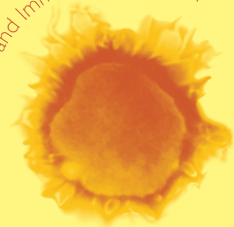




Hot Topics In Infection And Immunity In Children  
The ESPID-Oxford Course

Keble College, Oxford  
30 June - 2 July 2014

Infection and Immunity in Children





UNIVERSITY OF  
OXFORD



This page: Chris Donaghue: The Oxford Photo Library  
Front cover: Dreaming Spires by Katherine Shock

# Welcome

Dear Delegate,

Welcome to "Hot Topics In Infection And Immunity In Children 2014", and a warm welcome to Keble College and to Oxford.

This is our 12<sup>th</sup> year and we have put together a very exciting programme with leading experts from around the world to update us on the latest developments in the field.

Despite the long line up of distinguished speakers, the course is really about you and we urge your active participation in all of the interactive sessions to provide your knowledge and comments about the topics under review. We hope too that you will relish your duty to extend the educational opportunity by putting questions to the speakers after each talk, in order to extract the most from them and justify their travel expenses!

In order to bring you such a comprehensive course programme, and provide maximum value for the 3 days away from work, we have left a minimum amount of time in the daily schedule and it is, therefore, vital that you attend all sessions and mealtimes promptly. The speakers have been asked to keep strictly to time.

During the course we will be filming and taking photographs, for the purpose of advertising and for creating a webcast for the Postgraduate Diploma in PID. If you do not wish to be photographed or filmed, please make this known to the film crew and photographer.

The course reception and dinner is on Tuesday evening at Keble College.

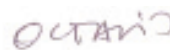
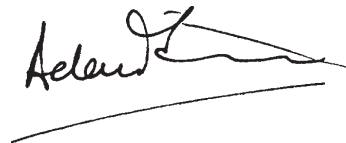
There will be plenty of time for relaxation and opportunity to chat further with the speakers in the evenings when the college bar will be open. If you are staying over on Wednesday, you will find an abundant selection of restaurants and cafes in the centre of Oxford to meet your needs as dinner will not be served in college.

Delegates staying in college will be served breakfast in the dining hall. Please be prompt for all meal times. Residential

delegates are asked to vacate their rooms and return their keys to the Porters' Lodge by 10am on the day of their departure. Effectively this means checking out after breakfast, before the first session as there will not be sufficient time to do so once the day's talks begin. There will be provision for the safe storage of luggage on the day of your departure and a porter is on duty 24 hours a day.

We have done our best to accommodate everybody on the course according to the information we have been given. If there is anything we have overlooked, please do not hesitate to let us know via the IIC Conference Information Desk.

We look forward to meeting each of you during the next 3 days.



## IIC Course Organising Team



**Andrew J Pollard**, FRCPCD PhD, is Professor of Paediatric Infection and Immunity at the University of Oxford, Director of the Oxford Vaccine Group, James Martin Senior Fellow, Jenner Institute Investigator, Fellow of the Infectious Disease Society of America, Fellow of St Cross College and Honorary Consultant Paediatrician at the Children's Hospital, Oxford, UK. He obtained his

medical degree at St Bartholomew's Hospital Medical School, University of London in 1989 and trained in Paediatrics at Birmingham Children's Hospital, UK, specialising in Paediatric Infectious Diseases at St Mary's Hospital, London, UK and at British Columbia Children's Hospital, Vancouver, Canada. He obtained his PhD at St Mary's Hospital, London, UK in 1999 studying immunity to *Neisseria meningitidis* in children and proceeded to work on anti-bacterial innate immune responses in children in Canada before returning to his current position at the University of Oxford, UK in 2001. He chaired the UK's NICE meningitis guidelines development group, the NICE topic expert group developing quality standards for management of meningitis and meningococcal septicaemia. He received the 2013 Bill Marshall Award of the European Society for Paediatric Infectious Disease. He chairs the Department of Health's Joint Committee on Vaccination and Immunisation and the European Medicines Agency scientific advisory group on vaccines. He runs one of the largest research groups in the UK that undertakes clinical trials in children and adults with 70 staff. Current research activities include clinical trials of new and improved vaccines for children and adults, surveillance of invasive bacterial diseases in children in Nepal, studies of cellular and humoral immune responses to glycoconjugate and typhoid vaccines, development of serogroup B meningococcal vaccines and research on a human challenge model of typhoid and paratyphoid. His publications include over 200 manuscripts and books on various topics in paediatrics, infectious diseases, and high altitude medicine.



**Adam Finn** is Head of the Academic Unit of Child Health at Bristol Medical School, Head of the Section of Infection and Immunity in the School of Clinical Sciences, University of Bristol and an honorary consultant in paediatric infectious diseases and immunology at Bristol Royal Hospital for Children. He is Clinical Research Lead - Children, Genetics, Haematology, Reproductive Health and Childbirth for the NIHR Clinical Research Network: West of England and heads the Bristol Children's

Vaccine Centre. His main research interests include mucosal immunology relating to bacterial vaccines, in particular pneumococcus and clinical trials of vaccines and medicines in children.



**Nigel Curtis** is Professor of Paediatric Infectious Diseases at the University of Melbourne and Head of Infectious Diseases at the Royal Children's Hospital Melbourne. He is also Leader of the Infectious Diseases & Microbiology Research Group at the Murdoch Children's Research Institute. He trained in Cambridge, London and Vancouver,

and has also worked for short periods in The Gambia, Zimbabwe and South Africa. He has a wide range of clinical and laboratory research interests with a particular interest in host-pathogen interactions and the immune response to infections. He has led studies on the role of superantigens in the aetiology of Kawasaki disease, and the pathogenesis of severe staphylococcal and streptococcal disease, including DNA microarray-based studies of gene expression in acute rheumatic fever. Current research projects focus on the innate and cellular immune response to BCG vaccine and the immunodiagnosis of childhood TB (or not TB). He is currently leading a large randomised controlled trial of BCG immunisation of infants in Melbourne to investigate the immunomodulatory 'non-specific' effects of this vaccine, including its ability to prevent infections and allergic disease (<http://misbair.org.au>).

## IIC Course Organising Team



**Ronald de Groot** studied medicine in Rotterdam, followed by a residency in Gynecology/Obstetrics and Surgery as a preparation for a 2.5 year period as Senior Medical Officer in Zonkwa Hospital, Nigeria. He did his pediatric training in Rotterdam, became chief resident in PID in the University of Washington, Seattle. In 1988 he returned to the Erasmus University in Rotterdam and

became head of the training program and Professor in PID and Immunology. He was chairman of the Dept of Paediatrics of the Radboud University Nijmegen Medical Centre from 2005-2009. As Professor in Pediatrics, his research activities cover several themes including the study of respiratory tract infections, the molecular pathogenesis of infections by *S. pneumoniae*, *Neisseria meningitidis* and HIV and clinical and translational research in children with immunodeficiencies and has authored 250 peer-reviewed English language papers. Ronald is currently President of ESPID, member of the Dutch Health Council and member of the Central Committee of Medical Research in the Netherlands.



**Octavio Ramilo** is the Henry G. Cramblett Chair in Pediatric Infectious Diseases and Professor of Pediatrics at the Ohio State University College of Medicine and Chief of Infectious Diseases at Nationwide Children's Hospital in Columbus, Ohio. He obtained his medical degree from the Universidad Complutense in Madrid, Spain. Professor Ramilo completed his paediatric residency at the Hospital "12 de Octubre" in Madrid and a subsequent Paediatric Infectious Disease Fellowship at UT Southwestern Medical Center in Dallas, Texas.

He has been involved in translational and clinical research related to the role of the host immune response in pathogenesis of infectious diseases for over 20 years. His current research is focused on pathogenesis and treatment of respiratory infections, especially RSV, and the application of genomics technologies for improving diagnosis and understanding of host responses to infectious agents.



**Simon Dobson** is a Clinical Associate Professor at the University of British Columbia. He is Head of the Division of Immunological and Infectious Diseases and an attending physician in Pediatric Infectious Diseases at BC's Children's Hospital, Vancouver. He trained in Pediatrics in the United Kingdom and in Pediatric Infectious

Diseases at Baylor College of Medicine, Houston. He works at the Vaccine Evaluation Center, BC's Children's Hospital. He has served on the Canadian National Advisory Committee on Immunization. His current research interests are clinical vaccine trials, especially in the pre-teen and adolescent age group, and vaccine adverse events. In his out patient clinic, he regularly gives advice on children who have had adverse events to vaccines and engages with parents who are less than convinced about immunization being worthwhile for their child.



**Sue Sheaf** has been organising events in the University of Oxford Department of Paediatrics since 2004. The main focus of her role is organising all aspects of IIC. Other events include the annual Oxford Vaccine Group Immunisation Seminar which provides an update for practice nurses and GP's, a bi-annual training event in Kathmandu for Nepali GP trainees, a training day for paediatric haematologists as well as other training

and social events. Her interests also lie in design and she oversees the design and branding elements of the Oxford Vaccine Group's website and publicity.

## Supporters and Sponsors



Supported by the European Society for Paediatric Infectious Diseases  
In association with the University of Oxford Department of Paediatrics  
and the British Paediatric Allergy, Immunology and Infection Group

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who have had no influence on the agenda or the content:



## IIC History

Hot Topics In Infection and Immunity In Children arose from discussions in 2002 between Andrew J Pollard and George McCracken about the successful programme George runs for trainees in North America. The aim of the ESPID-Oxford Course is to provide both basic information and updates in key areas of paediatric infectious disease. The course is designed with trainees in mind but also receives excellent feedback from senior specialists.

### Course Philosophy

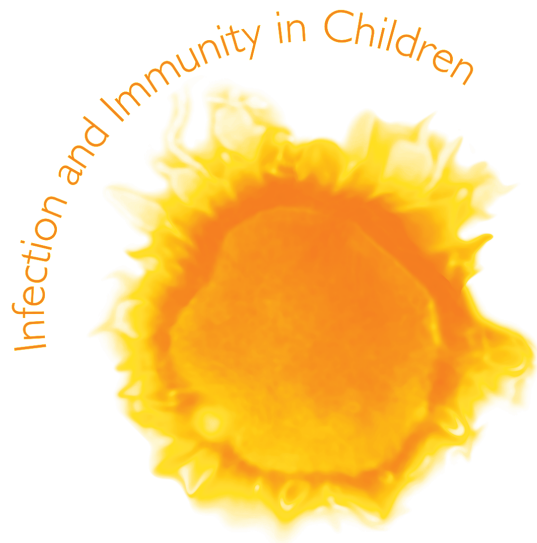
- Course Faculty drawn from credible international authorities on aspects of paediatric infectious disease
- Collegiate atmosphere
- Audience participation and interaction
- Value for money – delegates pay only 60% of actual cost, making it accessible for trainees
- Organisers take account of course feedback to improve future courses
- Emphasis on hot topics and information for trainees

### Training Objectives

- Provide information on expert approach to management for children with acute and chronic infections
- Updates on hot topics in paediatric infectious disease and immunology
- European PID training programme topics included in the course programmes

This is now our 12th year. Over the last 11 years there have been:

- 2083 delegates
- 352 speakers
- 213 hours of training
- 543 bursaries awarded
- 38 countries represented on average each year
- 60% of delegates are ESPID members
- 62% of delegates are trainees



## Keble College



Keble College opened in 1870 and was the first new college to be established in Oxford for nearly two centuries. The college was founded in memory of John Keble

(1792-1866), a founding member of the so-called 'Tractarian' movement which sought to recover the catholic heritage of the Church of England. Funding for the college was sought from Tractarian sympathisers, including the benefactor of the chapel, William Gibbs, whose family's fortune was based on Peruvian bird droppings, a valuable fertiliser! It was the wish of the founders in 1870 to extend access to the University more widely and the college has always had a reputation for being friendly and inclusive.



Keble's distinctive redbrick architecture is the work of William Butterfield, a leading proponent of the modern Gothic style, and the college chapel is generally regarded as a masterpiece. But it is perhaps the grandeur of scale and the architectural unity of the original college buildings as a whole that are most striking. The equally bold buildings by Ahrends, Burton and Koralek, opened in 1977 have supplemented Butterfield's architecture. The latest addition to the college is the Sloane Robinson Building, which opened in October 2002.

Although originally intended for 'gentleman wishing to live economically', the college began to admit women undergraduates from 1979 and elected its first female Warden in 1994. Originally dominated by those intending a career in the Church, it now admits students for the full range of subjects and sends them forth to just about every conceivable career. Keble now has 440 undergraduates and 160 graduate students and is among Oxford's largest colleges.

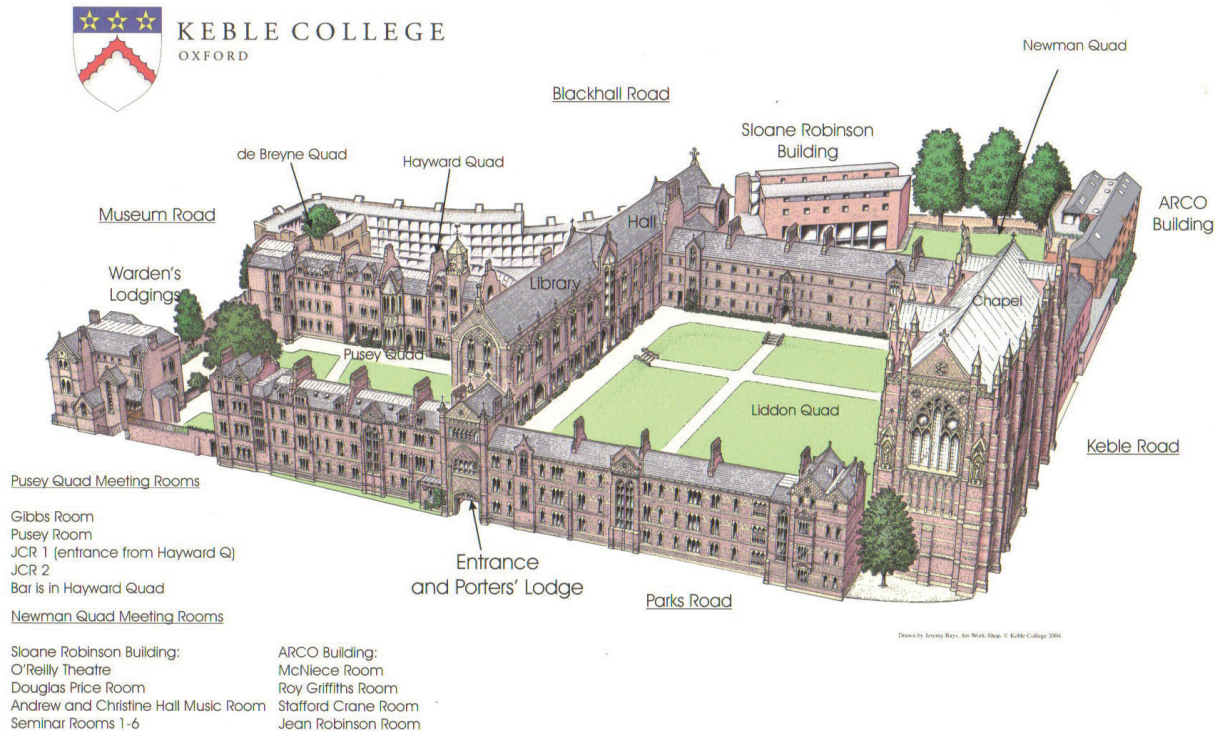
Its students come from a great variety of social and educational backgrounds and from diverse parts of the UK, Europe and further overseas. It is noted for both its academic and sporting successes and its music, notably the Chapel Choir which is among some of the best in Oxford.

The Sloane Robinson Building and the Arco Building have both won awards for being very environmentally friendly. Neither building has any heating or air-conditioning as both are climate controlled. Heat exchangers using water circulating in pipes embedded in the foundations draw winter warmth and summer cooling from the water table. Room temperatures are controlled by water circulating in the floor/ceiling slabs. The plumbing system is similar to that found in ships and aircraft in order to reduce water consumption.





# College Map & Useful Information



## Directions from Keble College to Oxford City Centre

Exit the College at the main entrance and turn right down Parks Road. Turn right into Broad Street where you will find Blackwells book shop and the tourist information office. Continue along this street which brings you into the heart of the city.

## Useful contacts:

Police Station: St Aldates Tel: 01865 841148

Post Office: St Aldates Tel: 01865 202863

Chemist: Boots, Cornmarket Street Tel: 01865 247461

Hospital A&E: John Radcliffe Hospital Tel: 01865 741166

NHS Direct: Tel: 0845 4647

Dental Emergencies: Tel: 01865 337267/0800 113824

Out of hours: 0845 345 8995

## Course timetable

<b>Monday 30 June 2014</b>		
Breakfast for Keble residential delegates in dining hall from 7.30		
9.15-9.30	Welcome	Andrew Pollard, Adam Finn, Ronald De Groot, Nigel Curtis, Simon Dobson, Octavio Ramilo
9.30-10.00	Human 'Animacules' (little animals)	David Relman, USA
10.05-10.35	Q fever	Didier Raoult, France
10.40-11.10	What the paediatrician should know about non-typeable Hi	Janet Gilsdorf, USA
<b>11.15-11.45</b>	<b>Coffee</b>	
11.50-12.20	Susceptibility to infections in "healthy" children: what can we learn from genetic studies in herpes simplex encephalitis?	Shen-Ying Zhang, USA
12.25-12.55	Malaria vaccines, malaria transmission and malaria models	Philip Bejon, Kenya
<b>13.00-14.00</b>	<b>Lunch</b>	
14.00-15.00	ID Case Rounds 1	Nigel Curtis, Australia
15.00-15.30	Group B meningococcal vaccine: science and policy	Andrew J Pollard, UK
<b>15.35-16.05</b>	<b>Tea</b>	
16.05-16.35	Sepsis in the developing world	Tex Kissoon, Canada
16.40-17.10	Fever and neutropenia	Stephane Paulus, UK
17.15-17.45	Why guidelines for sepsis have failed	Tex Kissoon, Canada
18.00	Reception for PID Diploma students and tutors	
<b>19.00</b>	<b>Dinner at Keble College</b>	

<b>Tuesday 1 July 2014</b>		
<b>Breakfast for Keble residential delegates from 7.30</b>		
8.30-9.15	Debate	Andrew J Pollard, UK and Adam Finn, UK
9.15-9.45	Abscess of the epidura, subdura and brain	Simon Dobson, Canada
9.50-10.20	Immunity to varicella	Sophie Hambleton, UK
<b>10.25-10.55</b>	<b>Coffee</b>	
10.55-11.25	Seasonal epidemics – why?	Adam Finn, UK
11.30-12.00	HSV in the neonatal period – when, why and who to treat?	David W Kimberlin, USA
12.05-12.35	Prevention, diagnosis and treatment of central line infections	Jonathan Carapetis, Australia

<b>Tuesday (continued)</b>		
<b>12.40-13.40</b>	<b>Lunch</b>	
13.40-14.40	Infections of the skin, interactive session	Arnold Oranje, The Netherlands
14.40-15.10	The evidence for treatment of influenza in children	David W Kimberlin, USA
<b>15.15-15.45</b>	<b>Tea</b>	
15.45-16.15	The evidence for treatment of RSV in children	Octavio Ramillo, USA
16.20-16.50	Tick-borne diseases of the USA	Steven C Buckingham, USA
16.55-17.25	Micro-grants – the end of infectious disease	Tobias Kollman, Canada
<b>19.15</b>	<b>Conference Reception and Dinner at Keble College</b>	

<b>Wednesday 2 July 2014</b>		
<b>Breakfast for Keble residential delegates from 7.30</b>		
8.25-8.30	Opening remarks	Andrew Pollard, Adam Finn, Ronald De Groot, Nigel Curtis, Simon Dobson, Octavio Ramilo
8.30-9.00	Sore throat: is it such a big deal anymore?	Jonathan Carapetis, Australia
9.05-9.35	Evidence-based treatment for URTI's	Anne Schilder, UK
9.40-10.10	Novel flowcytometry for diagnosis and classification of immunodeficient patients	Jacques van Dongen, The Netherlands
<b>10.15-10.45</b>	<b>Coffee</b>	
10.45-11.15	Protracted bacterial bronchitis	Ronald de Groot, The Netherlands
11.20-11.50	HIV and the adolescent	Hermione Lyall, UK
11.55-12.25	Development of immunity in the neonate	Tobias Kollmann, Canada
<b>12.30-12.40</b>	<b>Course evaluation</b>	
<b>12.40-13.40</b>	<b>Lunch</b>	
13.40-14.40	Infectious Disease Case Rounds 2	Adam Finn and Mich Erlewyn-Lajeunesse, UK
14.40-15.10	Azole-resistant <i>Aspergillus</i> ; should we be bothered?	Adilia Warris, UK
15.15-16.00	To catch a cold or not to catch a cold	Nigel Curtis, Australia
<b>16.00</b>	<b>Scoring of afternoon session followed by concluding remarks and close</b>	

## IIC Speakers



**Philip Bejon** is a consultant in infectious disease (with a sub-specialty interest in bone infection) and general medicine. His research interests include the clinical testing of candidate malaria vaccines. He has conducted Phase I, II and III vaccine trials, including viral vectored prime-boost vaccines to induce T cells and the GSK candidate malaria vaccine, RTS,S to induce antibodies. He is now funded by

a UK Medical Research Council Clinician Scientist Fellowship to characterise hotspots of malaria transmission at fine-scale. This characterisation includes epidemiological and genetic analyses in order to inform targeted control strategies.



**Steve Buckingham** is an Associate Professor of Pediatrics at the University of Tennessee College of Medicine in Memphis, Tennessee. He is an attending physician in Pediatric Infectious Diseases at Le Bonheur Children's Hospital, where he is also medical director for infection prevention, clinical consultant to the microbiology laboratory, site director for the Pediatric Infectious

Disease fellowship program, and an associate director of the pediatric residency program. After graduating from the UCLA School of Medicine, he trained in Pediatrics at the University of Oklahoma Health Science Center and in Pediatric Infectious Diseases at the fellowship program run jointly by Le Bonheur and St. Jude Children's Research Hospital in Memphis. His scholarly interests are diverse but most of his publications focus on epidemiology, therapy, and prevention of infections caused by respiratory and tick-borne pathogens in children.



**Jonathan Carapetis** is the Director of the Telethon Kids Institute in Perth, Western Australia. He is a consultant in Paediatric Infectious Diseases at the Princess Margaret Hospital for Children and is a Winthrop Professor at The University of Western Australia. He holds separate qualifications as a medical practitioner (MBBS), specialist paediatrician (FRACP Paediatrics), specialist infectious diseases physician (FRACP

Infect Dis), and specialist public health physician (FAFPHM), as well as a PhD. Professor Carapetis was the Director of the Menzies School of Health Research in Darwin, Northern Territory from 2006-2012. His research interests include Rheumatic fever and rheumatic heart disease, other group A streptococcal diseases, vaccine preventable disease, Indigenous child health, child development and education, youth health and education and skin sores and scabies.



**Janet Gilsdorf** is the Robert P. Kelch Research Professor of Pediatrics and Communicable Diseases at the University of Michigan Medical School and Professor of Epidemiology at the University of Michigan School of Public Health in Ann Arbor. After graduating from medical school at the University of Nebraska, Omaha, she completed her pediatric training

at Baylor Hospitals, Houston, Texas, and Fresno Medical Center, Fresno, California, and completed her infectious diseases fellowship at the University of Minnesota, Minneapolis. Her research program is directed at understanding the biology, tax-

onomy, pathogenesis, epidemiology, evolution, and colonization dynamics of *Haemophilus influenzae* using population-based analyses to identify bacterial virulence factors. She is an associate editor of *Journal of the Pediatric Infectious Diseases Society*, a member of the PID sub-board of the American Board of Pediatrics, and President-elect of the Pediatric Infectious Diseases Society. In 2004 she received the Sarah Goddard Power award, in 2008 the Alumni Achievement Award from North Dakota State University, and in 2012 the Distinguished Physician Award from the Pediatric Infectious Diseases Society.



**Sophie Hambleton** is a clinical senior lecturer and honorary consultant in paediatric immunology and infectious diseases at Newcastle University and the Great North Children's Hospital, Newcastle upon Tyne. She interspersed clinical training in paediatrics (Birmingham, Oxford, Newcastle) with basic research in molecular immunology (Oxford) and herpesvirology (Columbia). Since her CCST in 2008, Dr Hambleton has worked on the cellular and molecular basis of novel primary immunodeficiencies, with a focus on susceptibility to intracellular pathogens. A former MRC clinician scientist fellow, her research is now funded by a Biomedical Award from the Sir Jules Thorn Charitable Trust. Sophie plays an active clinical role within the paediatric immunology and infectious diseases team in Newcastle, including stem cell transplantation.



**David Kimberlin** holds the Sergio Stagno Endowed Chair in Pediatric Infectious Diseases at the University of Alabama at Birmingham, where he is Co-Director of the Division of Pediatric Infectious Diseases. He is the PI for the Collaborative Antiviral Study Group (CASG). Funded continuously by NIH/NIAID/DMID since the early 1970s, the CASG is a network of pediatric

academic medical centers that evaluates antiviral therapeutics in rare diseases with a large unmet medical need, including neonatal herpes simplex virus (HSV) infections, congenital cytomegalovirus (CMV) disease, neonatal and infantile influenza infection, neonatal enteroviral sepsis syndrome, and juvenile-onset recurrent respiratory papillomatosis. Studies conducted by the CASG have led to new drug indications and label changes for acyclovir, valganciclovir, and oseltamivir, and non-CASG studies conducted by Dr. Kimberlin also have led to label changes for valacyclovir. The CASG study of oseltamivir in children under 12 months of age defined the worldwide management of infants with influenza disease during the 2009 H1N1 pandemic. In 2011, the CASG was awarded four new contracts of \$19.2M from NIH/NIAID/DMID to evaluate novel therapeutic and diagnostic opportunities for management of neonatal herpes and congenital CMV infection. These studies will involve approximately 20 academic medical centers in the USA and Great Britain, and will build upon previous CASG studies conducted by Dr. Kimberlin that have defined the standard of care for the treatment of neonatal HSV and congenital CMV infections. He is Editor of the 2015 AAP *Report of the Committee on Infectious Diseases (Red Book)*, and currently is President of the Pediatric Infectious Diseases Society (PIDS).

## IIC Speakers



**Niranjan “Tex” Kissoon** is the outgoing President of the World Federation of Pediatric Intensive and Critical Care Societies, Professor in the Department of Pediatrics at the University of British Columbia in Vancouver, BC as well as the UBC and BC Children’s

Hospital Professor in Acute and Critical Care – Global Child Health. He is the vice chairman of the Global Alliance for Sepsis ([www.globalsepsisalliance.org](http://www.globalsepsisalliance.org)) and co-chair of the International Pediatric Sepsis Initiative ([www.wfpiccs.org](http://www.wfpiccs.org)). He was awarded the Distinguished Career Achievement Award by the American Academy of Pediatrics in October 2012.



**Tobias Kollmann** MD.Ph.D. Associate Professor, Department of Pediatrics, Division of Infectious Diseases, Vaccine Evaluation Centre; University of British Columbia. Dr. Kollmann completed his MD and PhD at the Albert of Einstein College of Medicine, Bronx NY, followed by a residency in pediatrics and fellowship in infectious diseases as the University of Washington, Seattle, WA.

He now is consulting physician in pediatric infectious disease at BC Children’s Hospital, where he directs the training program in Global Pediatric Infectious Diseases (GpID) and the Vancouver Immune and Vaccine Analysis Research Center (VIVArc). He has received numerous awards, including the Michael Smith Foundation for Health Research Career Investigator Award, Canadian Child Health Clinician Scientist Career Development Award, and the Burroughs Wellcome Career Award in the Biomedical Sciences. His work focuses on the development of the immune system, with the special focus on vaccines for early life.



**Hermione Lyall.** I am a consultant in paediatric infectious diseases and chief of service for paediatrics at Imperial College Healthcare NHS Trust, London. As an infectious diseases paediatrician, I am particularly interested in viral infections and their interactions with their hosts. Prevention of transmission of HIV from mother to infant, and the management

of HIV infected children and young people are my main areas of work. I am also interested in other congenital infections (syphilis, toxoplasmosis, CMV etc) and their prevention. I am a member of the steering committee of PENTA (Paediatric European Network for the Treatment of AIDS) and participate in international treatment trials for HIV infected children. I am PI on the PENTA 18 trial (KONCERT), which is a trial of once versus twice daily Kaletra in children fully suppressed on therapy, [www.pentatrials.org/](http://www.pentatrials.org/). I am the main paediatric author on the British HIV Association guideline for the management of HIV in pregnancy, updated 2012, [www.bhiva.org](http://www.bhiva.org). I am passionate about training clinicians, and am a member of the PENTA and ESPID (European Society for Paediatric Infectious Diseases) training committees. I inaugurated the development of the **Tr@inforPedHIV** course in 2005, an annual online and residential course for paediatric HIV, [www.pentatrials.org/](http://www.pentatrials.org/). This course has so far trained more than 800 healthcare workers around the world about the detailed management of paediatric HIV.



**Arnold Oranje** is consultant General Dermatology and Pediatric Dermatology and Emeritus Professor in Pediatric Dermatology. He has written about 400 scientific papers, of which 237 are listed in PubMed, and 288 in Embase. His

## IIC Speakers

H(Hirsch) index is 31. He has been co-editor of the Textbook of Pediatric Dermatology (Harper, Oranje and Prose, 2000 and 2006), and is also editor of the Dutch Handboek Pediatric Dermatology (Kinderdermatologie), finally he was graduated several times for his duties in (Pediatric) Dermatology. He also initiated two foundations dealing with disfiguring skin diseases called InFace and Aardbeesie implicating medical and dermatopsychological aspects. Recently he was appointed as Officer in the Order of Orange-Nassau by His Majesty The King of The Netherlands (2013) and he received a certificate of appreciation (2012) by the International League of Dermatological Societies for his outstanding contributions to the national and international field of Dermatology.



**Stéphane Paulus** is an infectious diseases consultant at Alder Hey Children's Hospital and a honorary senior lecturer at the University of Liverpool. After obtaining his medical school degree at the University of Louvain in Belgium, he trained in paediatrics in the US and the UK. Dr Paulus completed his paediatric ID fellowship at the University of British Columbia under the inspiring mentoring of Dr Simon Dobson and Dr Edith Blondel-Hill. His clinical interests include antimicrobial stewardship, infections in paediatric oncology patients and adolescent care. Dr Paulus is the current secretary of the British Paediatric Allergy, Immunology and Infection group (BPAIIG).



**Didier Raoult** was trained in Medecine in Marseille, France, where he specialised in internal medicine then in Infectious Diseases and Tropical Medicine. Because the laboratory diagnostic became a major goal for him, he followed courses in microbiology and received a national diploma in Bacteriology, Virology and Parasitology and followed a course in Bacteriology at the Pasteur Institute in Paris, France. He was trained in epidemiology by a continuous education program at the CDC, Atlanta, USA in Principles of Epidemiology and Infectious Diseases Control. He also obtained a PhD in Microbiology in Montpellier, France. He became Assistant Professor at Marseille School of Medicine in 1984, associate Professor in 1986 and full Professor in 1989. He is currently running a clinical microbiology laboratory for 2500 beds of University Hospitals, he is a consultant of ID. He was the President of the Scientific Committee of Marseille School of Medicine and University Hospital (1989-94), then he became the President of the Université de la Méditerranée in Marseille (1994-99). He is member of the ASM, IDSA, ESCMID, he created the European Study Group of Rickettsia, Ehrlichia, Coxiella (EUWOG) of which he is the President. He is member of the editorial board of Eur. J. Clin. Microbiol. Infect. Dis., J. Clin. Microbiol and Emer. Infect. Dis.. He created alone in 1983 a research unit, "l'Unité des Rickettsies" which became National Reference Center in 1987, WHO Collaborative Center in 1988 and associated to CNRS (National Research Agency) in 1994. The laboratory currently is the largest in the world in the field of Rickettsial disease and 72 persons are working in it. Currently, this laboratory receive, from many countries, 10.000 samples per year for the diagnostic of Rickettsial diseases, tick bite infection, blood culture negative endocarditis and unidentified infections.

## IIC Speakers



**David A. Relman, M.D.**, is the Thomas C. and Joan M. Merigan Professor in the Departments of Medicine, and of Microbiology and Immunology at Stanford University, and Chief of Infectious Diseases at the Veterans Affairs Palo Alto Health Care System in Palo Alto,

California. He is also Co-Director of the Center for International Security and Cooperation and Senior Fellow at the Freeman Spogli Institute for International Studies at Stanford University. Dr. Relman's research focus is the human indigenous microbiota, and in particular, the nature and mechanisms of variation in patterns of microbial diversity and function, key features of microbial community assembly, and the basis for community stability and resilience. He currently serves as Chair of the Forum on Microbial Threats at the Institute of Medicine (U.S. National Academies of Science), and is Immediate Past-President of the Infectious Diseases Society of America. Dr. Relman received an S.B. (Biology) from MIT, M.D. from Harvard Medical School, completed his clinical and research postdoctoral training at Massachusetts General Hospital and at Stanford University, and joined the faculty at Stanford in 1994. He was elected a member of the Institute of Medicine in 2011.



**Anne Schilder** is an ENT surgeon and NIHR Research Professor. Since 2012 she leads the evidENT team at UCL dedicated to developing the evidence base for Ear, Nose and

Throat (ENT) surgery, ensuring new and current treatments in ENT are tested and evaluated so that patients can benefit from the best treatments in the field. She is Professor of Paediatric ENT at the UCL Ear Institute, the Royal National Throat, Nose and Ear Hospital, University Medical Center Utrecht (The Netherlands) and a Visiting Professor at the Nuffield Department of Surgical Sciences at Oxford University. She is chair of the NIHR CCRN ENT Specialty Group and Joint Co-ordinating Editor of the Cochrane Collaboration ENT Disorders Group. Until 2011 she worked as a Clinician Scientist at the University Medical Centre Utrecht, where she built the Paediatric ENT Department into a national referral centre for children with upper respiratory disease. In close collaboration with her colleagues at the Departments of Epidemiology, Primary Care and Paediatrics, she led a series of multicentre RCTs of medical and surgical treatments of upper respiratory tract infections and otitis media in children. These trials have been influential in the way global health-care systems think about the management of children with these conditions and have been translated in national and international evidence-based guidelines and health policies. From 2011 she continued her career in the UK and in 2012 became the President of the European Society of Paediatric Otorhinolaryngology.



## IIC Speakers



**Jacques J.M. van Dongen** studied Medicine at the Erasmus University Rotterdam and received his M.D. degree in 1981. From then on he worked in the field of immunology research, with special focus on human T- and B-cell differentiation as well as lymphoid malignancies and immunodeficiencies. He initiated the immunodiagnostic laboratory of the Erasmus University Medical

Center Rotterdam in 1985, which has developed into one of the leading centers for immunodiagnostics and translational research of lymphoproliferative diseases and immunodeficiencies in Europe. In 1990 he received his Ph.D. degree (thesis: "*Human T-cell differentiation: Basic aspects and their clinical applications*"). Since 1991 he has been full Professor of Immunology at the Erasmus MC/Erasmus University Rotterdam. His translational research focuses on molecular genetic processes during normal, malignant, and immunodeficient lymphoid differentiation and on the development and clinical evaluation of new immunodiagnostic methods in lymphoproliferative diseases and primary immunodeficiencies. He contributed to ~600 manuscripts and book chapters, including 403 SCI publications. He is inventor on 18 patent (applications): 15/18 licensed; 13/18 granted. He is head of the Research & Diagnostic Section of Molecular Immunology with ~50 persons, including 5 group leaders, 3 postdocs, 14 PhD students and 22 technicians. He is/was coordinator of 7 European networks in the field of diagnostics in hematology and immunology, including 4 EU-supported consortia. Three of these EU-supported consortia obtained long-term sustainability based on revenues from collectively filed and owned patents. He is the founding chairman of these 3 consortia, EuroClonality, EuroMRD and EuroFlow, which are united in the European Scientific foundation of Laboratory Hemato-Oncology (ESLHO; [www.eslho.org](http://www.eslho.org)).



**Adilia Warris** is a clinical reader at the University of Aberdeen and an expert in paediatric infectious diseases with a specific interest in medical mycology. She is a Principal Investigator of the Aberdeen Fungal Group and also holds an Honorary Consultant position in Paediatric Infectious Diseases at the Royal Aberdeen Children's Hospital. Having been the head of the division of

PID & Immunology of the Department of Paediatrics at Radboud University Nijmegen Medical Centre, The Netherlands, she was appointed as a clinical reader at the University of Aberdeen in September 2013. She considers the organisation of top clinical and top reference care in combination with related scientific activities for children with serious and complicated infectious diseases as one of her core priorities. Specific areas of interest are the host-fungus interaction in specific patient groups with an emphasis on *Aspergillus* species, the unique interaction of *A. nidulans* and the CGD host, *Aspergillus* infections in the CF host, the development of new management strategies for invasive fungal infections in children, and the epidemiology of invasive fungal infections in children. The Dutch Pediatric Mycology Network was established by her and is a unique collaboration involving all the 8 university medical centers to improve the knowledge of pediatric invasive mycoses. She is a member of the research advisory panel of the CGD society in the UK and of the steering committee of the Scottish Paediatric & Adolescent Infection & Immunology Network (SPAIIIN). Training and supervising of both clinical as research fellows in the field of PID is one of her responsibilities and is a real challenge for her to support them in becoming excellent colleagues in the near future. She is a member of the ESPID Research Master Class committee being a valuable course to motivate and stimulate young researchers in the field of paediatric infectious diseases.

## IIC Speakers



**Shen-Ying Zhang.** As a physician scientist trained in Infectious Diseases, I am fascinated by the field of immunity to infections. I received my MD from Shanghai Fudan University in China, and my PhD in

Human Genetics and Immunology from Paris Descartes University in 2007. I currently lead a group investigating the immune defects underlying severe viral diseases of the central nervous system, in the laboratory of Human Genetics of Infectious Diseases (with contains two branches, a Rockefeller University branch in New York led by Dr. Jean-Laurent Casanova and a Necker branch in Paris led by Dr. Laurent Abel). The current principal focus of my research is first the fine dissection of the molecular genetic and central nervous system (CNS)-specific cellular basis of HSE pathogenesis in children, and second the expanding of this research program to investigation of other life-threatening encephalitis caused by other common viruses of the childhood. The pathogenesis of HSE has long remained unclear until I and my colleagues demonstrated that the disease may result from single-gene mutations impairing CNS-intrinsic TLR3-dependent, IFN- $\alpha$ /b-mediated immunity to HSV-1, in a small proportion of HSE children. We also demonstrated more recently that patient-specific induced pluripotent stem cell (iPSC)-derived TLR3-deficient neurons and oligodendrocytes were highly susceptible to HSV-1 infection, suggesting that impaired TLR3- and IFN-mediated CNS-intrinsic anti-HSV-1 immunity underlies the pathogenesis of HSE in patients with inborn errors of TLR3 immunity. By combining the genetic and cellular dissection of HSE and other viral diseases of the brain, I hope to achieve an understanding of human immunity controlling virus infection of the CNS.

Bikes in St Giles by Katherine Shock



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South Parks, Oxford by Katherine Shock

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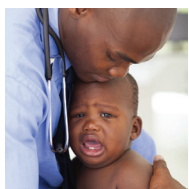
The Oxford Today magazine app offers you the complete magazine including all the features, alumni profiles and regular departments from books to letters – everything that you've come to expect from one of the leading university alumni magazines.

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# Postgraduate Paediatric Infectious Diseases Programme



- **Part-time Postgraduate Diploma and MSc**
- **Taught via a blend of online and residential components, particularly suited to those in full-time employment**
- **Syllabus based on EU clinical training requirements and is also appropriate for those outside the EU**
- **For trainees in paediatrics, specialist trainees in paediatric infectious diseases and clinical research fellows**



The Programme draws on world-class research and teaching in paediatric infectious diseases. It offers a unique opportunity to gain an understanding of principles that underpin infection and the ways in which those principles have developed, and to translate this understanding into good clinical and research practice. It is the result of a close collaboration between the University of Oxford Department of Paediatrics and the Department for Continuing Education. The Programme is led by Andrew Pollard, Professor of Paediatric Infection and Immunity at the University of Oxford, and Honorary Consultant Paediatrician at the Children's Hospital, Oxford.

This programme is supported by ESPID, PENTA and The ESPID-Oxford Course



### The main programme components are:

- A two-year online course with online tutor support and student discussion forums
- Two three-day residential courses in Oxford: Infection and Immunity in Children (IIC)
- PENTA-ESPID Tr@nforPed Paediatric HIV Infection online course with a three-day residential component in Rome
- Additional research year for MSc students with dissertation

### The online topics covered are:

- Infectious Syndromes
- Therapeutics and Infection Control
- Epidemiology, Immunity and Immunization
- Bacterial Infections
- Viruses
- Imported and Tropical Diseases and Mycobacterial Infection
- Neonatal Infection and STIs
- The Immunocompromised Host
- Fungal Infection

*"The course has provided me with a framework of how to approach clinical problems and the importance of evidence-based medicine. It has enriched my clinical experience whilst working as a trainee in Paediatric Infectious Diseases. This course is thought-provoking, challenging and requires some hard work but is highly rewarding." Year 1 Postgraduate Diploma student*



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**Tel: +44 (0)1865 286946**  
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## ESPID and BPAIIG

### Join ESPID

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

Anyone interested in the field of PID can become an ESPID member. Applications should be done on-line and are subject to acceptance by the ESPID board, under the terms of Article 3 of the Association. New members' applications are normally processed within one month. Membership is entered per calendar year.

ESPID members are entitled to the following benefits:

- Free annual subscription to PIDJ
- Reduced registration fees for ESPID annual meetings
- ESPID fellowship and awards
- Facilitated participation in a number of prestigious scientific courses
- Reduced fees to attend IIC

To apply, complete and submit the on-line form at [www.espid.org](http://www.espid.org)



The British Paediatric Allergy, Immunology and Infectious Diseases Group (BPAIIG) is an affiliated specialty group of the Royal College of Paediatrics and Child Health (RCPCH). Members of the BPAIIG are actively involved in the clinical care of children as well as in research and development of new methods of investigation and treatment of allergic, immune and infectious conditions. Research presentations by trainees are an important part of the Spring and Autumn meetings. Encouraging trainees to proceed in this field is a crucial function of the group. Establishment of the annual Oxford Infection and Immunity Summer Meeting in 2003 under the auspices of BPAIIG and the European Society of Paediatric Infectious Diseases (ESPID), has complemented the BPAIIG rolling training programme. BPAIIG members are also involved with the specialist training of young doctors, via the Allergy, Immunology, and Infectious Diseases CSAC of the RCPCH.

Establishment of the annual ESPID-Oxford Course, Infection and Immunity in Children in 2003 under the auspices of BPAIIG and the European Society of Paediatric Infectious Diseases (ESPID), has complemented the BPAIIG rolling training programme. BPAIIG members are also involved with the specialist training of young doctors, via the Allergy, Immunology and Infectious Diseases CSAC of the RCPCH.

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

## IIC Books

All delegates will be sent by post a free copy of the proceedings of IIC 2014. Since 2013, the proceedings are being produced in the format of a supplement in the Journal of Infection. This supplement will be based on the course and is aimed at encouraging excellent in clinical practice and raising the profile of paediatric infectious diseases, with a particular eye on the needs of trainees in the specialty.

Prior to this, the proceedings were published as a book by Springer in the Advances in Experimental Medicine and Biology series. You will find in these books a wealth of state of the art information about various aspects of paediatric infectious diseases, written by leading authorities in the field.

A limited number of copies of previous editions are available to purchase at cost price here at the course, cash or cheque only.



Alternatively, you can purchase copies of the book from previous courses (2003–2012) direct from Springer Online at [www.springer.com](http://www.springer.com) or contact [service-ny@springer.com](mailto:service-ny@springer.com)

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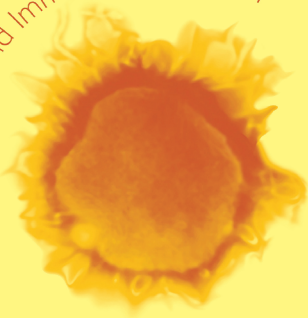
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Infection and Immunity in Children



# Hot Topics In Infection And Immunity In Children 2015

St Catherine's College, Oxford  
29 June - 1 July

## The ESPID-Oxford Course

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