Infection and Immunity in Children

The Oxford Course
Dear Delegate,

Welcome to the 7th annual Oxford Course, “Hot Topics in Infection and Immunity in Children 2009”, and a warm welcome to Keble College and to Oxford. We think we have managed to put together a very exciting programme for this year 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 buffet dinner is on Tuesday evening at the University Museum, across the road from Keble. If you are staying over on Wednesday night, you will find an abundant selection of restaurants and cafes in the centre of Oxford to meet your needs. 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.

Delegates staying at Keble College will be served breakfast in the dining hall. Please be prompt for all meal times as service will only take place over the first 25 minutes of each break. 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 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 over-looked, please do not hesitate to let us know via the Conference Office.

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

Andrew Pollard, Ronald de Groot, Ron Dagan, Adam Finn, Nigel Curtis, Andrew Cant & Sue Sheaf
Andrew J Pollard is Professor in Paediatric Infection and Immunity, Director of the Oxford Vaccine Group, and Head of the Paediatric Infection and Immunity Laboratory at the University of Oxford, and Honorary Consultant Paediatrician at the Children’s Hospital (John Radcliffe), Oxford, UK. He obtained his medical degree at St Bartholomews Hospital Medical School, University of London and trained in PID in the UK and Canada. Current research activities include clinical trials of new and improved vaccines for children, development of a serogroup B meningococcal vaccine, studies of cellular and humoral immune responses to glycoconjugate vaccines, research on the genetic control of the human immune response and investigations on meningococcal host-pathogen interactions. His publications include over 150 manuscripts and books on various topics in paediatrics, infectious diseases, and high altitude medicine.

Adam Finn works at the University of Bristol and the Bristol Royal Hospital for Children. He leads the South West Regional Clinical Service for children with HIV and the Bristol paediatric immunology service. He is director of the South West Local Research network for Medicines for Children. He has an interest in the mucosal immunology of pneumococcal infection.

Ron Dagan, Professor of Pediatrics and Infectious Diseases at the Ben-Gurion University of the Negev, Beer-Sheva is Director of the Pediatric Infectious Disease Unit at the Department of Pediatrics, Soroka University, Beer-Sheva, Israel, a position he has held since 1987. A member of several national and international advisory committees and medical and scientific associations, he served as the President of the European Society for Paediatric Infectious Diseases from 2004 to 2006 and is currently the President of the World Society for Pediatric Infectious Diseases. He serves on the editorial board of several peer-reviewed journals. He is a recipient of many grants and awards. He has contributed over 400 original articles, reviews and book chapters, and has presented over 400 papers at national and international scientific meetings. His research focuses on pneumococcal vaccines, epidemiology and introduction of hepatitis A vaccines, the epidemiology of vaccine-preventable diseases, the pathology of otitis media, and prediction of its bacteriological and clinical response to various antibiotics, and the epidemiology and prevention of its enteric and invasive infections in young children.
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 subsequently did his pediatric training in Rotterdam, became chief resident followed by a 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 nominated as head of the Department of Pediatrics of the University Medical Centre Nijmegen. 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.

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.

Andrew J Cant. After training in internal medicine, infectious diseases, paediatrics and neonatology at St George’s and Guy’s Hospitals in London, I held a Medical Research Council fellowship in immunology before completing my training in paediatric immunology and infectious diseases at the Hospital for Sick Children, Great Ormond Street, London and L’Hopital Necker, Paris. Appointed as a consultant in Newcastle 15 years ago, I have set up 1 of 2 national referral centres for the treatment of children with severe immunological disorders and a regional PID/immunology service with a network of clinics across Northern England, Scotland and Ireland supported by a team of 7 specialists. For 5 years I led the UK national PID group and for 6 years I have chaired their training committee. I am UK government advisor on the provision of infectious diseases services and the prevention of infection during transfusion and transplantation. I have been President of ESPID since May 2006.
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.
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker</th>
<th>Time</th>
<th>Session</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.30-10.00</td>
<td>The value of vaccination</td>
<td>David Bloom</td>
<td>8.30-9.00</td>
<td>Diagnosis and management of central line infections</td>
<td></td>
</tr>
<tr>
<td>10.05-10.35</td>
<td>Recent trends in global immunization</td>
<td>Gus Nossal</td>
<td>9.05-9.35</td>
<td>Moraxella infection, “who cares anyway?”</td>
<td></td>
</tr>
<tr>
<td>10.40-11.10</td>
<td>Typhoid fever</td>
<td>Zulfiqar Bhutta</td>
<td>9.40-10.10</td>
<td>The perils of overlooking anaerobes: Fusobacterium and friends</td>
<td></td>
</tr>
<tr>
<td>11.15-11.45</td>
<td>Coffee</td>
<td></td>
<td>10.15-10.45</td>
<td>Coffee</td>
<td></td>
</tr>
<tr>
<td>11.50-12.20</td>
<td>Immunity to Malaria</td>
<td>Kevin Marsh</td>
<td>10.45-11.15</td>
<td>PK/PD of antimicrobials, what’s the point?</td>
<td></td>
</tr>
<tr>
<td>12.25-12.55</td>
<td>Breast feeding and HIV infection</td>
<td>Catherine Wilfert</td>
<td>11.20-11.50</td>
<td>Drug resistance in Gram negative bacteria</td>
<td></td>
</tr>
<tr>
<td><strong>13.00-14.00</strong></td>
<td>Lunch</td>
<td></td>
<td>11.55-12.25</td>
<td>Toxic Shock Syndrome – the evolution of an emerging disease</td>
<td></td>
</tr>
<tr>
<td>14.00-15.00</td>
<td>Do you know your enemy? The pneumococcus</td>
<td>Ron Dagan and Andrew J Pollard</td>
<td>12.30-13.00</td>
<td>Peri-orbital and orbital cellulitis, what’s the difference?</td>
<td></td>
</tr>
<tr>
<td>15.00-15.30</td>
<td>Pneumonia: whom to treat and how to treat</td>
<td>Frank Shann</td>
<td><strong>13.05-14.10</strong></td>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td>15.35-16.05</td>
<td>Darwin (1809-1882) and Microbes</td>
<td>E Richard Moxon</td>
<td>14.10-15.10</td>
<td>ID Case Rounds 2</td>
<td></td>
</tr>
<tr>
<td><strong>16.10-16.40</strong></td>
<td>Tea</td>
<td></td>
<td>15.10-15.40</td>
<td>B-cell developments and B-cell defects</td>
<td></td>
</tr>
<tr>
<td>16.40-17.10</td>
<td>The end of statistical significance</td>
<td>Jonathan Sterne</td>
<td>15.45-16.30</td>
<td>What’s your diagnosis?</td>
<td></td>
</tr>
<tr>
<td>17.15-17.45</td>
<td>Encephalitis diagnosis &amp; management in the real world</td>
<td>Sarah Long</td>
<td><strong>16.30-17.00</strong></td>
<td>Tea</td>
<td></td>
</tr>
<tr>
<td>17.50-18.20</td>
<td>HHV6 infections</td>
<td>Charles Prober</td>
<td>17.00-17.30</td>
<td>Measles – where and what is it in 2009?</td>
<td></td>
</tr>
<tr>
<td>19.30</td>
<td>Dinner at Keble College</td>
<td></td>
<td>17.35-18.05</td>
<td>Mumps is back</td>
<td></td>
</tr>
<tr>
<td><strong>19.15</strong></td>
<td>Reception and buffet</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Session</td>
<td>Presenter(s)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-------------------------------------------------------------------------</td>
<td>-----------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.20-8.25</td>
<td>Opening remarks&lt;br&gt;Andrew J Pollard  Adam Finn&lt;br&gt;Ronald de Groot  Ron Dagan  Nigel Curtis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.25-8.55</td>
<td>Vaccines – dangers and perception of danger&lt;br&gt;Paul Offit</td>
<td>Jonathan Carapetis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.00-9.30</td>
<td>Non-specific effects of vaccines&lt;br&gt;Frank Shann</td>
<td>Christoph Aebi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.35-10.05</td>
<td>A rational approach to antifungal therapy&lt;br&gt;William Steinbach</td>
<td>Itzhak Brook</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.10-10.40</td>
<td>Coffee</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.40-11.10</td>
<td>Should we treat congenital CMV?&lt;br&gt;A review of the evidence&lt;br&gt;Mike Sharland</td>
<td>Edith Blondel-Hill</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.15-11.45</td>
<td>Herpes simplex infection treatment,&lt;br&gt;who to treat and how long is long enough?&lt;br&gt;Richard Whitley</td>
<td>David Paterson</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.50-12.20</td>
<td>Nosocomial infection – does infection control work?&lt;br&gt;Simon Dobson</td>
<td>James Todd</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.25-12.55</td>
<td>Staphylococcus aureus infections:&lt;br&gt;host pathogen interactions&lt;br&gt;Alex van Belkum</td>
<td>Ellen Wald</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.05-14.05</td>
<td>Lunch</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.05-15.05</td>
<td>ID Case Rounds 3&lt;br&gt;Adam Finn</td>
<td>Nigel Curtis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.05-15.35</td>
<td>Rheumatic Fever&lt;br&gt;Jonathan Carapetis</td>
<td>Jacques van Dongen</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.40-16.25</td>
<td>TB or not TB?&lt;br&gt;Diagnosing TB in the 21st century&lt;br&gt;Nigel Curtis</td>
<td>Charles Prober</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.25-16.30</td>
<td>Scoring of sessions&lt;br&gt;Concluding remarks and close</td>
<td>Sam Katz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.30</td>
<td>Tea</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Noni Macdonald</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>University Museum</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Edith Blondel-Hill trained at the University of Alberta, Edmonton, Alberta, and received specialty training in internal medicine, infectious diseases and medical microbiology. She started her career at the Royal Alexandra Hospital in Edmonton as an infectious diseases consultant and medical microbiologist and then at Dynacare Kasper Medical Laboratories. She moved to British Columbia in 2003 worked at BC Children’s Hospital in Vancouver until 2008. She is currently the microbiology consultant for Interior Health and is located at the Kelowna General Hospital in Kelowna, British Columbia. She has a long interest in antimicrobial utilization, chairing various antimicrobial advisory committees in Alberta and British Columbia as well as being involved in guideline and policy development for antibiotic use and prescribing. She is co-author of the Bugs and Drugs – Antimicrobial Reference Book and the medical director of the Do Bugs Need Drugs? program, an educational program to address antimicrobial resistance. Her other interests include mechanisms of resistance and susceptibility testing. She has co-authored the Guide to Antimicrobial Susceptibility Testing and Reporting.

Christoph Aebi is Associate Professor of Pediatrics and Infectious Diseases at the University of Bern, Switzerland, and Head of the Pediatric Infectious Disease Division at the Children’s Hospital in Bern. He received his training in Pediatric Infectious Diseases at the University of Texas Southwestern Medical Center in Dallas. His main research focuses are the pathogenesis of middle ear infections, epidemiology of viral respiratory tract infections, and infections in cancer patients. He has been a Board member of ESPID since 2007.

Zulfiqar A. Bhutta is Husein Laljee Dewraj Professor and Head of the newly created Division of Maternal and Child Health, Aga Khan University Medical Center, Pakistan. He also holds adjunct professorships in International Health & Family and Community Medicine at the depts of International Health at Boston University and Tufts University. He was designated a Distinguished National Professor of the Government of Pakistan in 2007. He was educated at the University of Peshawar and has a doctorate from the Karolinska Institute, Sweden. He has been associated with the Aga Khan University since 1986 and heads a large research team working on issues of maternal, newborn and child survival and nutrition globally and regionally. Dr Bhutta has served as a member of the Global Advisory Committee for Health Research for the World Health Organization, the Board of Child & Health and Nutrition Initiative of Global Forum for Health Research, and the steering committees of the International Zinc and Vitamin A Nutrition Consultative Groups. He is an executive committee member of the International Paediatric Association and on the Board of the Global Partnership for Maternal, Newborn and Child Health. Dr Bhutta is currently the Chair of the Health Sciences Group of the Biotechnology Commission of Pakistan, a member of the WHO Strategic Advisory Committee for Vaccines, the Advisory Committee for Health Research of WHO EMRO, and its apex Regional Consultative Committee. He is also Chairman of the NREC of the Government of Pakistan.

Edith Blondel-Hill

Itzhak Brook is Professor of Pediatrics and Medicine at Georgetown University School of Medicine, Washington DC. He is the past chairman of the Anti-infective Drug Advisory Committee of the Food and Drug Administration (FDA). He earned his medical degree and completed his residency at Hebrew University, Hadassah School of Medicine, in Jerusalem and obtained his master's degree in pediatrics from the University of Tel Aviv in Israel. Subsequently he completed a fellowship in adult and pediatric infectious diseases at the University of California, Los Angeles, School of Medicine. A member of more than 20 professional organizations, Dr. Brook is a fellow of the Infectious Diseases Society of America, the Society for Pediatric Research, and the Pediatric Infectious Diseases Society. His research interests include the pathogenesis and therapy of polymicrobial infections, including upper respiratory tract infections.
David E. Bloom is an economist and demographer and the Clarence James Gamble Professor at the Harvard School of Public Health. In January 2003 he was appointed Chairman of the School’s Department of Global Health and Population. He has worked extensively in the areas of development, health, and labor economics and in demography, and has published more than 250 articles, book chapters, and books. He has taught numerous courses on global health and population, labor and development economics, and statistics and econometrics at both the graduate and undergraduate levels. His current research focuses predominantly on the theoretical and empirical links between health, demography, and economic growth, and on the value of vaccination. Bloom has been honored with a number of distinctions, including an Alfred P. Sloan Research Fellowship, election as Fellow of the American Academy of Arts and Sciences, and appointment as an Ambassador in the Paul G. Rogers Society for Global Health Research.

Jonathan Carapetis holds separate qualifications as a medical practitioner, specialist paediatric physician, specialist infectious diseases physician and specialist public health physician as well as a PhD. Between 1994-98 he conducted doctoral studies at the Menzies School of Health Research in Darwin into group A streptococcal diseases in the Aboriginal population, under the supervision of Bart Currie and John Mathews. This work translated into important public health interventions, including the establishment of Australia’s first rheumatic heart disease control program in the Top End. In 1999, he co-founded (with Prof Kim Mulholland) the Centre for International Child Health at the University of Melbourne Dept of Paediatrics. The Centre has since been recognised as the only Australian WHO Collaborating Centre in Child Health. Professor Carapetis has been a Chief Investigator on grants worth more than $20 million since 2001, including three NIH grants, an NHMRC Centre for Clinical Research Excellence, and numerous NHMRC project grants. He is currently Director of the Menzies School of Health Research in Darwin. His wide range of research interests includes group A streptococcal and pneumococcal diseases, other vaccine preventable diseases, vitamin D deficiency in refugees, and urinary tract infections in children. At Menzies, he is encouraging new directions for research, including the links between education and child health.

Simon Dobson is a Clinical Associate Professor at the University of British Columbia 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. His current research interests are clinical vaccine trials, especially in the pre-teen and adolescent age group, and vaccine adverse events. He works at the Vaccine Evaluation Center, BC’s Children’s Hospital and is a member of the National Advisory Committee of Immunization.

Samuel L. Katz is the W. C. Davison Professor and Chair emeritus of Duke University’s Department of Paediatrics. His career has been devoted to research, development, clinical trials and implementation of vaccines to prevent infectious diseases. With Nobel laureate John Enders and other colleagues he developed the attenuated measles virus vaccine used today throughout the world. In recent years his energies have focused on vaccine policy, in the United States as well as globally. In that regard he has chaired the Advisory Committee on Immunization Practices of the U.S. Centers for Disease Control, the Committee on Infectious Diseases of the American Academy of Paediatrics, the Board of Directors of the International Vaccine Institute in Korea, and the India-U.S. Vaccine Action Program among others. Currently he chairs the World Health Organization’s Polio Research Committee and participates in guidance of the Measles (Initiative) Partnership of the WHO, CDC, UNICEF, Red Cross & Crescent Societies and the United Nations Fund which in six years has reduced annual measles deaths from over 800,000 to less than 200,000, averting more than 3 million deaths.
Sarah Long is Professor of Pediatrics at Drexel University College of Medicine and Chief of the Section of Infectious Diseases at St. Christopher's Hospital for Children in Philadelphia, Pennsylvania. Dr. Long is Chief Editor of Principles and Practice of Pediatric Infectious Diseases and an associate editor of The Journal of Pediatrics. She has contributed extensively to the literature on vaccine preventable diseases and to leadership of the subspecialty of pediatric infectious diseases in the United States.

Noni MacDonald is a Professor of Paediatrics 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 the former Dean of Medicine at Dalhousie University. She is head of the Health Policy and Translation Group of the Canadian Centre for Vaccinology. Her major current research interests include vaccines for serious infectious diseases in children and youth and vaccine safety. She has published over 200 papers, served on a number of editorial boards and is Editor in Chief of Paediatrics and Child Health, one of the most read Canadian speciality journals. She was the Acting Editor in Chief in 2006 and is now Section Editor for Public Health of CMAJ one of the top 10 general medical journals in the world based on impact factor. She is an elected fellow of Canadian Academy of Health Sciences and is active in many professional organizations as well as serving on many federal government committees. She is a consultant to the Department of Immunization, Vaccine and Biologicals of World Health Organization. Dr. MacDonald has long been recognized in Canada, as an advocate for children and youth health and as a leader in paediatric infectious disease.

Kevin Marsh. After qualifying in medicine in Liverpool in 1978 Kevin commenced training in internal medicine, obtained his MRCP in 1981 and the DTM&H in 1982. He was awarded an MRC training fellowship to be held in the Gambia where he pursued a combination of clinical, laboratory based and field based research into malaria and particularly the development of immunity. In 1985 he moved to work in the Molecular Parasitology Group in Oxford. During this period he developed plans for a new collaborative programme between Oxford and the Kenya Medical Research Institute (KEMRI) funded by the Wellcome Trust. This began in 1989 and in 1990 he moved to live in Kenya. The programme began with a small team of around twenty people and over the last 19 years it has grown to be one of the most productive research programmes in international health, involving nearly 600 staff in Kenya and many international collaborators. Personal research interests continue to be around understanding how children develop immunity to malaria.

Richard Moxon is Emeritus Professor of Paediatrics and a Professorial fellow of Jesus College at the University of Oxford. His paediatric and research training was in the UK and the USA. He was Assistant and then Associate Professor of Paediatrics at Johns Hopkins University in Baltimore, becoming the Eudowood Director of Pediatric Infectious Diseases in 1981 before he was elected as Action Research Professor and Chairman of Paediatrics at Oxford University and Director of the Molecular Infectious Diseases Group in the Weatherall Institute of Molecular Medicine. He is a Fellow of the UK Royal College of Paediatrics and Child Health and of the UK Academy of Medical Sciences and was elected a Fellow of the Royal Society in 2007. His major research interests have been on the pathogenesis and prevention of sepsis and meningitis caused by the bacteria *Haemophilus influenzae* and *Neisseria meningitidis*. 
**Sir Gustav Nossal** was born in Austria in 1931 and came to Australia in 1939. In 1965 he was appointed Director of The Walter and Eliza Hall Institute of Medical Research, a position he held from 1965-1996. Sur Gustav is currently a consultant for the World Health Organization and the Bill and Melinda Gates Foundation. He was formerly Chairman of The Global Foundation Advisory Committee. He was Deputy Chairman of the Council for Aboriginal Reconciliation from 1998 to 2000. He was knighted in 1977, made a Companion of the Order of Australia in 1989 and appointed Australian of the Year 2000.

**Paul A. Offit** 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 130 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 Gold Medal from the Children’s Hospital of Philadelphia, the Jonas Salk Medal from the Association for Infection Control and Epidemiology, the Luigi Mastroianni Clinical Innovator Award from the University of Pennsylvania School of Medicine, and the Charles Mérieux Award for Achievement in Vaccinology and Immunology from the National Foundation for Infectious Diseases. Dr Offit was also a member of the Advisory Committee on Immunization Practices to the Centers for Disease Control and Prevention and is the author of five books.

**Frank Shann** is a Staff Specialist in Intensive Care at the Royal Children’s Hospital in Melbourne, Australia, and Professor of Critical Care Medicine at the University of Melbourne. He is a member of the International Advisory Board of The Lancet. Frank trained as an adult physician at the Royal Melbourne Hospital, and then worked at the Royal Children’s Hospital, where he was Director of Intensive Care for 20 years. He worked for seven years in Papua New Guinea (PNG), in Kenya, and with ICRC in East Timor. He helped Greg Lawrence develop a vaccine that eradicated pigbel from PNG. His research into pneumonia in children in PNG formed the basis for the WHO Acute Respiratory Infections programme. Frank has published 200 articles, six books and 17 book chapters.

**William J Steinbach** is an Associate Professor of Pediatrics (PID), Molecular Genetics and Microbiology at Duke University Medical Center. He is the Director of the Duke University *Aspergillus* Pathogenesis Laboratory and his research interests include both clinical investigation and basic science advances. His NIH-funded laboratory efforts at Duke focus on stress response pathways in *A. fumigatus* as a means to deciphering virulence factors and improving antifungal therapy outcomes. In addition to his molecular genetic and animal model research, he designs and performs phase I-IV clinical trials in antifungal therapy for adults and children. Dr. Steinbach completed a sabbatical at the Unité dés *Aspergillus* at the Institute Pasteur in Paris in 2004, and also completed another sabbatical at the University of Perugia in Italy in 2007 studying host cell responses to *Aspergillus fumigatus*. He was the co-founder and continues as the co-chairman of the international Advances Against Aspergillosis conference. He is also the co-editor of the American Society for Microbiology new textbook “*Aspergillus fumigatus* and Aspergillosis”. Dr. Steinbach is also the founder and director of the International Pediatric Fungal Network, an international consortium of over 60 sites dedicated to investigating pediatric invasive fungal infections. Most importantly, he also coaches both his son and daughter’s soccer teams.
Ellen R. Wald earned her medical degree from the State University of New York Downstate Medical Center in Brooklyn, New York. She completed her residency in pediatrics at Kings County Hospital in Brooklyn and her fellowship in infectious disease at the University of Maryland Hospital in Baltimore. An internationally recognized expert on the diagnosis and treatment of pediatric infectious diseases, Dr. Wald was named Distinguished Physician of the Year by the Pediatric Infectious Diseases Society in 2006. She has served as Chair of the Section of Infectious Diseases of the American Academy of Pediatrics and Chair of the Subboard of Infectious Diseases of the American Board of Pediatrics. Dr. Wald is currently Chair of the Department of Pediatrics at the University of Wisconsin School of Medicine and Public Health and Pediatrician-in-Chief of the American Family Children’s Hospital in Madison, Wisconsin.

James K. Todd is Professor of Pediatrics and Microbiology at the University of Colorado School of Medicine, Professor of Epidemiology at the Colorado School of Public Health. He is certified by the American Board of Pediatrics in pediatrics and infectious diseases, and has served on numerous committees of the American Academy of Pediatrics, and the Pediatric Infectious Diseases Society. Over the course of his career, he has maintained a strong interest in the pathophysiology, diagnosis, and treatment of bacterial diseases including bacteremia, meningitis, and shock, -- with an emphasis on streptococcal and staphylococcal diseases. Dr. Todd was awarded a special citation by the Infectious Diseases Society of America for the original description of Toxic Shock Syndrome and recently received the Distinguished Physician Award of the Pediatric Infectious Diseases Society. In 2003, he was named the Jules Amer Chair in Community Pediatrics at The Children’s Hospital and created the State of the Health of Colorado’s Children program to analyze local data to measure and improve the health outcomes of children in Colorado. He has been a tireless advocate for high quality, medical home healthcare for all Colorado’s children. His recently published book, On Track to Quality (Lighthouse Point Press, 2006), addresses the definition of quality in healthcare, business, and personal life.

Jacques J.M. van Dongen studied Medicine at the Erasmus University Rotterdam, Netherlands 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. Together with Herbert Hooijkaas, 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 is/was coordinator of six European networks in the field of diagnostics in hemato-oncology and immunology.

Jonathan Sterne is Professor of Medical Statistics and Epidemiology, and Head of the Division of Health Services Research, in the Department of Social Medicine, University of Bristol. His research interests include the clinical epidemiology of HIV and AIDS in the era of antiretroviral therapy, methodology for meta-analyses and systematic reviews, statistical methods for epidemiology and health services research, and the epidemiology of asthma and allergic diseases.

Ellen R. Wald

James K. Todd

Jacques J.M. van Dongen

Jonathan Sterne

Ellen R. Wald earned her medical degree from the State University of New York Downstate Medical Center in Brooklyn, New York. She completed her residency in pediatrics at Kings County Hospital in Brooklyn and her fellowship in infectious disease at the University of Maryland Hospital in Baltimore. An internationally recognized expert on the diagnosis and treatment of pediatric infectious diseases, Dr. Wald was named Distinguished Physician of the Year by the Pediatric Infectious Diseases Society in 2006. She has served as Chair of the Section of Infectious Diseases of the American Academy of Pediatrics and Chair of the Subboard of Infectious Diseases of the American Board of Pediatrics. Dr. Wald is currently Chair of the Department of Pediatrics at the University of Wisconsin School of Medicine and Public Health and Pediatrician-in-Chief of the American Family Children’s Hospital in Madison, Wisconsin.

James K. Todd is Professor of Pediatrics and Microbiology at the University of Colorado School of Medicine, Professor of Epidemiology at the Colorado School of Public Health. He is certified by the American Board of Pediatrics in pediatrics and infectious diseases, and has served on numerous committees of the American Academy of Pediatrics, and the Pediatric Infectious Diseases Society. Over the course of his career, he has maintained a strong interest in the pathophysiology, diagnosis, and treatment of bacterial diseases including bacteremia, meningitis, and shock, -- with an emphasis on streptococcal and staphylococcal diseases. Dr. Todd was awarded a special citation by the Infectious Diseases Society of America for the original description of Toxic Shock Syndrome and recently received the Distinguished Physician Award of the Pediatric Infectious Diseases Society. In 2003, he was named the Jules Amer Chair in Community Pediatrics at The Children’s Hospital and created the State of the Health of Colorado’s Children program to analyze local data to measure and improve the health outcomes of children in Colorado. He has been a tireless advocate for high quality, medical home healthcare for all Colorado’s children. His recently published book, On Track to Quality (Lighthouse Point Press, 2006), addresses the definition of quality in healthcare, business, and personal life.

Jacques J.M. van Dongen studied Medicine at the Erasmus University Rotterdam, Netherlands 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. Together with Herbert Hooijkaas, 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 is/was coordinator of six European networks in the field of diagnostics in hemato-oncology and immunology.

Jonathan Sterne is Professor of Medical Statistics and Epidemiology, and Head of the Division of Health Services Research, in the Department of Social Medicine, University of Bristol. His research interests include the clinical epidemiology of HIV and AIDS in the era of antiretroviral therapy, methodology for meta-analyses and systematic reviews, statistical methods for epidemiology and health services research, and the epidemiology of asthma and allergic diseases.

James K. Todd is Professor of Pediatrics and Microbiology at the University of Colorado School of Medicine, Professor of Epidemiology at the Colorado School of Public Health. He is certified by the American Board of Pediatrics in pediatrics and infectious diseases, and has served on numerous committees of the American Academy of Pediatrics, and the Pediatric Infectious Diseases Society. Over the course of his career, he has maintained a strong interest in the pathophysiology, diagnosis, and treatment of bacterial diseases including bacteremia, meningitis, and shock, -- with an emphasis on streptococcal and staphylococcal diseases. Dr. Todd was awarded a special citation by the Infectious Diseases Society of America for the original description of Toxic Shock Syndrome and recently received the Distinguished Physician Award of the Pediatric Infectious Diseases Society. In 2003, he was named the Jules Amer Chair in Community Pediatrics at The Children’s Hospital and created the State of the Health of Colorado’s Children program to analyze local data to measure and improve the health outcomes of children in Colorado. He has been a tireless advocate for high quality, medical home healthcare for all Colorado’s children. His recently published book, On Track to Quality (Lighthouse Point Press, 2006), addresses the definition of quality in healthcare, business, and personal life.

Jacques J.M. van Dongen studied Medicine at the Erasmus University Rotterdam, Netherlands 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. Together with Herbert Hooijkaas, 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 is/was coordinator of six European networks in the field of diagnostics in hemato-oncology and immunology.

Ellen R. Wald earned her medical degree from the State University of New York Downstate Medical Center in Brooklyn, New York. She completed her residency in pediatrics at Kings County Hospital in Brooklyn and her fellowship in infectious disease at the University of Maryland Hospital in Baltimore. An internationally recognized expert on the diagnosis and treatment of pediatric infectious diseases, Dr. Wald was named Distinguished Physician of the Year by the Pediatric Infectious Diseases Society in 2006. She has served as Chair of the Section of Infectious Diseases of the American Academy of Pediatrics and Chair of the Subboard of Infectious Diseases of the American Board of Pediatrics. Dr. Wald is currently Chair of the Department of Pediatrics at the University of Wisconsin School of Medicine and Public Health and Pediatrician-in-Chief of the American Family Children’s Hospital in Madison, Wisconsin.
**Alex van Belkum** is Professor of Molecular Microbiology at Erasmus Medical Centre in Rotterdam, The Netherlands. He heads a research team with interest in microbial typing and evolution, innovation of clinical diagnostics, nasal carriage of Staphylococcus aureus, Campylobacter as the causative agent in Guillain Barre Syndrome and Madurella mycetomatis induced mycetoma. Van Belkum serves on various journal boards and published over 330 PubMed cited papers.

**Richard Whitley** is a UAB Distinguished Professor, Professor of Pediatrics, Microbiology, Medicine and Neurosurgery, as well as the Loeb Eminent Scholar Chair in Pediatrics. He directs the Division of Pediatric Infectious Diseases and is also the Vice-Chair of the Department of Pediatrics. He co-directs the recently merged UAB Center for Emerging Infections and Emergency Preparedness and is heavily involved in activities that create awareness of and develop strategies for dealing with pandemic influenza. 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. 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 and engineering of herpes simplex virus for gene therapy. He is a past President of the International Society of Antiviral Research. He is the current President-Elect of the Infectious Diseases Society of America, and is also a member of the American Society of Microbiology, American Society of Clinical Investigation and Association of American Physicians. At UAB Commencement on May 3, 2007, he received the UAB President’s Medal for his accomplishments and many years of dedicated service to the University.

**Cathy Wilfert** is Senior Technical Advisor to CEO EGPAF (Elizabeth Glaser Pediatric AIDS Foundation). Originally as Scientific Director, she spearheaded the Foundation’s PMTCT programs, has been instrumental in encouraging other scientists throughout the world to focus their investigations on pediatric HIV/AIDS. A faculty member at Duke University Medical Center for 38 years, her national leadership roles have included chairmanship of the Advisory Committee on Immunization Practices of the Centers for Disease Control, membership in the Institute of Medicine, the presidency of the Infectious Diseases Society of America, Editorial Boards of eight professional journals, plus numerous awards and special recognitions, including the Baylor International Pediatric AIDS Initiative Leadership Award.

**Charles Prober, MD** is the Senior Associate Dean for Medical Education at Stanford School of Medicine. He is a Professor of Pediatrics, Microbiology and Immunology and Co-Director of the Stanford Center for Clinical and Translational Education and Research. He is an expert in pediatric infectious diseases with an academic career focused on the epidemiology, pathophysiology, prevention, and treatment of infections in children. Much of his research has focused on viral infections, especially those caused by herpes simplex virus (HSV). He has conducted a number of seminal studies concerned with the epidemiology of HSV-2 infections in pregnant women, their partners, and neonates as well as investigations of the immunologic response to HSV infections. Antiviral therapy is another area of specific expertise. Dr. Prober has published over 120 peer-reviewed articles and is the editor of *Principles and Practice of Pediatric Infectious Diseases*, one of the major textbooks in the field of pediatric infectious diseases.
UNIVERSITY OF OXFORD
PART-TIME POSTGRADUATE PROGRAMME

PAEDIATRIC INFECTIOUS DISEASES PROGRAMME

Advanced part-time education suited to those in full-time employment

• Postgraduate Diploma in Paediatric Infectious Diseases

• A blend of online and face-to-face teaching
Postgraduate Diploma in Paediatric Infectious Diseases
University of Oxford

The Postgraduate Diploma in Paediatric Infectious Diseases is a part-time programme taken over two years. It comprises a blend of tutored online modules and residential short courses. This is an advanced programme and is suited to those in full-time employment who wish to study in parallel.

The Programme draws on world-class research and teaching in paediatric infectious diseases and offers a unique opportunity to gain an understanding of the principles that underpin paediatric infection, the ways in which those principles have developed, and to translate this understanding into good clinical and research practice. The Postgraduate Diploma also places the practice of paediatric infectious diseases in the broader context of applied sciences, such as pathogenesis, population biology and epidemiology.

There are three main teaching elements to the Programme:

- An online course in Paediatric Infectious Diseases, which runs for two terms each year.
- Two (one each year) three-day residential courses in Oxford: Infection and Immunity in Children.
- A PENTA-ESPID training course in paediatric HIV medicine, comprising an online component and a three-day residential component in Rome.

Applications are being accepted for October 2009. The deadline is 17th July 2009 for online applications and 4th September 2009 for paper applications, but places are limited so please apply as early as possible.

For further information please visit

www.conted.ox.ac.uk/cpd/pid

or contact: cpdhealth@conted.ox.ac.uk

Student comments:
“It concentrates on paediatric and non-tropical infectious diseases, hence is amazingly useful even for normal general paediatricians.”

“Easily accessible. Good technical and academic support as required.”

“Very well structured course with excellent teachers. A lot of interesting resources.”
Some took to water like ducks

Some took a slower, more steady pace in view of the delicate cargo

whilst others took a more scenic route along with extra equipment and a change of punter or two!

Fun on the river with the iic 2008 speakers
All delegates will receive a free copy of the proceedings of IIC 2009, posted direct to them from the publisher, which is due to be published in the summer of 2010.

These books are based on the course and are aimed at encouraging excellence in clinical practice and raising the profile of paediatric infectious diseases, with a particular eye on the needs of trainees in the specialty.

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. If you wish to purchase a copy of the proceedings of previous IIC courses, the easiest way is direct from Springer Online at www.springer.com or contact service-ny@springer.com
Delegates
on-line registration for iic 2010 opens on 1 November 2009

Trainees
Visit the website for information on how to apply for a trainee bursary - application for bursary closes 1st February 2010

Hot Topics in Infection and Immunity in Children
28-30 June 2010
Keble College
Oxford

www.bpaiig.org/iic.html