presented his award by Professor Giuseppe Cornaglia, ESCMID President, and Thierry Bernard, Vice President and Head of Corporate & Commercial Operations for bioMérieux at the 18th ECCMID during the ESCMID Award session.

### Research Interests

Ivan Ivanov's research interests are mainly in the field of molecular detection and typing of bacterial biothreat agents, in particular *Bacillus anthracis*, *Francisella tularensis* and *Brucella* spp. He has introduced a number of PCR methods for detection and typing of these pathogens including AFLP, MLVA, PCR-RFLP etc. These techniques proved very useful in the investigation of two recent outbreaks of tularemia and brucellosis in Bulgaria. Currently, he is studying the molecular diversity among *B. anthracis* and *Brucella* spp. strains by applying the high-resolution MLVA technique. These studies revealed some novel undescribed genotypes of *B. anthracis* in Bulgaria.

Apart from the above, Ivan Ivanov is also involved in a number of molecular studies regarding nosocomial pathogens. Currently he works at the newly founded Reference Center for Nosocomial Infections where he is responsible for the molecular characterization of nosocomial strain collections and the establishment of activities in the molecular lab unit.

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

*The young Investigator Awards 2008 are sponsored by Pfizer.*



### Sylvain Brisse

born 1968 in Sète (Hérault), France; PhD, Research scientist at the Unit for Biodiversity of Emerging Bacterial Pathogens at the Institut Pasteur in Paris, in recognition of his outstanding achievements in the field microbial phylogenomics, population genetics and epidemiological typing. His work, which involves a large number of different bacterial pathogens, but also Chikungunya viruses, most successfully combines field with molecular bench work.

Sylvain Brisse will be presented his award during the ESCMID Awards Session at the 18th ECCMID by Professor Ragnar Norrby, Chair of the ESCMID Awards Committee. His award lecture is titled *Diversity and virulence in microbial pathogens: an evolutionary perspective*.

### Research Interests

Sylvain Brisse's research focuses on the phylogenetic diversity and population structure of microbial pathogens, with the aim of understanding evolution of important traits such as virulence or antimicrobial resistance. His work is diverse, including fundamental aspects of pathogen evolution (such as rates of mutation and recombination), practical applications in taxonomy, molecular identification and strain tracking. Innovative methods derived from the field of genomics, such as multiple gene sequencing and DNA arrays, are developed and applied to a wide range of pathogenic agents including bacteria, parasites, viruses and fungi. His main current models are *Listeria monocytogenes*, *Salmonella enterica*, pathogens of the genus *Klebsiella*, and Chikungunya virus. On a wider phylogenetic scale, Sylvain Brisse also investigates the biodiversity of *Enterobacteriaceae*, with the aim to understand the evolution of this heterogeneous family, to renovate species definition and taxonomy, and to develop universal sequence-based strain typing methods.



### William Hope

born 1969 in Alice Springs, Australia; MBBS, FRACP, FRCPA, PhD, Senior Research Fellow in the Department of Medicine at the University of Manchester, in recognition of his outstanding achievements in the field of pathogenesis, diagnosis and treatment of fungal infections. He most successfully combines basic and clinical research and covers a large range of topics including genetic sequencing, molecular diagnostics, animal models and therapeutic management of fungal infection, applying a range of pharmacodynamic and pharmacokinetic modelling techniques.

William Hope will be presented his award during the ESCMID Awards Session at the 18th ECCMID by Professor Ragnar Norrby, Chair of the ESCMID Awards Committee. His award lecture is titled *Antifungal pharmacokinetics and pharmacodynamics: the optimization of antifungal therapy for immunocompromised patients*.

### Research Interests

William Hope's research has focused on identifying antifungal dosages and schedules which are associated with optimal therapeutic outcomes in humans. Antifungal PK-PD is a relatively young field, which explores the relationship between drug exposure and the antifungal effect. PK-PD is increasingly used in the development of new antimicrobial agents. Concentration-effect relationships are often best defined in experimental systems, in which the interaction between antifungal compounds, immunological effectors and clinically relevant biomarkers can be studied. The clinical implications of the experimental data can be explored using population pharmacokinetics and Monte Carlo simulation techniques. This paradigm can be used to identify antifungal dosages and schedules which are likely to be associated with optimal efficacy in humans, thereby facilitating the design of clinical trials likely to yield informative results and maximizing the use of limited resources.

## ESCMID Research Grants 2008

The following ESCMID members have been awarded a research grant in 2008 for the indicated project.



**Richard M Anthony:** Royal Tropic Institute, KIT Biomedical Research Amsterdam, NL

**Project:** The effect of sequential acquisition of mutations associated with resistance to the primary drugs of *M. tuberculosis in vitro*.



**Máire Begley:** Department of Microbiology and Alimentary Pharmabiotic Centre University College Cork, Cork, IR

**Project:** Bile as an environmental cue for the regulation of *Listeria monocytogenes* virulence-associated characteristics.



**Frank Breinig:** Department of Applied Molecular Biology, Saarland University, Saarbrücken, GR

**Project:** Recombinant yeast as novel mucosal live vaccine.



**Geraldine Canny:** Mucosal Immunity Laboratory Central University Hospital of Vaud, Lausanne, CH

**Project:** The role of bactericidal/permeability-increasing protein (BPI) in intestinal inflammation and infection.



**Marie Hallin:** Service de Microbiologie Hôpital Erasme, Brussels, Belgium

**Project:** Exploration of resistance and virulence factors harbored by methicillin resistant *S. aureus* of animal and human origin.



**Christine Imbert:** Faculty of Medicine and Pharmacy University of Poitiers, Poitiers, FR

**Project:** Isolation and Characterization the modulating factor responsible for the *Candida albicans* biofilm inhibition.



**Lucia Pallecchi:** Department of Molecular Biology University of Siena, Siena, IT

**Project:** Mechanisms of acquired antibiotic resistance in bacteria from very remote human communities with minimal antibiotic exposure.



**Spyros Pourmaras:** Department of Microbiology University Hospital of Larissa, Larissa, GR

**Project:** Clinical impact and molecular analysis of linezolid- and vancomycin-resistant *Enterococcus faecium* (VRE) clinical strains from Greece.



**Martin Sundqvist:** Department of Clinical Microbiology Central Hospital, Vaxjo, SN

**Project:** Clonal analysis of uropathogenic *Escherichia coli* to trace bacterial population changes in response to a large scale antibiotic intervention study in the community.



**Pierre Tattevin:** Infectious Diseases and ICU Pontchaillou University Hospital, Rennes, FR

**Project:** *Streptococcus* and *Enterococcus* sp. isolated from blood culture and/or valves in patients with infective endocarditis: molecular epidemiology and comprehensive susceptibility testing.



**Alma C. van de Pol:** Department of Virology, University Medical Center Utrecht, Utrecht, NL

**Project:** Is the viral load of respiratory viruses associated with the severity of respiratory symptoms in young children with lower respiratory tract infections at the paediatric intensive care unit?



**Willem van Schaik:** Department of Medical Microbiology University Medical Center Utrecht, Utrecht, NL

**Project:** Functional Genomics of hospital-acquired *Enterococcus faecium*.



**Anne Vergison:** Paediatric Infectious Diseases Department Université Libre de Bruxelles, Brussels, BG

**Project:** Evolution of *Streptococcus pneumoniae* epidemiology in Belgian children.

Please see the ESCMID website for information about the 2009 awards ([www.escmid.org/awards&grants](http://www.escmid.org/awards&grants)).

# Tribute to Pentti Huovinen, ESCMID Excellence Awardee for 2008

Tempering achievement with modesty



Pentti Huovinen

Michael Morgan, Consultant Microbiologist, Durham, UK.  
microbemike99@yahoo.co.uk

Firstly, on behalf of all at ESCMID and also me, may we congratulate Professor Huovinen on winning the ESCMID Excellence Award for 2008. As the following account will show, he is a very deserving awardee indeed.

Pentti Huovinen is currently Research Professor and Director of the Department of Bacterial and Inflammatory Diseases at the National Public Health Institute, Finland. He was born in 1956 in Helsinki and is now living in Turku, Finland. He is married to Saara, who is a fellow professional and a specialist in dermatology and allergology. They are blessed with three children, Heidi-Maria (25 yrs.), Ville (22 yrs.) and Elisa (18 yrs.).

Professor Huovinen obtained his first advanced degree, Licentiate of Medicine (MD) from the University of Turku in 1982. This was followed by three further degrees from the same institution: Doctor of Medical Science (PhD) (1984), Specialist in Clinical Microbiology (1990) and Docent (Assistant Professor) in Medical Bacteriology (1985). He attended the Executive Development Program, Wharton School, University of Pennsylvania, Philadelphia, USA (2003). To cap it all off and in a dramatic change of tack, he obtained a Military degree (second lieutenant) from the Finnish Navy in 1976.

His major professional appointments include Acting Research Associate and Laboratory Supervisor, Acting Lecturer in Medical Microbiology, and Research Associate, all in the Department of Medical Microbiology at the University of Turku, Finland (1979-1990). In between he ventured across the pond to work as a Research Fellow in Medicine at the Infectious Disease Unit, Massachusetts General Hospital, Harvard Medical School, Boston, USA (1986-1987). He then worked for the Antimicrobial Research Laboratory at the

National Public Health Institute, where he was a Senior Researcher in the Department of Turku (1990-1991) then became Physician in Chief and Head of the Laboratory (up to 2006). This was followed by a Senior Scientist post at the Academy of Finland (2005-2006). Throughout he has been a general physician at Health Center Pulssi, Turku, Finland, since 1982.

Professor Huovinen should be proud of his many international academic and professional activities that include active Membership (alternate) of the Advisory Forum of European Center for Disease Prevention and Control (ECDC) (2005-2007) as well as the National Microbiology Focal Point (2007-) and the Antimicrobial Resistance National Focal Point (2008-).

He represented his country in the European Antimicrobial Resistance Surveillance System (EARSS) (1998-2003) and the European Surveillance on Antibiotic Consumption (ESAC) (2002-). He is an expert for the European Agency for the Evaluation of Medicinal Products (1994-), including Veterinary Medicines (1996-). Professor Huovinen is also an active member and supporter of ESCMID where he was Member of the Council and representative of Finland (1999-2004), Member of the ESCMID Scientific Advisory Committee (2000-2002), Member of the European Study Group for Antimicrobial Resistance Surveillance (ESGARS) (1999-), Member of the ESCMID Education Committee (EDC) (2006-) and President of the 19th European Congress of Clinical Microbiology and Infectious Diseases, Helsinki (2009). He also performs advisory, expert or reviewer tasks for WHO, EU Biomed 2, Swiss National Science Foundation, United Kingdom Department of Health and Swedish Medical Council. Additionally, he is a member of many Finnish and international scientific organizations and sits on several journal editorial boards.

Professor Huovinen's domestic academic and professional activities include Permanent Advisor of the Finnish National Agency for Medicines on the field of Antimicrobial Agents (1993-); Permanent Advisor of the National Research and Development Centre for Welfare and Health (Stakes) Infectious Diseases and Clinical Microbiology (1997-2004); Member of the Committee: Environmental Effects of Drugs Used In the Treatment of Animals, Ministry of Agriculture and Forestry (1998-1999); Secretary of the Committee: Repel of Bacterial Resistance and Control of Antimicrobial Policy in Finland, Ministry of Social Affairs and Health (1999-2000); Secretary (1989-1991) then

Chairman (1991-1993) of the Finnish Microbiologists Subdivision of the Finnish Medical Association (the main professional organization of the clinical microbiology specialists in Finland).

In the Medical Faculty of the University of Turku he was a Member of the Board of the Docent Association (1991-1993), the Committee of Coordinators of the International Evaluation of Undergraduates Medical Education (1995-1996) and the Committee for Docent Nominations (1995), Chairman of PR-committee (1996-1998), the Committee for Registration and Evaluation of Teaching Merits (1997-1998) and the Infectious Diseases Program (1998-2000).

At the Academy of Finland he was Chairman of the Program Planning Committee Antibiotic Resistance Consensus Meeting (1997) and the Microbes and Man Research Program (2001).

He was also a member of the Publications Committee (1998-2003) and the Editorial Board of the Medical Society Duodecim (2004-2006); the Current Care Evidence Based Recommendation Committees on the subjects of acute otitis media, urinary tract infections and sinusitis and Scientific Secretary of the Maud Kuistila Memorial Foundation which supports medical research giving annual grants in excess of EUR 300'000 a year.

Pentti Huovinen has been a contributor to the Finnish Medical Journal and Columnist of the daily Newspaper Turun Sanomat and Health and Medicine (the major Finnish internet journal; www.uusuomi.fi). He also contributes to several regional radios, including YLE Finnish Broadcasting.

Pentti Huovinen has won several research awards and major grants including from National Institute of Health, USA; Infectious Disease Unit, Massachusetts General Hospital; Harvard Medical School, Boston; Turku University Foundation and the Academy of Finland.

His honours and prizes include the Medix-prize for Doctoral Thesis, Finnish Medical Society Duodecim (1984), The Apple of Knowledge of Good from Finnish medical journalists (1997), and Docent of the Year in Universities of Turku (1999).

He supervised over a dozen academic doctoral theses (PhDs), including that of his own wife Saara (!) as well as being an official opponent in academic doctoral dissertations. He is an editor or author of several major Finnish professional textbooks.

Professor Huovinen has an extensive portfolio of about 200 publications (as well as 150 publications in Finnish), mostly peer-reviewed and many in distinguished journals and as first or last author.

We can only touch on a core selection of publications and current projects here:

## 1. Molecular background of bacterial resistance, characterization of new resistance genes

This work concerns the description of the PSE-2 beta-lactamase, the trimethoprim resistance TN-21 like integron and the erythromycin resistance gene ermTR.

- Huovinen P, Huovinen S, Jacoby GA. Sequence of PSE-2 beta-lactamase. *Antimicrob Agents Chemother* 1988;32:134-136.
- Heikkilä E, Skurnik M, Sundström L, Huovinen P. A novel dihydrofolate reductase cassette inserted in an integron borne on a Tn21-like element. *Antimicrob Agents Chemother* 1993;37:1297-1304.
- Seppälä H, Skurnik M, Soini H, Roberts MC, Huovinen P. A novel erythromycin resistance methylase gene (ermTR) in *Streptococcus pyogenes*. *Antimicrob Agents Chemother* 1998;42:257-262.

## 2. Epidemiology of resistance and resistance genes

This applies to trimethoprim (1980-1995), beta-lactamases (1986-ongoing), macrolides (1989-ongoing), and fluoroquinolones (1999-ongoing).

- Huovinen P, Mäntyjärvi R, Toivanen P. Trimethoprim resistance in hospitals. *Br Med J* 1982;284:782-784
- Burman LG, Haeggman S, Kuistila M, Tullus K, Huovinen P. Epidemiology of plasmid-mediated beta-lactamases in enterobacteria in Swedish neonatal wards and relation to antimicrobial therapy. *Antimicrob Agents Chemother* 1992;36:989-992
- Kataja J, Huovinen P, Muotiala A, Vuopio-Varkila J, Efstratiou A, Hallas G, the Finnish Study Group for Antimicrobial Resistance, Seppälä H. Clonal spread of group A streptococcus (*Streptococcus pyogenes*) with the new type of erythromycin resistance. *J Infect Dis* 1998;177:786-789
- Hakanen A, Lindgren M, Huovinen P, Jalava J, Siitonen A, Kotilainen P. A new quinolone resistance phenomenon in *Salmonella enterica*: nalidixic acid-susceptible isolates with reduced fluoroquinolone susceptibility. *J Clin Microbiol* 2005;43:5775-5778

## 3. Surveillance of bacterial resistance in Finland

He is founder, coordinator member and chairman of the advisory board of the Finnish Study Group for Antimicrobial Resistance (FiRe) network. This

network started in 1991 and all major 25 Finnish clinical microbiology laboratories are taking part; more than 350'000 bacteria samples are susceptibility tested annually in the laboratories. This network is the basis for all studies concerning the relationship between consumption of antibacterials and bacterial resistance in Finland. Co-work with Finnish clinical microbiologists for the last 16 years has been very fruitful. The ten years follow up from 1997 will be sure to show extremely interesting results.

#### 4. Active antibiotic policy in outpatients in Finland

Antibiotic consumption of major antibacterials used in outpatients in Finland has decreased 15-20% from 1995. This is a result of excellent co-work between general practitioners, infectious disease specialists and clinical microbiologists in Finland. Erythromycin-resistant group A streptococci increased rapidly in 1988-1990. A recommendation to decrease macrolide consumption in Finland caused a 42% reduction in 1991-1992, followed by a decline of macrolide-resistant group A streptococci. Professor Huovinen's group's most cited work around this topic have been published as follows:

- Seppälä H, Nissinen A, Järvinen H, Huovinen S, Henriksson T, Herva E, Jahkola M, Katila M-L, Klaukka T, Kontiainen S, Liimatainen O, Oinonen S, Passi-Metsomaa L, Huovinen P. Resistance to erythromycin in group A streptococci. *New Engl J Med* 1992;326:292-297.
- Seppälä H, Klaukka T, Vuopio-Varkila J, Muotiala A, Helenius H, Lager K, Huovinen P and the Finnish Study Group for Antimicrobial Resistance. The effects of changes in the consumption of macrolide antibiotics on erythromycin resistance in group A streptococci in Finland. *New Engl J Med* 1997;337:441-446.

Since then, the group has carefully followed the consumption of macrolides and its effect on streptococci including pneumococcus:

- Pihlajamäki M, Kotilainen P, Kaurila T, Klaukka T, Palva E, Huovinen P and the Finnish Study Group for Antimicrobial Resistance. Macrolideresistant *Streptococcus pneumoniae* and antimicrobial consumption. *Clin Infect Dis* 2001;33:483-8.
- Bergman M, Huikko S, Pihlajamäki M, Laippala P, Palva E, Huovinen P, Seppälä H and The Finnish Study Group for Antimicrobial Resistance (FiRe-network). The effect of macrolide consumption on erythromycin resistance in *Streptococcus pyogenes* in Finland in 1997–2001. *Clin Infect Dis* 2004;38:1251-6.
- Bergman M, Huikko S, Huovinen P, Paakkari P, Seppälä H, and the Finnish Study Group for Antimicrobial Resistance (FiRe Network). Macrolide and azithromycin use are linked to increased macrolide resistance in *Streptococcus pneumoniae*. *Antimicrob Agents Chemother* 2006;50:3646-50.

#### 5. MIKSTRA-program 1998–2008

Professor Huovinen wanted to improve diagnostics and reduce antibiotic consumption in Finland. MIKSTRA-program (Strategies for Optimal Antimicrobial Prescribing) was started in 1997, of which he is currently Chairman. A total of 30 MIKSTRA health centres were hired (population coverage 820'000); current care guidelines were introduced in 1999-2000 for six most prevalent outpatient infections; education was started in 2000; and antibiotic usage and diagnostics programmes were implemented in 1998–2002.

- Rautakorpi U-M, Huikko S, Honkanen P, Klaukka T, Mäkelä M, Palva E, Roine R, Sarkkinen H, Varonen H and Huovinen P for the MIKSTRA Collaborative Study Group. The Antimicrobial strategies (MIKSTRA) program: a five year follow-up of infection-specific antibiotic use in primary health care and the effect of implementation of treatment guidelines. *Clin Infect Dis* 2006; 42:1221-30.

Much data is still under preparation and the group is attempting to introduce new computerized methods to collect the same patient data that were handwritten by doctors in 1998-2002. Large comparative surveys examining how different antibiotic policies have influenced bacterial resistance in outpatients are also underway.

#### 6. Baby elephant –study

In Turku, the group is undertaking a placebo-controlled randomized trial on the treatment of acute otitis media with special reference to nasopharyngeal flora (microbiota) of children. The study is ending in 2009 when the codes will be opened. The study is still too much in its early stages to be able to convey meaningful results. Baby elephant is the logo for this trial and is shown to children with otitis while being examined!

Professor Huovinen has a modesty that belies his considerable professional achievements. He is very grateful for this award and considers it to be the pinnacle of his career. He would like to thank the ESCMID Executive, Award Committee and the whole ESCMID community. He is proud of his FiRe Study Group, colleagues, co-workers and collaborators, Finnish clinical microbiologists and general practitioners, and believes that the award also constitutes a reward to all these professionals. In addition he would like to thank his family who have tolerated his constant ranting about bacteria and antibiotics over the years.

When asked about his vision for the future he admits that it is unknown, but we look forward to his forthcoming ECCMID Award lecture entitled *Microbes and Man; from unexpected to unknown* in April 2008 in Barcelona.

Pentti Huovinen's unique strength in his scientific approach is enhancing collaboration between field physicians, clinical microbiologists and scientists. He believes that his best reward in his pro-



Pentti Huovinen showing real-life bacteria to children

fessional life was making many new and good friends throughout his career. He stresses that to best enable us to respond to future challenges, our most important assets are talented professionals and active researchers with an ever-inquisitive mind. Louis Pasteur said: "Chance favours the prepared mind." He would like to add: "Prepare yourself!" The aetiology of very many diseases is still unknown: "We only have a partial knowledge of microbial biology and its interaction with the human host. There is plenty of space for eager explorers in the microbial world. This is the field of the future".

Professor Huovinen is proud that ESCMID and ECCMID have grown rapidly to bring together European and world clinical microbiologists and infectious diseases specialists. This can only enhance our knowledge of pathogenic microorganisms and augment our fight against infectious diseases. He believes that ECCMID today is the major congress in this field.

Professor Huovinen would like to see the day when human microbial ecology plays a more important role in the management of infectious diseases. He would like to see nasopharyngeal samples taken from all patients with a respiratory tract disease to enable assessment of the status of their "normal flora" (microbiota), i.e. healthy or otherwise. However, he admits that this is currently difficult but that it could be greatly facilitated by using computerized programs and graphics displays. He believes that this would make it easier to manage patients and more importantly, avoid improper antibiotic treatments.

Whimsically, he says that he hates handshaking! It is the major contact between people and the vehicle for transmitting many pathogenic bacteria and viruses. He believes that a drastic reduction in handshaking would lead to an equally drastic reduction in common colds and other transmissible diseases and most probably resistant bacteria. He asks why do we always have to shake hands, even with family members and best friends? However, he concedes that it may be difficult to discover a better way to say hello and proposes to "hug instead"! I (the reviewer) personally believe that this would make an interesting field experiment for the next ECCMID that Professor Huovinen will be proud President of in Helsinki. It would be educational to find out the proportion of delegates who agree or disagree to forsake the ubiquitous handshake in favour of a hug and whether there would be a differential depending on whether the proposed hug is "single sex" or "intersex". However, just in case his "hugging" proposition does not catch on, he thanks us all for diligently washing our hands!

# ESCMID European Council Extraordinary Meeting

## Minutes

### Meeting in Rome, on 5 December 2007, from 9:00 h – 17:00 h

Giuseppe Cornaglia, ESCMID President, welcomed the 31 participants to the first extraordinary meeting of the European Council.

#### 1 From the Executive Committee: matters of interest for the European Council

Giuseppe Cornaglia gave a brief account of ESCMID's current portfolio of activities. He particularly emphasized the importance of the forthcoming Professional Affairs Workshop on 9 – 10 October 2008 for which he expects major input from the current meeting, and the first European Day of Fighting Infection on 23 April 2008 as major events in the year 2008.

#### 2 Membership campaign and different affiliation rates related to country income

Javier Garau, President-elect and Secretary General, summarized the activities of ESCMID in the fields of education, science and professional affairs. He pointed out the role of the European Council as a door opener to the national societies and reviewed their proposals made at the European Council meetings in the last five years according to the respective minutes. The affiliation process within the European Council is still ongoing. Up to now, 48 specialist societies have signed an affiliation agreement with ESCMID. Still, there is an estimated potential of about 60 societies with some 20'000 members. At the meeting in Rome, 29 societies were represented.

Javier Garau presented a proposal of different ESCMID membership fees related to country income. The reference figure could be the gross national product (GNP). Peter Schoch, ESCMID Managing Director, gave a résumé of the current ESCMID membership fees (regular membership ranges from 38 – 88 EUR per year depending on the age of the member and type of *CMI* subscription). He confirmed that fees based on GNP are possible as long as the total income of the Society covers the costs of the basic services provided to our members. The European Respiratory Society (ERS) has already categorized membership fees based on the average per capita income of each country using the current World Bank Report. They are, however, in general higher than those of ESCMID.

#### Comments from the floor:

Nicola Petrosillo (Italy) proposed to adapt the membership fee according to the salaries of the individual medical doctors in Europe. Javier Garau responded that his proposal has limitations because not all members are physicians and average salaries are difficult to determine.

Ram Dessau (Denmark) asked what the impact of the categorized membership fees would be. Javier Garau pointed out that this proposal would aim at increasing ESCMID's membership base. The purpose of this initiative is not to increase the income of the Society.

Truls M. Leegaard (Norway) asked if it is possible to have membership without and with *CMI* subscription. Javier Garau underlined the importance of the scientific journal to our So-

ciety and the need to support it. Peter Schoch added that the cost for online access to *CMI* is only EUR 27. He also emphasized the importance of the Society to protect its scientific journal. G.J.H.M. Ruijs (The Netherlands) proposed an automatic renewal system for membership. Giuseppe Cornaglia confirmed his full support for this procedure. Note added in proof: ESCMID already offers a kind of automatic renewal system as members can authorize ESCMID to automatically charge the annual/biannual fees to their credit card. Please also note that a direct debit is not possible for international banking and therefore this limits the options of an automatic renewal system.

#### 3 UEMS: towards an autonomous Microbiology Section

John Degener, Chair of the Microbiology Commission, reported on the current status and the recent developments regarding an independent Microbiology Section in UEMS. Today the speciality of Clinical Microbiology is not adequately represented by the current bodies in UEMS. When UEMS was founded in 1958, only a minority of six founding members recognized Clinical Microbiology as a medical specialty. By now, this situation has drastically changed, since today two-thirds of the EU countries recognize it as a specialty, thus rendering the formation of an independent Section of Clinical Microbiology a necessity. Not only training and education but also issues concerning accreditation strongly indicate the need for a separate Section. Still, at the level of UEMS the Specialty is only represented by a Commission of Microbiology that is part of the UEMS Section of Medical Biopathology. John Degener informed the Council about the recent formal submission by various countries to the UEMS Council for the establishment of an independent Section. This proposal was discussed at the UEMS Council meeting in October 2007 in Bratislava. A formal decision will be made during the forthcoming UEMS Council meeting in Brussels on 19 April 2008. John Degener is optimistic about a positive vote for an autonomous Section.

Giuseppe Cornaglia underlined that ESCMID has always supported the formation of a new Section of Clinical Microbiology, which would also facilitate the cooperation with the Section of Infectious Diseases. He thanked John Degener and Elisabeth Nagy for their involvement and commitment to forming an autonomous Microbiology Section.

#### 4 Programme for the ESCMID PA Workshop, Rome 2008

Robert Read, Professional Affairs Officer for Infectious Diseases, and Gunnar Kahlmeter, Professional Affairs Officer for Clinical Microbiology, presented briefly the current activities in the field of Professional Affairs.

Robert Read informed about the new Professional Affairs Advisory Committee (PAAC) which had its constituting meeting in Vienna in November 2007 (see report, page 22). The PAAC will advise the ESCMID Executive on organizational and operational matters relating to the professions of Clinical Microbiology and Infectious Diseases: Priority issues which the Committee wants to tackle are the definition of Clinical Microbiology and Infec-

tious Diseases, Europe-wide standards for training programmes in Clinical Microbiology and Infectious Diseases, the facilitation of mobility of trainees, as well as the development of clinical guidelines and standards of care.

According to Robert Read the goal of medical guideline development is to develop evidence-based ESCMID guidelines in the field of infectious diseases and laboratory diagnostics to promote Good Medical Practice across Europe. Topics selected up to now are: Management of adult lower respiratory tract infections (with ERS, ongoing), Surviving sepsis (with SCCM), Management of catheter-related urinary tract infections (with IDSA), Management of uncomplicated urinary tract infection (with IDSA) and Management of *Clostridium difficile*-associated diseases (lead by Ed Kuijpers). The European Council will play an important role in guiding the Society to select further topics and to provide national guidelines as a starting basis.

Robert Read outlined the current status of the ESCMID Training and Career platform. The activities on the website for recruitment are well accepted whereas the possibility for exchange visits is poorly used and needs more advertisement. He presented also the new proposal for observerships, which would be characterized by short visits of either trainees or certified specialists to institutions that might offer an experience quite different from their current work at home.

Finally, a new Professional Affairs Questionnaire was announced for 2008 which will be circulated to the members of the European Council in summer 2008. The aim is to collect national data on Professional Affairs and to update the data from 2005.

Robert Read introduced the idea of a Professional Affairs Workshop 2008 which will be organized on 9-10 October 2008 in Rome. The purpose will be to review the status of our professions across Europe and to discuss initiatives to improve the organizational basis for medical practice in our disciplines. He presented a list of potential topics for the programme. This list is open for discussion, and suggestions are highly welcome. Giuseppe Cornaglia introduced the format of the workshop. It will be an expert meeting which is also open for young fellows interested in the topic. ESCMID will support the workshop with up to 20'000 EUR which includes attendance grants for young professionals. ESCMID will charge a registration fee. The meeting will start on the 9 October 2008 at lunchtime and close on 10 October 2008 again at lunchtime. He proposed to have only one session at a time (no parallel sessions). The affiliated societies will play an important role in this undertaking and are asked to promote the PA Workshop in their societies. He asked the representatives of the national societies to submit their comments and suggestions.

#### Comments from the floor regarding general Professional Affairs issues:

Giorgio Palù (Italy) proposed that national societies should submit their national guidelines to ESCMID in order to screen them for the potential adaptation to European guidelines. He supported the existing algorithm for guidelines development.

G.J.H.M. Ruijs (The Netherlands) emphasized the importance of developing a gold standard for the speciality of Clinical Microbiology and to define a common professional profile. That would also help the colleagues in countries where Clinical Microbiology is not recognized as an independent speciality. In addition, this would help harmonize training programmes and medical practice in our fields across Europe. He also encouraged developing European standards and guidelines for the accredita-

tion of diagnostic laboratories.

Gunnar Kahlmeter announced that within the next six months the European Committee on Antimicrobial Susceptibility Testing (EUCAST) will publish a set of European standards for antimicrobial breakpoints, which is a major milestone for the effective therapeutic use of antibiotics and the surveillance of resistance. He encourages a discussion on a national level to clarify if there is need for a national strategy.

#### Comments from the floor regarding topic for the PA Workshop 2008 in Rome:

Truls M. Leegaard (Norway) emphasized that mobility of professionals throughout Europe is a big challenge because professional regulations across Europe are diverse. Therefore, a common definition of Clinical Microbiology and Infectious Diseases in Europe is crucial. It will help to find a basis for most of the problems/issues related to our professions. He was interested in further details concerning the purpose of the PA Workshop programme. Robert Read responded that the main objective is to develop a common consensus statement and to shape the profile of Clinical Microbiology and Infectious Diseases in Europe.

G.J.H.M. Ruijs (The Netherlands) pointed out that there is a need for hard data on how Clinical Microbiology is performed in Europe as a starting point for future challenges. He proposed to develop a White Book on the specialities of Clinical Microbiology and Infectious Diseases. Giuseppe Cornaglia fully supported his suggestion and he explicitly stated the need to collect quantitative data rather than qualitative answers.

Assuming that next October 2008 a separate Section of Clinical Microbiology will have been established, John Degener proposed discussing the different roles and tasks of the two Sections of CM and ID as well as the role of the ESCMID PAAC at the PA Workshop in October. Giuseppe Cornaglia fully agreed and proposed having a joint meeting of the UEMS Sections and the PAAC at the ECCMID 2009 in Helsinki.

Murat Akova (Turkey) underlined the increasing problem of lacking new antimicrobials at a time of increasing resistance which is a real threat to the communities in Europe. He proposed a joint campaign including all scientific societies active in this area and writing a position statement regarding this issue.

Margaret Hannan (Ireland) proposed to have a representative from outside Europe as a speaker at the PA Workshop to open the perspective on how ID and CM specialists cooperate in different parts of the world.

Ram Dessau (Denmark) made several suggestions regarding the PA Workshop: i) to have a more focused workshop report which is not too long (as was the case with the Leuven report 2004); ii) to include educational aspects of the profession into the programme; iii) to include as major issues the fight against antimicrobial resistance as well as the increasing privatization of diagnostic laboratories in Europe; v) to provide an international perspective on organizational issues from outside Europe; and vi) to generate a position paper about these issues.

John Degener proposed also including infection prevention. Giuseppe Cornaglia thanked everyone for the proposals, which will be taken into consideration when shaping the agenda

#### 5 Update on European CME accreditation

The European system for CME accreditation has many flaws as pointed out by Peter Schoch, ESCMID Managing Director. EACCME, the European Accreditation Council for CME, is operated by UEMS. It acts as a clearing house in which European accreditation is based on the national accreditation by the host

country and the accreditation by the respective UEMS Section. This need for dual accreditation renders accreditation cumbersome. Worse, however, is the fact that the accreditation criteria applied by the many national accreditation authorities and the European specialty accreditation boards of the UEMS Sections are not harmonized. The number of CME credits awarded for the same conference or workshop can therefore differ depending on the country where the event is held. This situation is not convenient for a European CME provider such as ESCMID. Peter Schoch thus called on UEMS to establish a simpler system in which Europe-wide events are accredited by a single European body applying the same quality criteria irrespective of where an educational event takes place.

#### Comments from the floor:

G.J.H.M. Ruijs (The Netherlands) asked whether EACCME raises money by providing European CME accreditation. Peter Schoch responded that CME providers are charged a fee for European accreditation depending on the number of participants in the educational event.

Javier Garau asked about the importance of the national accreditation authorities in the European CME accreditation process. Peter Schoch answered that they are crucial. Each educational event must be accredited by the national CME board in

order to obtain European accreditation. The only exceptions are in the few countries in which no CME boards exist. In these cases European accreditation is based on the accreditation by the respective UEMS section only.

#### 6 1st European Day for Fighting Infection

Giuseppe Cornaglia announced that ESCMID will celebrate its 25th anniversary next year and will convene a one-day symposium, the 1st European Day of Fighting Infection, to be held in Barcelona on 23 April 2008, one day after the ECCMID. The symposium will focus on the importance of infections in the past, present and future and their relevance in a socio-economic context on the daily life on our continent. The programme of the European Day for Fighting Infection will be made available to all registered participants and is already published on the ESCMID website ([www.akm.ch/eccmid2008/european\\_day\\_of\\_fighting/main.html](http://www.akm.ch/eccmid2008/european_day_of_fighting/main.html)).

Giuseppe Cornaglia thanked the participants for their participation and adjourned the meeting at 13.00 h.

Basel, 20 December 2007

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## Joint Technology Initiative on Innovative Medicines

*ESCMID has joined this appeal to the European Parliament and Council of Ministers, which supports a concerted approach to biomedical research and development. Please find the original statement below.*

*The listed organisations represent professional medical, scientific societies and umbrella organisations in the field of allergology and clinical immunology, diabetes, brain research, cancer, rheumatic disease, respiratory medicine, cardiology, clinical microbiology and infectious diseases, intensive care medicine and medical oncology, whose mission it is to promote research, education and knowledge exchange in their respective fields.*

#### Executive summary

We urge Members of the European Parliament and the Council of Ministers to support the proposed Joint Technology Initiative on Innovative Medicines. This important pan-European Research & Development Initiative has the objective of ultimately bringing novel therapies to citizens by tackling major knowledge gaps that exist across major disease areas. This crucial aim can only be achieved by supporting research, by ensuring that scientific excellence will be paramount, and by bringing together the best scientists in Europe (public and private) into unique collaborative partnerships where there are urgent and unmet medical needs. Health is a major public concern in Europe. However, to achieve crucial and timely advancements in the field of biomedical research, a coherent approach aimed at strengthening the European research and training infrastructure is critical. We believe that at a European level the Innovative Medicines Initiative will be decisive in providing the means to overcome the existing fragmentation, bringing benefits for all stakeholders. The IMI Strategic Research Agenda identifies the following disease areas: cancer, brain disorders, inflammatory diseases, metabolic diseases and infectious diseases. We would strongly recommend that future consulta-

tions on research priorities should also consider the inclusion of other priority disease areas, which are not sufficiently addressed in the current strategic research agenda.

#### Background

The Innovative Medicines Initiative (IMI) addresses important common pre-competitive challenges in the biomedical field that require a collaborative effort between clusters of excellent European researchers from academia and the pharmaceutical industry that would optimise translational research and help deliver novel innovative therapies.

#### Biomedical research & development challenges need a concerted approach

The Innovative Medicines Initiative addresses processes such as biomarker identification, validation of biomarkers, and understanding of disease mechanisms. By contrast, the Innovative Medicines Initiative does not address products and does not deal with specific drug development projects. This distinction is a crucial one. Significant fragmentation characterises the research environment in Europe, and there is a need to work towards more uniform and systematic approaches since the biomedical sciences have become considerably more complex (multifactorial and multigenetic). Thus, to achieve new breakthroughs, efforts will need to be pooled. The Innovative Medicines Initiative targets translational medicine, which is the important area of research between basic and clinical research (bench to bedside) and, where better feed-back and feed-forward pathways urgently need to be established. We believe that the Innovative Medicines Initiative could facilitate the creation of synergies and foster an improved cross-sectional knowledge exchange that would not be possible otherwise. There are important horizontal research gaps which require a unified approach and which therefore need to include the expertise and knowledge of all stakeholders.

## Conclusion

The European Commission and the European Federation of Pharmaceutical Industries and Associations (EFPIA) are spearheading the Innovative Medicines Initiative – a totally new initiative with no precedent in Europe. As professional bodies we believe that the Innovative Medicines Initiative may provide a unique opportunity of collaboration between public and private research groups. Such an opportunity, if seized now, will drive research towards new and improved therapeutic approaches. In the first instance we would recommend:

- The Council of Ministers support the JTI on Innovative Medicines
- The European Parliament to submit a favourable opinion on the same.

Furthermore, considering that professional European and international medical scientific societies represent key stakeholders in the framework of this initiative, we strongly suggest that they should be explicitly included within the Stakeholder Forum

of the Innovative Medicines Initiative. Professional scientific bodies represent organisations that are independent and unbiased. They could act as facilitators and be ideal candidates to provide the scientific platform for the continuous process of identifying and defining the strategic Research & Development needs in translational medicine for the various disease areas. They could facilitate the provision of this information into the Annual Implementation Plan of the Strategic Research Agenda.



European Academy of Allergy and Clinical Immunology (EAACI), European Association for the Study of Diabetes (EASD), European Brain Council (EBC), European Cancer Organisation (ECCO), European League Against Rheumatism (EULAR), European Respiratory Society (ERS), European Society of Cardiology (ESC), European Society of Clinical Microbiology and Infectious Diseases (ESCMID), European Society of Intensive Care Medicine (ESICM), European Society for Medical Oncology (ESMO).

## The purple square in the 7th EU Framework Programme

## Marie Curie Actions

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Among the six coloured squares, which represent the 7th EU Framework Programme (FP7) on the website of the European Commission ([http://cordis.europa.eu/fp7/home\\_en.html](http://cordis.europa.eu/fp7/home_en.html)), one may notice a purple square labelled “People”. Behind this new creative packaging stand the Marie Curie Actions: the mobility, training and career development schemes with a particular focus on young researchers, which have been implemented by the Commission since 1994.

With EUR 4.75 billion, the Marie Curie Actions have the third biggest share of the FP7 budget that altogether amounts to EUR 50.5 billion for 2007-2013. With this budget, the Marie Curie Actions, aim to fund about 70'000 young researchers over seven years. Compared with the 2002-2006 Marie Curie budget of 1.7 billion EUR, the current budget is thus the biggest ever in the history of Marie Curie Actions.

Moreover, the good news is that Marie Curie Actions follow a bottom-up approach, which means that all domains of research and technological development are eligible (except research areas that are covered by the EURATOM programme).

So how can you get a piece of the pie (purple square)?

The Marie Curie actions in FP7 address two different publics:

- individual researchers, who would like to undertake a research project on their own in Europe or elsewhere in the world;
- institutions, that would like to start a graduate school with other European partners, to exchange staff with industry partners/other research entities or start their own fellowship programme.

### Opportunities for individuals

Individual researchers applying for a Marie Curie Fellowship, must be in possession of a doctoral degree or have at least four years of full-time research experience. There is, however, no age limit. The research project shall support an intersectoral/interdisciplinary diversification of skills of the researcher and help to achieve or strengthen an independent research position. On this basis the researcher should choose an outstanding public or private host institution abroad, that may neither be in the researcher's country of origin (except when

the researcher is holding two nationalities or has spent three out of the last four years outside of Europe) nor in a country where the researcher has lived or worked longer than 12 months in the last three years before the deadline of application. Depending on the location of the host institution, the researcher from an EU Member State/Associated Country may choose to apply for a:

- Marie Curie Intra-European Fellowship for Career Development (IEF), in order to conduct a research project at a public or private research host institution in a Member State or Associated country (2).

or a

- Marie Curie International Outgoing Fellowship for Career Development (IOF) in order to conduct a research project at a public or private research host institution in a Third Country (3).

Researchers from Third Countries who wish to carry out research in a Member State or Associated Country might opt for a

- Marie Curie Incoming International Fellowship (IIF).

There is an exception for researchers from Third Countries, who have been living in an EU Member State or Associated Country for three out of the last four years. They are treated as EU citizens/citizens of an Associated Country, where they have resided and are not eligible for IIF.

The above mentioned fellowships cover a monthly living allowance, ranging between 34'500 and EUR 79'500/p.a (4), which depends on the country of the host institution, the research experience as well as whether the researcher obtains a work contract or only a stipend from the host institution. Additionally, the EU pays a mobility allowance of up to EUR 800/month, research costs of up to EUR 600/month, travel costs of up to 2'500 EUR/p.a. and in case of IEF there is a Career Exploratory Allowance of EUR 2'000 paid once during the fellowship.

Researchers (from Member States or Associated Countries) who have spent a minimum of 3 years as researcher in a Third Country and would like to return, can apply for the

- Marie Curie International Reintegration Grants (IRG) which cover a flat-rate contribution of EUR 25'000 per year/researcher for salary costs, other staff, consumables, patent costs etc. Furthermore former Marie Curie Fellows are able to get funding for the reintegration in their home country or another country in Europe by applying for a Marie Curie European Reintegration Grant (ERG).

### Notes

1. KoWi, which stands for European Liaison Office of the German Research Organisations/ Koordinierungsstelle EG der Wissenschaftsorganisationen, facilitates the successful participation of scientists located in Germany within the EU Framework Programme. Please check the KoWi website for more information: [www.kowi.eu](http://www.kowi.eu).
2. As of February 2008 the Associated Countries are Turkey, Croatia, Serbia, FYR Macedonia, Montenegro, Iceland, Israel, Liechtenstein, Norway, Switzerland, Albania.
3. Any country outside the EU Member States/Associated Countries
4. Fixed living allowances for researchers who are employed under the terms of a working contract

The success rate for individual fellowships in the first call round 2007 varied from 25% to 29% for IEF and IOF (with over 1700 applications for IEF and merely 341 for IOF), while the IRG scheme had a success rate of up to 78% in the first round with 136 applicants and for the second round 55% with 180 applicants.

#### Opportunities for institutions

Institutions, may apply for host-driven Marie Curie actions:

- Initial Training Network (ITN), consisting of a consortium with at least three participants (e.g. universities, research institutions, companies,

SMEs) located in at least three different EU Member States or Associated Countries, of which two must be EU Member States. Mono-site or twinning research organizations may also be eligible under this action when embedded in a well-established, international network. The maximum duration of an ITN is four years. The consortium should implement a joint research training programme focused primarily on doctoral students by providing training in research and complementary skills. Optionally, early postdocs can also be recruited if well justified by the network. The EU contribution covers the salaries/fellowships of the recruited researchers (which are based on the same amounts as the individual fellowships); research-related costs; networking costs; and the organization of pan-network training events that are also open to researchers from outside the network, 7% for management and 10% of direct costs for overhead.

- Industry-Academia Partnerships and Pathways (IAPP) In this scheme, universities, research institutions and companies can apply for a staff exchange programme based on a common research project, including at least two organizations, one from each sector and from at least two different EU Member States or Associated Countries. The total duration of the project is 4 years. PhD students, Post docs as well as technical or managerial staff can be exchanged for periods of two months up to two years in order to acquire or pass on knowledge concerning the common research project. After the exchange there is an obligatory return phase foreseen of at least one year. The European Commission finances the salaries of the seconded staff, small equipment expenses, networking

and management costs as well as 10% for the indirect costs.

Two new host-driven schemes were designed in FP7 to strengthen research cooperations with Third Countries and to make national awarded fellowship programmes in Europe more competitive:

- International Research Staff Exchange Scheme (IRSES) The goal is to create long-term, research based exchange programmes between European research institutions and their counterparts in countries with Science & Technology agreements (e.g. USA, China) or countries covered by the European Neighbourhood Policy (e.g. Georgia, Syria). The EU contribution of EUR 1'800 per researcher/month (irrespective of the country) can only be provided for participating organisations in EU Member States/Associated Countries for a period of two to four years (in exceptional cases it can also be provided for participants from ICPC countries). However, some countries, such as New Zealand or South Africa, have already assigned complementary funding for their institutions in order to assure their participation.
- Co-funding of regional, national and international programmes (COFUND) Public bodies in charge of funding and managing fellowship programmes, international organizations, research organizations and research funding bodies may apply to obtain EU funding up to EUR 5 Mio. or a top-up of 40% for existing or new national, regional and international funding schemes that comply with the aims of the Marie Curie individual fellowships. The Community contribution should not substitute or replace existing funding but enable an increased number of transnational fellowships and the amelioration of working/employment conditions.

#### Further Information

The success rate for the host-driven actions in the first call round 2007 was around 7.5% for the ITNs and 40% for IAPP, while the calls for IRSES and COFUND are still open running and will be evaluated in the course of 2008.

There is one call per year for each Marie Curie Action, except for the Reintegration Grants that have two cut-off dates per year.

Those who are acquainted with Marie Curie Actions from the 6th EU Framework Programme will realize that altogether there is a strong continuity between the Marie Curie funding schemes compared with the 7th EU Framework Programme.

The FP6 fellowship schemes for postdoctoral students continue in FP7 with only minor technical changes.

Structured training programmes for doctoral students have already been funded in FP6 under the label of "Research Training Networks (RTN)" and "Host Fellowships for Early Stage Training (EST)". To foster intersectoral mobility in FP6, the European Commission introduced the "Marie Curie Industry-Academia Strategic Partnership Scheme (Tok-IAP)" as a pilot scheme for the IAPP scheme in FP7.

You can make a difference by participating in Marie Curie Actions with your research project now that you know what lies behind the purple square.

Another way to obtain support is via the National Contact Points (NCPs), which are national structures established and financed by governments of the 27 EU member states and the states associated to the framework programme. NCPs give personalized support on the spot and in proposers' own languages.

- Further information on calls and deadlines is available under: <http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.FP7CallsPage>
- More background information about Marie Curie Actions can be found under: [http://cordis.europa.eu/fp7/people/home\\_en.html](http://cordis.europa.eu/fp7/people/home_en.html)
- For the contact details of your NCP check the following website: [http://cordis.europa.eu/fp7/get-support\\_en.html](http://cordis.europa.eu/fp7/get-support_en.html)



## Moving Forward in Co-operation

Rome, Italy, 9–10 October 2008

ESCMID Workshop on Professional Affairs in Clinical Microbiology and Infectious Diseases

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



# Professional Affairs Advisory Committee

Kick-off meeting

*Gunnar Kahlmeter, Professional Affairs Officer, Clinical Microbiology, [gunnar.kahlmeter@ltkronoberg.se](mailto:gunnar.kahlmeter@ltkronoberg.se)*

*Robert Read, Professional Affairs Officer, Infectious Diseases, [r.c.read@shef.ac.uk](mailto:r.c.read@shef.ac.uk)*

The inaugural meeting of the newly established Professional Affairs Advisory Committee (PAAC) was held in Vienna on 11 – 12 November 2007. The ESCMID President, Giuseppe Cornaglia, opened this first meeting by welcoming the members of the Committee and briefly describing the scope of the meeting. The aim of this Committee is to advise the ESCMID Executive on organizational and operational matters relating to the professions of Clinical Microbiology and Infectious Diseases.

## Roles and Structure of the PAAC

It was agreed that the ideal would be a common Professional Affairs Committee co-chaired by the two Professional Affairs Officers of ESCMID, Gunnar Kahlmeter (Clinical Microbiology) and Robert Read (Infectious Diseases). The Committee should meet at least once a year at the ECCMID with extraordinary meetings and teleconferences as required. In terms of the role of the PAAC, the Committee agreed on the following six major tasks:

### Members of the Professional Affairs Advisory Committee (PAAC)

#### Clinical Microbiology

*Gunnar Kahlmeter, Vaxjo, SE, Chairperson*  
Arta Olga Balode, Riga, LV  
Emmanuelle Cambau, Creteil, FR  
John Edward Degener, Groningen, NL  
Niels Frimodt-Møller, Copenhagen, DK  
Waleria Hryniewicz, Warsaw, PL  
Mario Poljak, Ljubljana, SI  
Arne Rodloff, Leipzig, DE  
Gian Maria Rossolini, Siena, IT  
Arjana Tambic, Zagreb, HR  
Alkiviadis Vatopoulos, Athens, GR

#### Infectious Diseases

*Robert Read, Sheffield, UK, Chairperson*  
Matthew Falagas, Athens, GR  
Åsa Hallgärde, Lund, SE  
Bruno Hoen, Besancon, FR  
Winfried Kern, Freiburg, DE  
Mike McKendrick, Sheffield, UK  
Nicola Petrosillo, Rome, IT  
Jos WM van der Meer, Nijmegen, NL

- To reach common agreement on the definition of the specialties of Clinical Microbiology and Infectious Diseases. It was acknowledged that these entities manifest in different ways across the territories of Europe and that common definition will help forge pan-European training programmes and defend professional standing.
- To agree on Europe-wide standards for training programmes in Clinical Microbiology and Infectious Diseases. It was acknowledged that the recommendations for common training programmes for specialist certification are within the realms of the sections of the UEMS, those sections being constrained to some extent by the political considerations relating to National Certification Authorities. However, ESCMID is free to set ideal standards for optimum training within Clinical Microbiology and Infectious Diseases. As such, it was decided that the first step in this process would be to agree on the construction of a syllabus for both Clinical Microbiology and Infectious Diseases.
- To facilitate and define a training track for joint specialists in Clinical Microbiology and Infectious Diseases. It was noted that some countries have advanced training schemes leading to joint accreditation in CM/ID whilst other countries within Europe either have separate specialties or recognize only one of the two. It was envisioned that, in future, ESCMID might espouse the concept of triple track specialization and training i.e. (i) Clinical Microbiology mono-specialists, (ii) Infectious Disease mono-specialists (physicians), (iii) Joint Specialists in Clinical Microbiology and Infectious Diseases.
- Act to facilitate professional mobility of trained specialists, and exchange visits to enhance the experience of trainees. The Committee identified the barriers to professional mobility and exchange throughout Europe and agreed upon some initial strategies to help break these down.
- Clinical guidelines and standards of care. It was agreed that the Committee would be responsible for identifying topics for the construction of guidelines and propose these to the ESCMID Executive Committee for approval.
- To guide continued professional development in the infection disciplines. The Committee acknowledged that European terminal examinations or certification in Clinical Microbiology and Infectious Diseases may evolve across Europe over the next ten years and it would therefore have a central role in advising the ESCMID Education Committee on appropriate investment in postgraduate courses for trainees and/or CME/CPD programmes.

Finally, the basis has been set for the organization of the third workshop of European Professional Affairs, which will be held in Rome on 9-10 October 2008. We welcome all ESCMID members to attend. More information is available on the ESCMID website [www.escmid.org/calendar](http://www.escmid.org/calendar).

# Update on Invasive Fungal Infections



*Saad Taj-Aldeen, PhD, Hamad Medical Corporation Department of Laboratory Medicine and Pathology, Doha, Qatar. [stajaldeen@hmc.org.qa](mailto:stajaldeen@hmc.org.qa)*

The 46th ESCMID Postgraduate Education Course *Update on Invasive Fungal Infections* was held in Innsbruck, Austria, on 8 and 9 November 2007, in the facilities of the University Hospital of Innsbruck.

The course focused on epidemiology, therapy, diagnosis and antifungal susceptibility testing. Faculty reviewed the present situation of the epidemiology of invasive fungal infections and evaluated conventional methods and techniques for diagnosis of invasive fungal infections. Appropriate methods for susceptibility testing including commercial techniques were presented and criteria for treatment of invasive fungal infections taught. We covered a range of topics relating to *Aspergillus*, *Scedosporium*, *Fusarium*, *Candida*, and zygomycetes. The programme consisted of several interac-

tive sessions; lectures covered the therapeutic options for the main invasive fungal infections and included a review about rare and emerging fungal species. We intensively discussed case histories, which was lively in part due to the various diagnostic and therapeutic practices from different European countries. Furthermore, Cornelia Lass-Flörl, the Course Organizer, led a practical session on antifungal susceptibility procedures for yeasts and filamentous fungi carried out in the mycology laboratory of the University Hospital of Innsbruck.

In just two days, the course provided participants with outstanding opportunities to improve upon our diagnostic methods. Meeting colleagues and establishing networks for the future to facilitate diagnosis and treatment of mycoses and related work was also invaluable. In my opinion all clinicians and mycologists would greatly benefit from such an informative and well organized course. I would like to express my thanks to ESCMID for awarding me an attendance grant for the course.



Course participants at a lecture

# Early Diagnosis of Infectious Diseases in Air Travellers

Hermann Feldmeier, Charité University Medicine Berlin, hermann.feldmeier@charite.de

Each day about 600'000 intercontinental passengers arrive at an airport in their home country. How many business travellers and tourists carry an infectious agent that may be spread locally after arrival is not known. Usually, only the very spectacular cases become noticed, e. g. when a traveller dies from cerebral malaria, Lassa fever or rabies.

When in February 2003 SARS developed into a worldwide infectious disease emergency - about 8'400 cases and 800 fatalities in five continents within a couple of weeks - it rapidly became clear that the new infectious agent had profited from the intense international air travel. For instance, SARS was imported to Taiwan by a single businessman, who had become infected during a stay in Hong Kong. The index case caused an epidemic in which 800 individuals were hospitalized and 75 died, and which led to chaotic conditions in the Taiwanese health care system: The Taipeh City Hospital had to be closed, and 1'300 patients and employees were put into quarantine for several weeks.

The deleterious medical, social and economic sequels could have been prevented, if it had been possible to identify infected individuals right at the airport and to isolate them before they could transmit an infectious agent to other individuals. Obviously, due to the great number of incoming passengers per day, it is technically and logistically impossible to screen them in real-time on arrival for the presence of an infectious agent. Hence, the only means for screening is to look for symptoms associated with the infectious disease in question. However, agents such as malaria parasites or den-

gue and corona virus, which may be transmitted locally by insect vectors or through inhalation, only cause a host of unspecific symptoms, which cannot be assessed objectively. The only constant sign is an increase of body temperature, a parameter which can be determined quantitatively in real-time.

It is not by coincidence that Taiwan has been the first country to implement the systematic measurement of body temperature by using infrared cameras at its major international airport. For a long time, the island has suffered from infectious diseases imported from neighbouring countries, such as dengue fever and malaria. Appropriate insect vectors are widespread in the country, so that an outbreak may occur each time the infectious agent is imported. Consequently, dengue fever epidemics with several thousand cases occur regularly. Therefore the health authorities decided to implement a new surveillance method.

During a 12-month pilot phase, the body temperature of eight million passengers arriving in Taipeh was measured in real-time. Infrared cameras installed at the gates recognized a body temperature above 38°C in 22'000 passengers. These were seen by a physician, who, using a standardized questionnaire, identified possible reasons for the elevated body temperature. In 3011 cases the physician suspected incipient or clinical dengue fever. In this case a serum sample was taken, anti-dengue antibodies were determined by means of a capture immunoglobulin IgM and IgG enzyme-linked immunoassay and viral antigen assessed by a real-time 1-step PCR. The passengers were allowed to leave the airport, received a mosquito net, and were asked to report to the health department of their home town within the next 24 hours. At this point in time, the health department was already aware of the results of the laboratory examination.

Of the 3'011 passengers 40 (1.3%) were found to be infected with dengue virus. Of those, 33 were viremic and thus could have spread the infectious agent. The hit rate is remarkable, since during the study period altogether 73 imported cases of dengue fever had been reported to the Health Authorities of Taiwan. Of these, 25 cases were identified during inpatient treatment in a hospital, namely by passive case detection. The remaining 48 patients were identified through active surveillance, including the 40 passengers identified during border control. Hence, the measurement of body temperature shortly after landing allowed identification of 83% of all actively detected cases of imported dengue fever.

The diagnostic efficacy of the new method was much better than that of the screening method previously used in Taiwan. For years, passengers were required to fill out questionnaires before they left the aircraft. These questionnaires were analyzed by airport nurses manually, however, with this very labour-intensive method, not a single case of dengue fever had been detected. For economic reasons, the use of the infrared cameras had been profitable, too. Whereas the investment costs were in the order of USD 86'000, USD 1.5 million had been saved as a consequence of prevented dengue cases.

In Canada and Australia screening of body temperature of arriving passengers has also been tested. In summer 2003, i. e. after the SARS epidemic had come to an end, the Canadian health authorities implemented a three-step screening method at the Toronto and Vancouver airports. Arriving passengers were urged to answer medical questions in a short questionnaire. Depending on the answers an airport physician took a medical history with emphasis on infectious disease exposure. At the same time, the body temperature was measured. If SARS was suspected, the passenger was transferred to a specialized hospital.

Altogether, 470'000 passengers were screened for body temperature, 95 of which were referred to a hospital. However, not a single infection with a corona virus was identified. Using a similar study design, the Australian health authorities screened 1.84 million arriving passengers during a period of two months. Of these 794 were referred to a specialized institution. Here, too, not a single case of SARS was detected.

The diverging results show that screening for an elevated body temperature is only an effective

means to diagnose an infectious disease if the disease incidence in question is relatively high among arriving passengers such as is the case during an outbreak in the country of departure. If the incidence decreases below a yet unknown threshold, the predictive value of the temperature screening becomes very low.

Currently, several alternatives for temperature screening are being developed, none being ripe for practice. The method which is closest to implementation is based on so-called electronic good noses. These are sensors which can detect compounds in the air in picomolar concentrations. Scientists at the Purdue University in West Lafayette, Indiana, USA, are verifying whether suspicious odour patterns can be detected already during the flight by means of sensors affixed to the cabin ceiling. This highly sophisticated method is still in its infancy.

Another method is based on the fact that breath contains more than 3'000 different volatile substances. For diagnostic purposes alkanes are the most interesting group. Alkanes are saturated hydrocarbon molecules with four to 20 carbon atoms. The pattern of alkanes in the breath of an individual reflects his metabolic status. The pattern changes with age, but depends very much on oxidative stress and the type and quality of reactive oxygen intermediates liberated in the body. Characteristic patterns of alkanes have been identified for lung and breast cancer using gas chromatography. Thus, it is conceivable that infectious diseases caused by viruses also induce specific patterns of alkanes in the breath. Whether this approach is feasible for real-time screening of thousands of passengers remains to be demonstrated.

## Real-time measurement of body temperature by infrared cameras

Modern infrared cameras are able to measure differences in body temperature of less than 0.1°C of the skin in real-time. Data analysis is performed within seconds. The cameras are programmed to automatically compensate measurements of the skin temperature. This is done by determining the average body temperature of the last 10 individuals examined, so that an increase of body temperature due to environmental factors can be adjusted. The camera automatically identifies so-called hot spots in the face, the intensity of which can be seen on an LCD screen.



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The international symposium and 43rd ESCMID post-graduate education course *Bacterial Adaptation Mechanisms: Biofilms, Hypermutability and Antibiotic Resistance (BAMBHAR)* took place in Palma de Mallorca (Spain) from 7 – 9 November 2007 and was organized by Antonio Oliver, Oana Ciofu and Niels Høiby.

Back in September 2005, during a fantastic dinner in a beer brewery in Copenhagen, the idea for organizing this scientific event emerged, originally as a “pay-back” visit to Mallorca of the Danish team that soon turned into the confection of a key meeting in the field of bacterial adaptation during persistent infections. As researchers devoted to the study of chronic bacterial infections, we felt the need to analyze, from a multidisciplinary perspective, the complex strategies developed by microorganisms for the adaptation (persistence) during host-pathogen interactions in human infections. Particularly, we were interested in the interplay between the biofilm mode of life, which is the hallmark of physiological adaptation in persistent infections, and adaptive evolution (of which hypermutation and antibiotic resistance are hallmarks), as a driver of the genetic adaptation required for the development of chronic or persistent infections, such as those occurring in patients suffering from cystic fibrosis. It should be noted that although biofilms and adaptive evolution had been the focus of previous scientific meetings, this was the first initiative in which they were to be analyzed together.

Under the auspices of the ESCMID Study Group for Biofilms (ESGB) the contents and the format for the meeting were further built up. Following the intended multidisciplinary approach, up to 17 of the most prestigious experts in the different areas of this complex research field were invited, and all enthusiastically accepted the challenge, providing this meeting a basis for the flow of knowledge between basic and clinical research, which is certainly necessary for the understanding and clinical management of persistent bacterial infections. The

most adequate format for this meeting was further debated, and we decided that the best approach was to divide it into three parts:

- A one-day technical workshop mainly dedicated to the discussion of the methodology for studying bacterial biofilms (structure and physiology of biofilms, *in vitro* and animal models of biofilms, etc.) and their relevance in human infections (biofilms in foreign body infections, biofilms in the cystic fibrosis lung, interactions of biofilms with the immune system and antimicrobial agents, etc.)
- A two-day symposium, including 16 talks divided into four sessions, dedicated to the analysis of bacterial adaptation mechanisms and their implications for human infections from a multidisciplinary perspective. Each expert in bacterial genetics, molecular biology, bacterial ecology and evolution, clinical microbiology or infectious diseases added the corresponding piece to this complex puzzle.
- A poster and oral communications session in which participants were encouraged to present their own research works in the field, in order to create a bi-directional (invited speakers-participants) discussion forum.

In addition to the 17 invited speakers, a total of 80 participants with diverse backgrounds, ranging from researchers in bacterial genetics to infectious disease specialists, joined the meeting. A remarkably high proportion of them (67) were highly interested in attending the workshop, so we had to significantly increase the originally intended number of participants (30), highlighting the success of this initiative. The provenance of participants was diverse as well: A total of 23 countries were represented, including 19 European countries (Austria, Croatia, Denmark, Estonia, Finland, France, Germany, Greece, Holland, Italy, Norway, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Turkey, and the UK), Argentina, Australia, Brazil and the USA.

The call for the submission of abstracts was a



Lecture at BAMBHAR workshop

success as well; a total of 40 high-quality research works were accepted for presentation as a poster. Ten of them were further selected for discussion in a slide session, based both on scientific quality and on whether they were focused on aspects complementing the topics chosen for the invited talks. The 40 works presented covered the entire spectrum from basic sciences to clinically oriented studies and they were divided in three sections: biofilms, hypermutability/adaptive mutation and therapeutical aspects. Ten young ESCMID members presenting high quality research works received an ESCMID attendance grant covering the full tuition fee for the workshop and symposium.

All the abstracts presented, as well as the summaries of the invited speakers' presentations are available at [www.escmid.org/presentations](http://www.escmid.org/presentations).

The key to the success of this meeting was the experience of the workshop instructors, the knowledge of the invited speakers, the quality of the work presented, and particularly the stimulating discussions in which all participants were involved. For this reason, we would like to thank all the instructors, speakers and participants for creating this debate-stimulating atmosphere that served as a starting point for establishing future interaction between different involved research groups.

European Congress of Clinical Microbiology and Infectious Diseases

Helsinki, Finland  
16 – 19 May 2009

Please save the date  
and come to Helsinki!

[www.escmid.org/eccmid2009](http://www.escmid.org/eccmid2009)

19th ECCMID

ESCMID EUROPEAN SOCIETY OF CLINICAL MICROBIOLOGY AND INFECTIOUS DISEASES

## 3rd Conference on New Frontiers in Microbiology and Infection

The mountain range around the Grand Muveran; symbolizing the new frontiers to which we venture and – of course – also the wonderful surroundings of Villars-sur-Ollon



Roland Koerner, [roland.koerner@chs.northy.nhs.uk](mailto:roland.koerner@chs.northy.nhs.uk), on behalf of the Organizing Committee (Javier Garau, Roland Koerner, Jean-Claude Piffaretti and Jordi Vila)

This FEMS/ESCMID joint venture was established in 2004. Now for the third successive year, scientists, medical microbiologists and infectious diseases physicians met in the picturesque mountain village Villars-sur-Ollon, Switzerland to discuss *Streptococcus pneumoniae* from Sunday 7 to Thursday 12 October 2007.

The meeting started late Sunday afternoon with the introductory lecture on *Impact of conjugate pneumococcal vaccine on pneumococcal pneumonia: implications for pandemic influenza preparedness* given by Keith Klugman (Emory University, Atlanta, USA).

Monday was solely dedicated to discussing the physiology and pathogenicity factors of *S. pneumoniae*. The key lectures were: *Pneumococcal fratricide: possible impact on horizontal gene transfer and virulence* (Leiv Sigve Håvarstein, Oslo, Norway), *Pneumococcal peptidoglycan hydrolases: from phage to bacteria or vice versa* (Ernesto García, Madrid, Spain), and *Capsular polysaccharide biosynthesis in the Pneumococcus* (Janet L. Yother, Birmingham, USA). Jefferey

Weiser (Philadelphia, USA) concluded the morning session by discussing the relationship between antimicrobial resistance and virulence.

Every day intense discussions took place between the lectures. They often were continued during coffee and meal breaks. In the afternoon short oral presentations of posters were presented on the field addressed in the morning session. Afterwards the topics were further debated more informally in the poster area, giving the presenters the opportunity to present their work in more detail.

Tuesday's theme was antimicrobial resistance of *S. pneumoniae* which was introduced by Daniel Musher's (Houston, USA) lecture: *A fresh look at the definition of susceptibility of Streptococcus pneumoniae to beta-lactam antibiotics*, followed by Josefina Liñares (Barcelona, Spain), who gave an update on macrolide resistance. With Keith Klugman's contribution *Resistance to fluoroquinolones and fitness cost* the morning session came to an end.

After lunch the excursion to the Giacomini hut at Anzeindaz provided a welcome opportunity to freshen the mind before presenting and discussing the posters.

The clinical management and epidemiology of *S. pneumoniae* were covered on Wednesday. Epidemiological dynamics of *S. pneumoniae* were first addressed by Helena Mäkela (Helsinki, Finland)

who presented the current understanding of nasopharyngeal colonization followed by Ron Dagan's (Beer-Sheva, Israel) review of the replacement of serotypes as a consequence of the introduction of the conjugate pneumococcal vaccine. Subsequently, Åke Örtquist (Stockholm, Sweden) reviewed overall vaccination strategies and Javier Garau (Barcelona, Spain) finally discussed the quite limiting antimicrobial options available for the treatment of multidrug resistant *S. pneumoniae*, an increasing worldwide concern.

After the presentation and discussion of the posters, David Fedson's lecture, *A perspective on the problem of S. pneumoniae* concluded the conference. He concentrated on presenting conventional and to-date unexplored potential approaches in reducing morbidity and mortality of secondary pneumococcal infections in the event of the next pandemic influenza.

The slides of all presentations will be soon available on the website of *Conferences on New Frontiers in Microbiology and Infection*, [www.unil.ch/cnfmi](http://www.unil.ch/cnfmi).

The entire conference was characterized by an ongoing lively and stimulating debate. In the final plenary discussion a number of key objectives were identified, which, in the participants' opinion should be given top priority in ongoing *S. pneumoniae* research:

- furthering the understanding of the physiological basis of fratricide and other mechanisms for

the exchange/transfer of genetic information between different strains of *S. pneumoniae* respecting the potential evolution of new serotypes and acquisition of other pathogenicity factors

- proper investigation of the pre-vaccination epidemiology and close follow up of potential changes in the post-vaccination pneumococcal serogroup epidemiology
- investigation of the immunological response to repeated vaccination with the polyvalent pneumococcal vaccine in different age groups as current data on protective levels are insufficient
- investigation of the impact on of the conjugative vaccine the immunological response in adults as theoretical considerations suggest a potential benefit
- search for new anti-pneumococcal agents by further analysis of the 3D-structure of known potential target molecules for new therapeutic approaches
- investigation of the impact of therapeutic interventions (both vaccination and antimicrobial chemotherapy) on the epidemiology of pneumococcal serotypes, serotype switching, and emergence of new serotypes, also *vide supra*.

Overall it was agreed that key factors to successful lowering overall morbidity and mortality of pneumococcal disease will be (i) the close collaboration between both scientists with different expertise and between clinicians and scientists and (ii) the

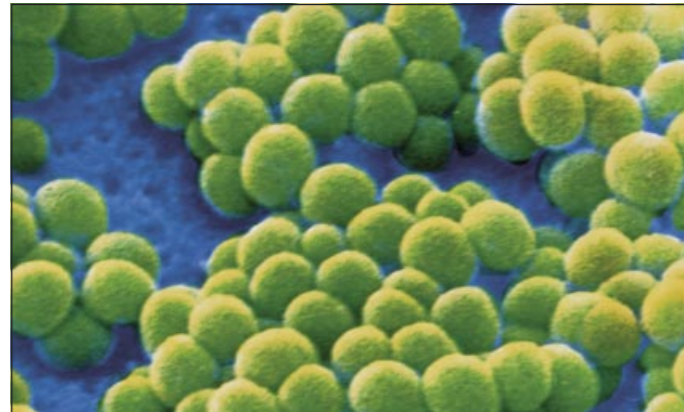


re-education of the medical profession with the aim to return to a rational approach to antimicrobial chemotherapy and to make proper use of diagnostic laboratories.

The Organizing Committee would like to take this opportunity to thank all participants, in particular all speakers, for their contributions and enthusiasm throughout the meeting. The overwhelmingly positive feedback to-date on this and the previous two conferences is an extremely strong encouragement to further develop the concept of the *Conferences on New Frontiers in Microbiology and Infection* with its key objectives:

- provide an opportunity for the transfer of state-of-the-art knowledge and understanding among research laboratory based and clinical microbiologists and infectious diseases specialists
- focus on the state-of-the-art understanding of a particular field or theme by bringing together the best European and non-European scientists
- give young scientists the opportunity to meet and interact with senior scientists
- offer research-minded clinical microbiologists and infectious diseases specialists the opportunity to update his/her understanding of the conference's subject.

We were particularly delighted by the great interest of young scientists in the *Conferences on New Frontiers in Microbiology and Infection*. Some participants were even already talking about the "Villars Meeting". Our promise is to continue doing our best to ensure that the "Villars Meeting" will continue. In this context we would like to express our gratitude to Martine Moreillon. Thanks to her flexible and imaginative approach to organizing the meetings and addressing the needs of individual participants we were able to maintain the conference's appealing format. The next "Villars Meeting" will be held from 5 – 8 October 2008 and tackle *Clostridia: from old diseases to new threats – basic science meets infectious diseases*. We look forward to seeing you there.



## ESCMID Conference

Venice, Italy  
29–31 May 2008

### Fighting Infections due to MDR Gram-positives

More information on  
[www.escmid.org/conferences](http://www.escmid.org/conferences)

#### Conference Faculty

Antoine Andremont, Paris, FR  
Marc Bonten, Utrecht, NL  
Emilio Bouza, Madrid, ES  
Christian Brun-Buisson, Cretail, FR  
Roberto Cauda, Rome, IT  
Jean Chastre, Paris, FR  
Jonathan Cohen, Brighton, UK  
Giuseppe Cornaglia, Verona, IT  
Patrice Courvalin, Paris, FR  
Matthew Falagas, Athens, GR  
Javier Garau, Barcelona, ES  
Helen Giamarellou, Athens, GR  
Robin Howe, Cardiff, UK  
Hilary Humphreys, Dublin, IE

Margareta Ieven, Edegem, BE  
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Hartmut Lode, Berlin, DE  
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Riccardo Utili, Naples, IT  
Alex Van Belkum, Leiden, NL  
François Vandenesch, Lyon, FR  
Jordi Vila, Barcelona, ES  
Wolfgang Witte, Wernigerode, DE



## ESCMID Conference

Istanbul, Turkey  
27 – 28 June 2008

### Viral Haemorrhagic Fevers

More information on  
[www.escmid.org/conferences](http://www.escmid.org/conferences)

#### Conference Faculty

Tatjana Avšič-Županc, Ljubljana, SI  
Dan Bausch, New Orleans, US  
Nurcan Baykam, TR  
Sina Bavari, Frederick, US  
Michele Bouloy, FR  
Mike Bray, Bethesda, US  
Thierry Calandra, Lausanne, CH  
Remi Charrel, Marseille, FR  
Sadegh Chinikar, Tehran, IR  
Ben Cooper, London, UK  
Guiseppa Cornaglia, Verona, IT  
Nazif Eladi, Sivas, TR  
Delia Enria, Pergamino, AR  
Onder Ergonul, Istanbul, TR  
Agustin Estrada-Pena, Zaragoza, ES  
Pierre Formenty, Geneva, CH  
Ayse Gargili, Istanbul, TR

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Giorgio Palù, Padova, IT  
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Sarah Randolph, Oxford, UK  
Arnaud Tarantola, Saint-Maurice, FR  
Zati Vatansever, Ankara, TR  
Chris Whitehouse, Frederick, US  
Herve Zeller, Lyon, FR



## 3rd GRACE Workshop

Cambridge, UK  
18 – 20 September 2008

### The science, practice and challenges of LRTI in primary care

More information on  
[www.escmid.org](http://www.escmid.org)

#### Workshop Faculty

Chris Butler, Cardiff, UK  
Roger Finch, Nottingham, UK  
Herman Goossens, Antwerp, BE  
Giles Green, Cardiff, UK  
Eelko Hak, Utrecht, NL  
Kerry Hood, Cardiff, UK  
Paul Little, Southampton, UK  
Sigvard Mölstad, Jönköping, SE  
Dominique Monnet, Copenhagen, DK

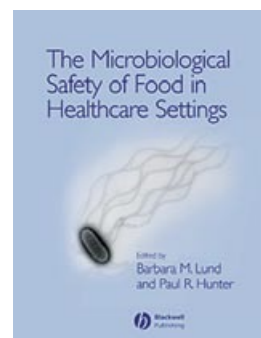
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Alfred Sachs, Utrecht, NL  
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Theo Verheij, Utrecht, NL  
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Mark Woodhead, Manchester, UK



# The Microbiological Safety of Food in Healthcare Settings

Book review

Erratum, the publishing details for the book are:  
 Edited by Barbara Lund and Paul Hunter, 400 pages, 24 illustrations.  
 Blackwell Publishing, Price: GBP 105.00



Jerome Goddard  
 CRC Press / Taylor Francis, Boca Raton, Florida, USA, 2007  
 ISBN: 0849385393  
 Pages: 480; Price: USD 159.95

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The safety of food (and indeed water) in healthcare settings is particularly problematic since these institutions contain large groups of individuals who are: in close contact with each other as well as to staff and visitors; housed in an enclosed environment and are highly susceptible to food- and water-borne infection; already acutely ill; and at greater risk of becoming infected and causing secondary spread than in other settings. Food poisoning in such settings can be at the very least unexpected, inconvenient and disruptive, but at worst extremely serious and life threatening to the patients, as well as of considerable cost. Indeed the *Salmonella Typhimurium* outbreak in the Stanley Royd Hospital in Wakefield in 1984 not only affected 355 patients (19 deaths) and 106 members of staff and closed an entire hospital, but also resulted in reforms of public health systems in the UK thereby creating the role of Consultants in Communicable Disease Control. Fortunately such events as the Stanley Royd Hospital outbreak are very uncommon; however, as with almost all food and water-borne outbreaks, they are usually preventable.

This book, *The Microbiological Safety of Food in Healthcare Settings*, is a worthy addition which fulfills an increasing need for practical advice to those dealing with vulnerable groups in hospitals, nursing homes, institutions and homes for the elderly and disabled, nurseries, and organizations supporting sick or elderly persons in their homes. The text is aimed at doctors, nurses, microbiologists, environmental health officers, catering managers, food scientists and food technologists who are involved with food safety and prevention of food and water-borne illnesses.

The book is well set out, clear and logically constructed as

well as being pleasing to read. The text describes the ascertainment and risks of food-borne disease and its incidence in healthcare settings, and highlights important features of the provision of safe food and water in these settings. In addition food safety and dietary advice for vulnerable groups is also considered. The text is divided into eight chapters, written by a group of experts in this field. Each chapter is authoritative, self-contained, and up-to-date.

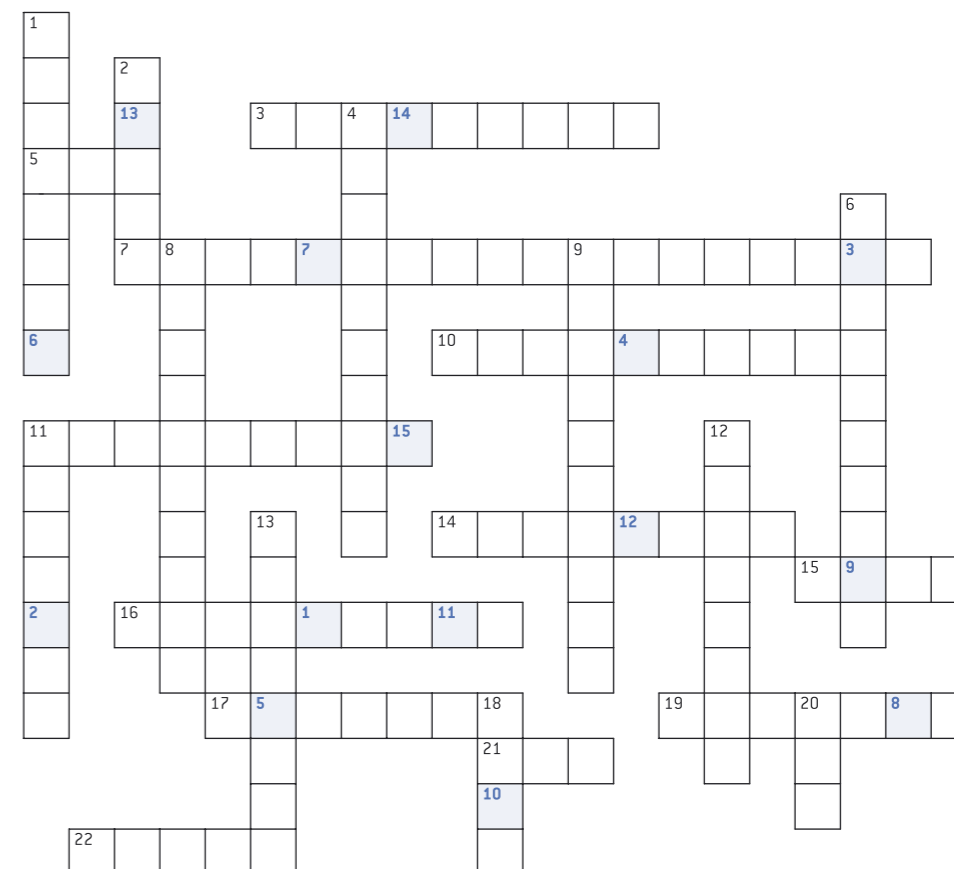
The first chapter is an overview which outlines general principals of food safety for vulnerable groups. This is followed by a chapter which constitutes over half the book and is devoted to the properties and importance of microorganisms that cause food-borne disease. Each organism (viruses, bacteria, and protozoan parasites) has a self-contained section outlining its characteristics together with the disease in humans, methods of control and informative tables on examples of outbreaks with factors leading to their occurrence. For some organisms (e.g. *Salmonella*) the outbreaks described were confined to healthcare settings, however for most of the other infectious agents the outbreaks predominantly occurred in the community and were outside healthcare settings. Whilst none, some, or most of the patients infected by each pathogen may be admitted to a hospital (the proportions of which are not always obvious from the text), the control measures are quite general and include sound recommendations on food safety which are as applicable to both the vulnerable as well as the general population. It is a pity, however, that other control measures to prevent secondary spread are not generally discussed. Although this may be outside the original scope of the book, in the initial investigation of an outbreak, a food or water-borne route of infection may not be apparent and other modes of transmission will need to be considered. In addition, for all cases of food- and water-borne infection occurring in or admitted to healthcare settings, prevention of further infection (by whatever route, including person-to-person spread) will be very much part of the remit of readers of this book. These minor reservations apart, this section is an excellent short textbook on food and water-borne pathogens in itself.

The remaining sections of the book are much more focused on practical considerations applicable to healthcare settings. The next chapter on surveillance deals with healthcare-associated infection (HCAI) in a general way for hospitals, as is likely to be considered by readers of the book. This is followed by an authoritative account on the significance, economics and “what goes wrong” (and should have been prevented) for a wide range of food poisoning outbreaks in healthcare settings. The reasons for increased susceptibility to food-borne infection in vulnerable groups are considered in the following chapter which also includes a discussion on approaches to dietary advice for the vul-

nerable. This is followed by two chapters on practical approaches (including consideration of legal aspects) to provision of food and water in healthcare settings. The book is concluded with a chapter on the practical implementation of safety management (i.e. hazard analysis critical control point - HACCP) systems to food and water service in healthcare settings.

The safe provision of food and water is essential for the successful functioning of all healthcare settings. *The Microbiological Safety of Food in Healthcare Settings* contains a wealth of current, practical and insightful information for all those who are responsible for this provision. To act on the clear advice given will surely contribute to disease prevention in the future.

## ESCMID's Anniversary Puzzle



### Across

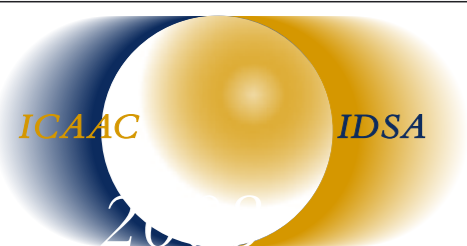
- 3 Current ESCMID President
- 5 Topic ESCMID Conference Istanbul 2008 (abbr.)
- 7 Field of interest of ESGAP
- 10 How old is ESCMID this year
- 11 City of 1st European Day of Fighting Infection Symposium
- 14 Author of ESCMID History
- 15 Famous microbiologist who is „positive and negative“
- 16 Chairman of EUCAST
- 17 Number of ESCMID Study Groups
- 19 Spanish: Thank you
- 21 In 2007, ECCMID was organized jointly with
- 22 Artist dominating the streets of Barcelona

### Down

- 1 ESCMID Excellence Awardee 2008
- 2 First Name of the Spanish Queen
- 4 Major threat reducing antibiotic effectiveness
- 6 City of ESCMID Summer School 2008
- 8 Health care associated
- 9 Discovery by Sir Alexander Fleming
- 11 Congress President ECCMID 2008
- 12 Prime Minister of Spain
- 13 City of ECCMID 2009
- 18 Only city where the ECCMID took place twice
- 20 Official ESCMID Journal (abbr.)

### Solution word





## ANNOUNCEMENT

**48th Annual ICAAC® / IDSA 46th Annual Meeting**  
Washington, DC ~ October 25-28, 2008  
A Joint Meeting of ASM and IDSA

### IMPORTANT DATES

Abstract Submission Deadline ..... May 19, 2008  
Pre-Conference Workshops ..... October 24, 2008

## Dear Colleagues:

On behalf of the American Society for Microbiology (ASM) and the Infectious Diseases Society of America (IDSA) we invite you to participate in the 48th ICAAC/IDSA 46th Annual Meeting, which will be held in Washington, DC, October 25-28, 2008.

Responding to the interest of many of the society's members and attendees, we are pleased to announce this joint meeting of ICAAC and IDSA. The Joint Program Committee has determined the Scientific Categories of the 2008 program with representatives from both organizations appointed in every category. Grants and Awards are expected to be presented as usual by each organization.

The online version of the Call for Abstracts, designed to guide you through the abstract preparation and electronic submission process is now available at [www.icaacidsa2008.org](http://www.icaacidsa2008.org)

Your presentation at the joint meeting of ICAAC and IDSA will be an excellent opportunity for you to share your work with the scientific community.

Scott M. Hammer, M.D.

W. Michael Scheld, M.D.



[www.icaacidsa2008.org](http://www.icaacidsa2008.org)

More detailed information about ESCMID courses and conferences as well as general information about other events can be found on the ESCMID website ([www.escmid.org](http://www.escmid.org)) under Courses & Workshops, ECCMIDs & Conferences, or Calendar of Events.

## Forthcoming Events

### ESCMID Events

29 – 31 May 2008  
ESCMID Conference  
**Fighting Infections Due to MDR Gram-positives**  
*Venice, Italy*

9 – 10 June 2008  
ASM / ESCMID Workshop  
**Antimicrobial Resistance among Bacterial Pathogens: Mechanism, Detection and Molecular Epidemiology**  
*Mexico City, Mexico*

15 – 21 June 2008  
ESCMID Postgraduate Technical Workshop  
**7th Workshop “Prof. V.J. Benedi”:  
Mechanisms of Antimicrobial Resistance. A Practical Approach.**  
*Palma de Mallorca, Spain*

27 – 28 June 2008  
ESCMID Conference  
**Viral Haemorrhagic Fevers**  
*Istanbul, Turkey*

19 – 25 July 2008  
**7th ESCMID Summer School**  
*Regensburg, Germany*

18 – 20 September 2008  
3rd GRACE Workshop  
**The Science, Practice and Challenges of Lower Respiratory Tract Infections in Primary Care**  
*Cambridge, UK*

4 October 2008  
5th GRACE Postgraduate Course  
**Antibiotics or not: from Acute Bronchitis to Acute Exacerbation of Chronic Bronchitis**  
*Berlin, Germany*

5 – 8 October 2008  
ESCMID / FEMS Conference on New Frontiers in Microbiology and Infection:  
**Clostridia: From Old Diseases to New Threats – Basic Science Meets Infectious Diseases**  
*Villars-sur-Ollon, Switzerland*

9 – 10 October 2008  
ESCMID Workshop on Professional Affairs in Clinical Microbiology and Infectious Diseases  
**Moving Forward in Co-operation**  
*Rome, Italy*

5 – 7 November 2008  
ESCMID Postgraduate Education Course  
**Invasive Fungal Diseases: Epidemiology, Diagnosis, Therapy and Antifungal Susceptibility Testing**  
*Nijmegen, The Netherlands*

16 – 19 May 2009  
**19th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID)**  
*Helsinki, Finland*

10 – 13 April 2010  
**20th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID)**  
*Vienna, Austria*

7 – 10 May 2011  
**21st European Congress of Clinical Microbiology and Infectious Diseases (ECCMID) / 27th International Congress of Chemotherapy (ICC)**  
*Milan, Italy*

### Endorsed by ESCMID

14 - 17 May 2008  
**8th International Meeting on Microbial Epidemiological Markers**  
*Zakopane, Poland*  
Contact: Bozena Matynia  
[bozenam@cls.edu.pl](mailto:bozenam@cls.edu.pl)  
[www.immem-8.org](http://www.immem-8.org)

14 – 25 July 2008  
**Introduction to Infectious Disease Modelling and Its Applications**  
*London, UK*  
[www.lshtm.ac.uk/prospectus/short/siidma.html](http://www.lshtm.ac.uk/prospectus/short/siidma.html)