



# The ESPID-Oxford Course

Infection and Immunity in Children





UNIVERSITY OF  
OXFORD

# Welcome

**Dear Delegate,**

**Welcome to “Hot Topics In Infection And Immunity In Children 2013”, and a warm welcome to St Catherine’s College and to Oxford.**

This is our 11th 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.

We will be filming all 3 days of the course and the webcast will be used as a resource for the Postgraduate Diploma in PID.

The course reception and dinner is on Thursday evening at St Anne’s College, Woodstock Road (there is a map in your pack). In order to give you a glimpse of Oxford and its history we have organised a bus tour which will depart from St Catherine’s College at 18.15. The tour will finish at St Anne’s College at 19.15 in time for the drinks reception. If you prefer to walk to St Anne’s, you should allow 20 minutes.

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 Friday

night, 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.**



Andrew Pollard



Nigel Curtis



Adam Finn



Ronald de Groot



Simon Dobson



Octavio Ramilo



Sue Sheaf

# IIC Course Organising Team



**Andrew J Pollard** 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, and chairs the NICE topic expert group developing quality standards for management of meningitis and meningococcal septicaemia. He sits on the Department of Health committee that considers use of meningococcal vaccines. He runs one of the largest paediatric research group in the UK with over 80 staff. Current research activities include clinical trials of new and improved vaccines for children, surveillance of invasive bacterial diseases in children in Nepal, studies of cellular and humoral immune responses to glycoconjugate and typhoid vaccines, and development of a serogroup B meningococcal vaccine.



**Adam Finn** is Head of the Academic Unit of Child Health at Bristol Medical School, 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 director of the South West Medicines for Children Research Network and heads the Bristol Childrens 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 Microbiology & Infectious Diseases Research Group at the Murdoch Children's Research Institute. He trained

in Cambridge, London and Vancouver, and spent a recent sabbatical period in Cape Town, South Africa. He has a wide range of clinical and laboratory research interests focusing on the immune response to infectious diseases. Current research projects include studies of the immune response to BCG vaccine, the immunodiagnosis of tuberculosis, and host-pathogen interactions in staphylococcal and streptococcal disease including DNA microarray-based studies of gene expression in acute rheumatic fever.



**Ronald de Groot** studied medicine in Rotterdam, followed by a residency in Gynecology/Obstetrics and Surgery as a preparation for a 2½ year period as Senior Medical Officer in Zonkwa Hospital, Nigeria. He did his pediatric training in Rotterdam, became chief resident followed by a 3 year research fellowship 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.



**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.



**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.



**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, as well as other training and social events. Her interests also lie in design and she recently led the re-design of the OVG website and the branding of the group.

# 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**

**With unrestricted educational grants from the following sponsors:**



# 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

## In 2012 we celebrated our 10th anniversary.

Over 10 years there have been:

- 1909 delegates
- 320 speakers
- 193 hours of training
- 468 bursaries awarded
- 38 countries represented (average) each year
- 50% of delegates are ESPID members
- Over 60% of delegates are trainees



# St. Catherine's College

St. Catherine's College was founded in 1962 by Alan Bullock (Lord Bullock), although it has its origins in a non-collegiate Society which was established in 1868 as a means for the less well-off to study at Oxford. The College's motto - Nova et Vetera (the new and the old) - sums up its unique quality among Oxford colleges.

While taking much from the best traditions of Oxford, it succeeds in having a much less formal and more relaxed and friendly atmosphere than many other colleges. Designed by Danish architect Arne Jacobsen, the College has a traditional layout in quadrangle style with gardens. Its situation and architecture give a feeling of space and light and peace; it backs onto Merton's playing fields and the University Parks.

The story of how St. Catherine's College, the only Oxford undergraduate college to be built since 1945, came into being, is a remarkable one. The achievement was inspired by its Founding Master, twentieth century historian Lord Bullock, who has seen St. Catherine's become, over the 43 years of its existence, one of the largest Oxford colleges.

As befitted its pioneering origins, the new college was to be distinctive from the outset. One highly innovative decision was to admit equal numbers of science and arts students each year - recognising, ahead of many others, the vital role and fast-advancing world of science and technology. Much effort was spent in promoting the College to schools of all different types to attract the widest possible range of applicants. Even the buildings were to proclaim a new attitude, entirely in keeping with the spirit of the 1960s and looking to modernism rather than the past. The appointment of the Danish architect Arne Jacobsen aroused controversy and was seen by many, mistakenly, as a tacit condemnation of the British profession. However, his striking modernist design, characterised by strong geometry, has become one of the few post-war buildings in the country to be given grade 1 listed status

and has matured to create a sophisticated and attractive environment.

When the College opened to its first students in October 1962 only a few buildings were ready for occupation and none of them were complete. The band of pioneers who endured the privations of that first term quickly became known as the 'Dirty Thirty', for obvious reasons! However, by the end of the academic year 150 undergraduates had taken up residence. The College grew steadily. In 1974 it became one of the first five colleges in Oxford to become mixed and by 1978 was the largest college within the University. While maintaining the conventional pattern of an Oxford college, the progressive outlook of St. Catherine's has resulted in the establishment of an institution which successfully marries tradition and innovation.

The club that became St. Catherine's Society took its name from its original meeting place, St Catharine's Hall, a house in Broad Street now forming part of Hertford College. However the connection with the saint is perhaps entirely appropriate for a college founded on an ethos of high academic standards combined with a doggedly independent streak.

Catherine was one of many women carried off from Alexandria by the Emperor Maxentius in 305. Maxentius brought fifty philosophers to convince her that her belief in Christianity was foolish but Catherine had studied in depth, and although aged only eighteen, confounded the arguments of the philosophers and ended up converting them. Maxentius had the philosophers put to death and Catherine imprisoned. However, when the Emperor's wife was also converted after visiting Catherine in prison, the Emperor decided that she had to die. A wheel set with razors was constructed and Catherine was tied to its rim, but instead of cutting her to pieces, the wheel broke and some of its splinters and razors injured the onlookers. Finally, Catherine was beheaded.



## ST. CATHERINE'S COLLEGE OXFORD



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### Directions from St Catherine's College to Oxford City Centre:

Exit the College at the main entrance and carry on straight to the top of Manor Road. Turn left on to St Cross Road. Cross the road at the pedestrian crossing and then turn right down Holywell Street. At the crossroads at the end of Holywell Street, go straight over 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. There is a map in your packs.

### Useful information

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: 111

Dental Emergencies.....Tel: 01865 337267/0800 113824

or Out of hours: .....0845 345 8995

# Course Timetable

<b>Wednesday 26 June 2013</b>		
8.00-9.00	Breakfast for St Catherine's residential delegates	
8.00-9.30	Registration and coffee	
9.15-9.30	Welcome	Andrew Pollard, Adam Finn, Ronald De Groot, Simon Dobson, Nigel Curtis, Octavio Ramilo
9.30-10.00	How to win a nobel prize – a primer for the infectious diseases physician	Peter Doherty, Australia
10.05-10.35	Standing up for vaccines	Paul Offit, USA
10.40-11.10	Systems immunology: beyond the antibody concentration	Michael Mason, USA
11.15-11.45	Coffee	
11.45-12.15	Vaccination: the end game for malaria?	Robert Sauerwein, The Netherlands
12.20-12.50	Is betalactam monotherapy of serious infections by susceptible gram positive bacteria suboptimal?	Keith English, USA
13.00-14.00	Lunch	
14.00-15.00	ID Case Rounds 1	Nigel Curtis, Australia
15.00-15.30	Leishmaniasis	David Pace, Malta
15.35-16.05	Congenital syphilis	Pablo Sanchez, USA
16.10-16.40	Tea	
16.40-17.10	Prevention, diagnosis and treatment of neonatal candida infection	Danny Benjamin, USA
17.15-17.45	Can Group B streptococcal infection be prevented without a vaccine?	Paul Heath, UK
17.50-18.20	Bone and joint infections with and without implants: current concepts and outlook	Andrej Trampuz, Germany
18.30	Reception for Diploma students and tutors	
19.30	Dinner in college	

<b>Thursday 27 June 2013</b>		
7.30-8.15	Breakfast for St Catherine's residential delegates	
8.15-9.00	Debate	Andrew Pollard & Adam Finn, UK
9.00-9.30	Severe anaemia in African children	Michael Boele van Hensbroek, The Netherlands
9.35-10.05	The signature of bacterial infection in Africa	Mike Levin, UK
10.10-10.40	How to recognize and manage chronic granulomatous disease	David Goldblatt, UK
10.45-11.15	Coffee	

**Thursday 27 June 2013 (continued)**

11.15-11.45	The biology of Aspergillus infection	Adilia Warris, The Netherlands
11.50-12.20	Mycoplasma pneumoniae: does treatment help?	Annemarie van Rossum, The Netherlands
12.25-12.55	What is the significance of H. Zoster?	Rich Whitley, USA
13.00-14.00	Lunch	
14.00-15.00	Infectious Diseases Case Rounds 2	Octavio Ramilo, USA and Andrew Pollard, UK
15.00-15.30	Its all in the biofilm	Saul Faust, UK
15.35-16.05	The role of the microbiota in enteric and allergic diseases	B Brett Finlay, Canada
16.10-16.40	Tea	
16.40-17.10	HCV infection: what every paediatric ID specialist needs to know	Gareth Tudor-Williams, UK
17.15-17.45	Mother to child transmission of HIV: what works and how much is enough	Hermione Lyall, UK
18.15	Bus tour of Oxford. Departs: St Catherine's College. Destination: St Anne's College	
19.15	Dinner at St Anne's College	

**Friday 28 June 2013**

7.30-8.20	Breakfast for St Catherine's residential delegates	
8.25-8.30	Opening remarks	Andrew Pollard, Adam Finn, Ronald De Groot, Simon Dobson, Nigel Curtis, Octavio Ramilo
8.30-9.30	Hypothetical: Wonder-drugs, super-bugs and flesh-eating furphies	Jonathan Carapetis and Tom Snelling
9.35-10.05	Management of severe pertussis: when is there no hope?	Simon Dobson, Canada
10.10-10.40	Coffee	
10.40-11.10	Management of invasive group A streptococcal infection	Jonathan Carapetis, Australia
11.15-11.45	West Nile virus infection. Should paediatricians care?	Noni Macdonald, Canada
11.50-12.20	Dengue	Ronald De Groot, The Netherlands
12.25-12.55	Pneumonia in children: Facts and myths	Octavio Ramilo, USA
13.00-14.00	Lunch	
14.00-15.00	Infectious Disease Case Rounds 3	Adam Finn and Mich Erlewyn-Lajeunesse, UK
15.00-15.45	To be announced or not to be announced	Nigel Curtis, Australia
15.50	Scoring of afternoon session followed by concluding remarks and close	

# IIC Course Speakers



**Daniel K. Benjamin, Jr., MD MPH PhD** obtained his medical degree and completed a residency in pediatrics at the University of Virginia in 1995 and

1998, respectively. He completed a fellowship in pediatric infectious disease at Duke University, obtained an MPH at the University of North Carolina (UNC)–Chapel Hill, and accepted a faculty appointment at Duke University in 2001. He completed a PhD in epidemiology at the UNC–Chapel Hill in 2003. He is the author of over 160 peer-reviewed publications published or in press, most of which are in epidemiology, pharmacology, and therapeutics. Dr. Benjamin leads the Pediatric Trials Network, the largest NIH-sponsored network for therapeutic trials in the world.



**Micahel Boele van Hensbroek**, a paediatric infectious disease specialist, is a staff member of the Emma Children's hospital, Academic Medical Centre of

the University of Amsterdam. He previously worked in The Gambia (1991–1995), conducting research on the treatment of severe malaria in children. The research was based at the MRC research laboratories and was part of collaboration between the University of Oxford and the University of Amsterdam. This was followed by a 5-year (1996–2000) training period in paediatrics. In 2000 he obtained a Wellcome Trust career development fellowship to study the aetiology, pathogenesis and outcome of severe anaemia in Malawian children. During his fellowship he was based at the Wellcome Trust Research Laboratories in Blantyre, Malawi, conducting his research and working as a consultant in Paediatrics at Queens Elisabeth Central Hospital. In 2005 he (as P.I.) obtained a grant from the Dutch government to develop a Research Support Centre at

the University of Malawi and to conduct a series of related intervention trials on severe anaemia prevention. In 2005 he returned to the Emma Children's hospital to become the Head of the Global Child Health Group, paediatric advisor for Doctors Without Borders (MSF) and to complete his training in Paediatric infectious diseases. He is currently involved in several research projects in Malawi, Nigeria, Cameroon and Kenya in the area of malaria, anaemia, HIV and research capacity building.



**Jonathan Carapetis** is the Director of the renowned Telethon Institute for Child Health Research in Perth, 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. He undertook his medical training at the Royal Melbourne and Royal Children's Hospitals. Previous positions include terms as Director of the Centre for International Child Health at the University of Melbourne, Theme Director at the Murdoch Children's Research Institute in Melbourne and Clinical Fellow in Paediatric Infectious Diseases at the Hospital for Sick Children, Toronto, Canada. Professor Carapetis holds a clinical position with the Princess Margaret Hospital for Children and is a Winthrop Professor at The University of Western Australia.



**Peter Doherty** trained as a veterinarian, spent a decade researching infectious diseases of domestic animals and has, for the past 40+ years been involved in basic biomedical research. He and his Swiss colleague Rolf Zinkernagel shared the 1996 Nobel Prize for

Physiology or Medicine for a discovery made at the John Curtin School of Medical Research and the ideas they developed (from 1973–5) concerning the nature of cell-mediated immunity and transplantation. Named Australian of the Year in 1997, he became committed to the public communication of science and has, while continuing his involvement with talented young researchers, written four “trade” books: “The beginner’s guide to winning the Nobel Prize” (2005), “A light history of hot air”(2007), “Sentinel chickens: what birds tell us about our health and the world” (2012), and “Pandemics: what everyone needs to know” (2013). His next book will be on science in the public space.



**B. Keith English, M.D.** is Professor and Associate Chair of the Department of Pediatrics at the University of Tennessee Health Science Center (UTHSC) and Chief of the Division of Pediatric Infectious Diseases at Le Bonheur Children’s Hospital (LBCH) in

Memphis. Dr. English is a native of northeast Texas, earned his B.A. in general science summa cum laude at Coe College in Cedar Rapids, Iowa, and was an AOA graduate of Baylor College of Medicine (BCM) in Houston. He then completed his pediatric residency and chief residency at BCM and Texas Children’s Hospital and a research fellowship in pediatric infectious diseases at the University of Washington and Seattle Children’s Hospital with Chris Wilson. He joined the faculty in the Department of Pediatrics at

UTHSC in 1990, was appointed Chief of the Division of Pediatric Infectious Diseases in 1996, was promoted to Professor of Pediatrics in 2000 and named as Associate Chair of the Department of Pediatrics in 2012. His laboratory studies macrophage responses to Gram-positive bacteria and bacterial products, and he has authored 65 peer-reviewed publications. He is a member of the American Pediatric Society, the Society for Pediatric Research, the Infectious Diseases Society of America, the Pediatric Infectious Diseases Society, and the Southern Society for Pediatric Research (SSPR). Dr. English served as President of the SSPR, and in 2008 won the highest honor bestowed by this Society, the Founder’s Award. He has been a member of the Pediatric Infectious Diseases sub-board of the American Board of Pediatrics since 2008 and currently chairs that sub-board. He played a leading role in helping the Memphis community respond to the 2009 H1N1 influenza A pandemic, and was honored for these efforts with the Tennessee chapter of the American Academy of Pediatrics’ 2010 “Pediatrician of the Year” award. In his role as Associate Chair, he focuses on faculty recruitment and development and has instituted a formal faculty mentoring program.



**Saul N Faust** is Reader in Paediatric Infectious Diseases & Immunology at the University of Southampton and Director of the Southampton NIHR Wellcome Trust Clinical Research Facility. Current projects include work to bridge the

clinical-laboratory interface in paediatric infectious diseases, immunology and respiratory medicine (including biofilm-related clinical diseases), developing local and national collaborative clinical trials in paediatric infectious diseases, and conducting paediatric and adult vaccine trials as part of the UK academic paediatric vaccine group. Saul is currently Chair of the UK NIHR Medicines for Children

# IIC Course Speakers

Clinical Speciality Group Forum, Chair of the MCRN Clinical Speciality Group for Allergy, Infectious Diseases and Immunity, Convenor of the British Paediatric Allergy, Immunology and Infectious Diseases Group and Convenor of the UK Paediatric Clinical Research Facilities Director's Forum.



**B. Brett Finlay** is a Professor in the Michael Smith Laboratories, and the Departments of Biochemistry and Molecular Biology, and Microbiology and Immunology at the University

of British Columbia. He obtained a B.Sc. (Honors) in Biochemistry at the University of Alberta, where he also did his Ph.D. (1986) in Biochemistry under Dr. William Paranchych, studying F-like plasmid conjugation. His post-doctoral studies were performed with Dr. Stanley Falkow at the Department of Medical Microbiology and Immunology at Stanford University School of Medicine, where he studied Salmonella invasion into host cells. In 1989, he joined UBC as an Assistant Professor in the Biotechnology Laboratory. Dr. Finlay's research interests are focussed on host-pathogen interactions, at the molecular level. By combining cell biology with microbiology, he has been at the forefront of the emerging field called Cellular Microbiology, making several fundamental discoveries in this field, and publishing over 400 papers. His laboratory studies several pathogenic bacteria, with Salmonella and pathogenic E. coli interactions with host cells being the primary focus. He is well recognized internationally for his work, and has won several prestigious awards including the E.W.R. Steacie Prize, the CSM Fisher Scientific Award, CSM Roche Award, a MRC Scientist, five Howard Hughes International Research Scholar Awards, a CIHR

Distinguished Investigator, BC Biotech Innovation Award, the Michael Smith Health Research Prize, the IDSA Squibb award, the Jacob Biely Prize, the prestigious Canadian Killam Health Sciences Prize, the Flavelle Medal of the Royal Society, the Queen Elizabeth II Diamond Jubilee Medal, is a Fellow of the Royal Society of Canada and the Canadian Academy of Health Sciences, is a Member of the German National Academy of Sciences, and is the UBC Peter Wall Distinguished Professor. He is an Officer of the Order of Canada and Order of British Columbia. He is a cofounder of Inimex Pharmaceuticals, Inc., and Director of the SARS Accelerated Vaccine Initiative. He also serves on several editorial and advisory boards, and is a strong supporter of communicating science to the public.



**David Goldblatt** is Professor of Vaccinology and Immunology and Head of the Immunobiology Unit at the Institute of Child Health, University College London (UCL).

He is a Consultant Paediatric Immunologist at the Great Ormond Street Hospital for Children NHS Foundation Trust (GOSH) where he is also Director of Clinical Research and Development and also Director of the National Institute for Health Research GOSH/UCL Biomedical Research Centre. He obtained his medical degree from the University of Cape Town, South Africa, his Paediatric qualifications from the Royal College of Physicians (London) and a PhD in Immunology from the University of London, United Kingdom.

He has a long-standing interest in the immune response to vaccines and infectious diseases in childhood and has an active research programme studying bacterial conjugate vaccines, the kinetics of immunological memory

and immunity and infections in early life. He is involved in clinical trials and basic science research projects in the United Kingdom, Africa and SE Asia and collaborates with colleagues in Europe and the USA. He is a regular advisor to the World Health Organisation (WHO) on bacterial conjugate vaccines and is Director of the WHO Reference Laboratory for Pneumococcal Serology based at the UCL Institute of Child Health in London. He served as a member of the United Kingdom Department of Health Joint Committee on Vaccines and Immunisation for 10 years (1997–2007), currently contributes to 2 JCVI subcommittees and has served as a member of both MRC and Wellcome Trust funding panels. He is currently a member of the Wellcome Trust’s “Immune System in Health and Disease” Expert Review Group.



**Paul T Heath MB BS, FRACP, FRCPCH.** is a Professor / Honorary Consultant in Paediatric Infectious Diseases at St George’s, University of London and Vaccine Institute in London. His training in paediatrics and infectious diseases was at the Royal Children’s Hospital, Melbourne, the John Radcliffe Hospital, Oxford and St George’s Hospital, London. His particular research interests are in the epidemiology of vaccine preventable diseases, in clinical vaccine trials, particularly in at-risk groups, and in perinatal infections. He sits on national committees concerned with meningitis, Group B streptococcus prevention, Pneumococcal and Hib infections, neonatal infections and on immunisation policies in children. He is a Fellow of the Royal Australasian College of Physicians, a Fellow of the Royal College of Paediatrics and Child Health, a member of the education committee of the European Society of Paediatric Infectious Diseases and a member of the science board of the international Brighton Collaboration on vaccine safety.



**Michael Levin** is Professor of Paediatrics and International Child Health, and Director of the Wellcome Centre for Tropical Clinical Medicine at Imperial College London. He trained in medicine in South Africa and in paediatrics in the UK before specialising in infectious diseases. His research has focused on life threatening infections of childhood. He currently heads an international EU-funded consortium studying novel diagnostic methods for tuberculosis in Africa working with colleagues in Malawi and South Africa. He recently led an ESPID funded consortium studying the genetic basis of meningococcal disease, and is a co-investigator on the MRC funded Phase III trial of fluids as supportive treatment for critical illness in African children (“FEAST”), the results of which are recently published in the New England Journal of Medicine. He is the co-ordinator of a recently funded European Commission FP7 award studying the genetic basis of meningococcal and other life threatening bacterial infections of childhood, working with a consortium of colleagues from Europe, Africa and Singapore.



**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

# IIC Course Speakers

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@nforPedHIV 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.



**Noni MacDonald** is a Professor of Paediatrics (Infectious Diseases) and of Computer Science at Dalhousie University with a clinical appointment in Paediatric Infectious Diseases at the IWK Health Centre in Halifax Canada. She is a former

Dean of Medicine at Dalhousie University; the first woman in Canada to be a Dean of Medicine. Her current three major areas of interest are 1) Vaccines, especially vaccine safety in developing countries through her work with the World Health Organization, mitigating pain with vaccines, and vaccines and policy; 2) MicroResearch, building capacity in community focused research in developing countries ([www.microresearch.ca](http://www.microresearch.ca)) and 3) application of Health Information Systems in developing countries to improve health outcomes. She has published over 300 papers; is the founding Editor-in-Chief of Paediatrics

and Child Health, and a former Editor-in-Chief of CMAJ (Canadian Medical Association Journal). In December 2012, she received the Canadian Distinguished Leader in Vaccinology Award; the highest award for vaccinology in Canada. Dr. MacDonald has long been recognized in Canada and internationally, as an advocate for children and youth health and as a leader in paediatric infectious disease.



**Michael Mason** is bioinformatician who received his PhD from UCLA where he investigated gene expression regulation in embryonic stem cell maintenance and development. As a computational biologist at iPierian he helped develop

high-throughput screening assays to identify small molecules for the treatment of neurological disorders and to increase the efficiency of reprogramming somatic cells to an embryonic stem state. In 2011 he joined the Benaroya Research Institute (BRI) as a bioinformatician where he has developed methods for the integration and analysis of large-scale immunological expression datasets in order to design targeted assays for better classification of infectious diseases, cancer, and autoimmune diseases.



**Paul A. Offit, MD** is the Chief of the Division of Infectious Diseases and the Director of the Vaccine Education Center at the Children's Hospital of Philadelphia. In addition, Dr. Offit is the Maurice R. Hilleman Professor of Vaccinology and a Professor of Pediatrics at the University of Pennsylvania School of Medicine. He is a recipient of many awards including the J. Edmund Bradley Prize for Excellence in Pediatrics from the

University of Maryland Medical School, the Young Investigator Award in Vaccine Development from the Infectious Disease Society of America, and a Research Career Development Award from the National Institutes of Health. Dr. Offit has published more than 140 papers in medical and scientific journals in the areas of rotavirus-specific immune responses and vaccine safety. He is also the co-inventor of the rotavirus vaccine, RotaTeq, recommended for universal use in infants by the CDC; for this achievement Dr. Offit received the Luigi Mastroianni and William Osler Awards from the University of Pennsylvania School of Medicine, the Charles Mérieux Award from the National Foundation for Infectious Diseases; and was honored by Bill and Melinda Gates during the launch of their Foundation's Living Proof Project for global health. In 2009, Dr. Offit received the President's Certificate for Outstanding Service from the American Academy of Pediatrics. In 2011, Dr. Offit received the Humanitarian of the Year Award from the Biologics Industry Organization (BIO), the David E. Rogers Award from the American Association of Medical Colleges, the Odyssey Award from the Center for Medicine in the Public Interest, and was elected to the Institute of Medicine of the National Academy of Sciences. In 2012, Dr. Offit received the Distinguished Medical Achievement Award from the College of Physicians of Philadelphia and the Drexel Medicine Prize in Translational Medicine from the Drexel University College of Medicine. In 2013, Dr. Offit received the Maxwell Finland award for Outstanding Scientific Achievement from the National Foundation for Infectious Diseases and the Distinguished Alumnus award from the University of Maryland School of Medicine. Dr. Offit was a member of the Advisory Committee on Immunization Practices to the Centers for Disease Control and Prevention and is a founding advisory board member of the Autism Science Foundation and the Foundation for Vaccine Research. He is also the author of

five medical narratives: *The Cutter Incident: How America's First Polio Vaccine Led to Today's Growing Vaccine Crisis* (Yale University Press, 2005), *Vaccinated: One Man's Quest to Defeat the World's Deadliest Diseases* (HarperCollins, 2007), for which he won an award from the American Medical Writers Association, *Autism's False Prophets: Bad Science, Risky Medicine, and the Search for a Cure* (Columbia University Press, 2008), *Deadly Choices: How the Anti-Vaccine Movement Threatens Us All* (Basic Books, 2011), and *Do You Believe in Magic?: The Sense and Nonsense of Alternative Medicine* (HarperCollins, 2013).



**David Pace** is a Consultant Infectious Disease Paediatrician at Mater Dei Hospital, Malta and visiting Assistant Lecturer in Paediatrics at the University of Malta. He completed his undergraduate training in Medicine in 1999 at the University of Malta, specialised in Paediatrics, and then in Paediatric Infectious Diseases, in Malta and in the UK. He holds a postgraduate diploma in Paediatric Infectious Diseases which he obtained with distinction from the University of Oxford in 2010. He is currently a member of the Education Committee of the European Society for Paediatric Infectious Diseases (ESPID), served on the Advisory Committee on Immunisation Policy in Malta since 2007 and was also on the editorial board of the Malta Medical Journal from 2009–2013. As part of his ongoing commitment to research he has founded the Malta Children's Vaccine Group, a non-profit organisation promoting the study of infectious diseases and vaccines in children. He has published several scientific papers on infectious diseases and on meningococcal vaccines and is a reviewer for multiple international journals. His principal research interests include meningococcal disease, infections in migrant children and leishmaniasis.



**Robert W Sauerwein** is Professor of Medical Parasitology, Radboud University Nijmegen, Medical Centre (RUNMC), The Netherlands. He is also Head of Centre for Clinical Malaria Studies (CCMS),

Nijmegen. Robert is a member of the Scientific Board of the Biomedical Primate Research Center, a member of the Scientific Advisory Committee of the Swiss Vaccine Institute, a board member of Treub Maatschappij and a member of the Partnership Board of EDCTP. In 2009 he received the N4j – senior award RUNMC and, in 2010 the Eijkman Medal from the Dutch Society of Tropical Medicine.



**Tom Snelling** is a paediatric infectious diseases physician at the Princess Margaret Hospital and Frank Fenner research fellow at the Telethon Institute for Child Health Research in Perth, Australia. His clinical interests are in antimicrobial

stewardship and the management of blood borne viruses in children; his research interests lie in infectious diseases epidemiology, in particular assessing the individual and population impacts of vaccination. He is a member of the Australian Trachoma Surveillance Unit and working parties for Australia's Technical Advisory Group on Immunisation, and he is a permanent member of the Economics Sub-Committee of Australia's Pharmaceutical Benefits Advisory Committee. In his spare time (and much of his non-spare time), he writes hypotheticals.



**Adilia Warris, MD PhD**, is associate professor in paediatric infectious diseases. She is the head of the section of Paediatric Hematology, Oncology, Immunology and Infectious Diseases of the Department

of Paediatrics at Radboud University Nijmegen Medical Centre in Nijmegen, The Netherlands. 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, immune deficiencies, immune-mediated diseases and HIV/AIDS as one of her core priorities. Training and supervising of both clinical as research fellows in the field of paediatric infectious diseases and immunology is one of her responsibilities and is a real challenge for her to support them in becoming excellent colleagues in the near future. The research of her group has a predominantly translational profile, although clinical research and to a lesser extent basic research also forms part of the research profile. The microbial pathogenesis, host immunity and epidemiology of paediatric infectious diseases are the central research themes. Specific areas of interests are the host-fungus interaction with an emphasis on *Aspergillus* species, the unique interaction of *A. nidulans* and the CGD 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 paediatric invasive mycoses by (1) prospectively investigating the clinical epidemiology of invasive fungal

infections in children; (2) education and training by post-graduate courses; (3) performing multicenter study in the field of new diagnostic and therapeutic modalities. She has published over 80 peer-reviewed papers and contributed to several book chapters both nationally and internationally.



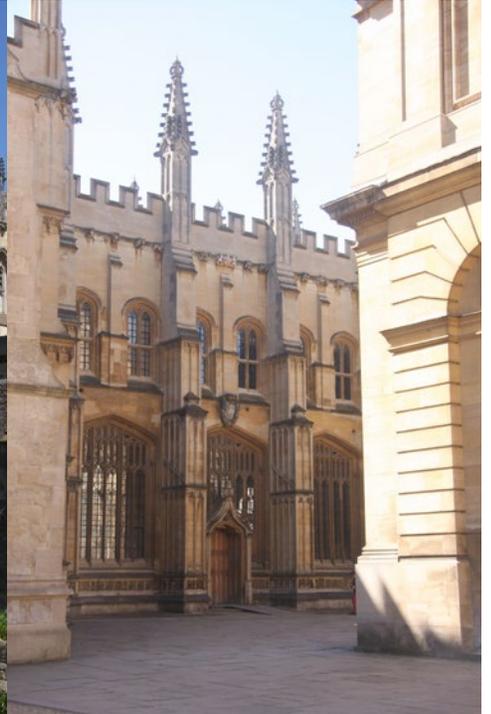
**Rich Whitley** is a Distinguished Professor of Pediatrics, Professor of Microbiology, Medicine and Neurosurgery; Loeb Eminent Scholar Chair in Pediatrics; Co-Director, Division of Pediatric Infectious Diseases; Vice-Chair, Department of Pediatrics; Senior Scientist, Department of Gene Therapy; Scientist, Cancer Research and Training Center; Faculty, Gene Therapy Center; Associate Director for Drug Discovery and Development and Senior Leader, Pediatric Oncology Program, Comprehensive Cancer Center; Director, UAB Center for Emerging Drug Discovery; Co-Founder and Co-Director, Alabama Drug Discovery Alliance. Dr. Whitley is responsible for the National Institute of Allergy and Infectious Diseases Collaborative Antiviral Study Group whose role is to perform clinical trials of antiviral therapies directed against medically important viral diseases of children and adults including viruses considered as threats to human health. Dr. Whitley's other research interest is in the translation of molecular biology to clinical application, particularly in the development of human monoclonal antibodies for therapy of herpesvirus infections and engineering of herpes simplex virus for gene therapy. In these latter studies, he and his colleagues have engineered herpes simplex virus to serve as a vector for foreign gene expression. He received his B.A. in chemistry from Duke University

and his M.D. from the George Washington University. He subsequently completed an internship in pediatrics and a fellowship in infectious diseases/virology at the University of Alabama at Birmingham. He has published over 337 articles. He participates in numerous Data Safety and Monitoring Boards for ongoing clinical studies. In June of 2009, he was tapped to serve as a member of the Novel H1N1 Influenza Working Group of the President's Council of Advisors on Science and Technology (PCAST). He is a past President of the Infectious Diseases Society of America (IDSA) and received the UAB President's Medal in 2007. He has recently been named as the inaugural recipient of the Distinguished Clinical Research Scholar and Educator in Residence at the NIH Clinical Center, and spent the week of February 11, 2013 in residence.



**Professor John Watson MB BS, MSc, FRCP, FFPH** - is a Consultant Clinical Epidemiologist and Head of the Respiratory Diseases Department at Public Health England's Centre for Infectious Disease Surveillance and Control in London. He is an Honorary Professor in the Department of Infectious and Tropical Diseases at the London School of Hygiene and Tropical Medicine and Visiting Professor in the Department of Primary Care and Population Sciences at University College London. His main interests include tuberculosis and acute respiratory infections (particularly influenza, legionnaires and SARS). His work has focussed on the surveillance, prevention and control of these diseases at the local, national and international levels as well as related research.

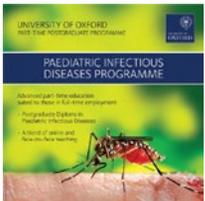
# Oxford



Photos taken by Ann Waterhouse



# Postgraduate Diploma in Paediatric Infectious Diseases



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- **For trainees in paediatrics, specialist trainees in paediatric infectious diseases and clinical research fellows**

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This programme is supported by ESPID, PENTA and the Oxford IIC Course



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- Online topics taught through an interactive virtual learning environment
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- The PENTA-ESPID training course in paediatric HIV medicine, comprised of an online component and a three-day residential course in Rome



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**The British Paediatric Allergy, Immunology and Infectious Diseases Group** is an affiliated speciality group of the Royal College of Paediatrics and Child Health. 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 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.

**For further information and to become a member visit our website [www.bpaiig.org](http://www.bpaiig.org)**



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