



UCL INSTITUTE OF CHILD HEALTH

Great Ormond Street
Hospital for Children



NHS Trust

Research
Review 2008
The child first and always



Contents

Overview

- 04 Director's report
- 08 Chief executive's report
- 10 Research and development report

Research

- 14 Dr Colin Wallis
- 16 Dr Lyn Chitty
- 18 Dr Kevin Mills
- 20 Dr Andrew Taylor
- 22 Dr Neil Sebire
- 24 Professor David Skuse
- 26 Dr Mike Hubank
- 28 Professor Ian Wong
- 30 Professor Nikhil Thapar
- 32 Dr Therese Hesketh

People

- 36 Awards, honours and prizes 2008
- 40 Grants and donations 2008
- 43 Senior academic staff 2008
- 50 Administration 2008

Cover: There are lots of children like eleven-month-old Edward at Great Ormond Street Hospital (GOSH). He isn't here because he is ill. He and his grandmother are visiting his brother Charlie, who has multiple allergies and congenital hyperinsulinism.

Left: The patients at GOSH, like John, benefit from the close relationship of researchers working alongside doctors to deliver ground-breaking healthcare from bench to bedside.

Mae Leong, specialist registrar in paediatric pathology, examines a biopsy specimen in Dr Sebire's lab at the UCL Institute of Child Health.

Breakthroughs in medical research only happen as a result of years of meticulously conducted studies, by individuals passionate about their work.





Director’s report
Research activity at the UCL Institute of Child Health (ICH), in partnership with Great Ormond Street Hospital (GOSH), has continued to increase. This, and our very positive results in the 2008 Research Assessment Exercise (RAE), allows us to continue to play a leading role in driving paediatric research forward, which not only benefits children but also the adults they become.

The results of the 2008 Research Assessment Exercise were released in late December. The Institute participated in a large submission to the clinical medicine sub-panel (Unit of Assessment 4) along with the UCL Institutes of Ophthalmology and Women’s Health, the Ear Institute and part of the Division of Medicine. Nearly 300 staff were submitted, and the UCL Institute of Child Health made up 40 per cent of the whole (120 staff members).

The 2008 RAE rating takes the form of a staff quality profile in which 4* and 3* denotes international research quality, while 2* and 1* refers to national quality. Pleasingly, 40 per cent of research in the Institute’s submission received 4*, and a further 30 per cent was rated 3*. Hence, 70 per cent of our research is considered of international quality. The RAE panel also awarded the maximum (100 per cent) score for both ‘environment’ and ‘esteem’ aspects of the submission. This superb performance topped the 4* rankings for clinical medicine, and outperformed both Oxford and Cambridge. If the percentage of 4* and 3* staff is multiplied by the total number of staff submitted, then University College London (UCL) has 208 research staff of international quality, with our nearest competitor, Imperial College London, having 131.

Despite the gratifying RAE result the Institute cannot afford to rest on its laurels, and in 2008 we began what will become an annual cycle of strategic planning. The first aim is to identify and capitalise upon the strengths of the Institute and GOSH, as well as devising ways to improve areas where we are not so strong. Towards the former, the Institute’s renowned facility for microarray analysis of gene expression, headed by Dr Mike Hubank (see page 27), joined with colleagues at UCL to create UCL Genomics, an unparalleled resource for genetic analysis throughout UCL and beyond. In a similar vein, we have begun to seek funding for expansion of the Institute’s highly successful gene therapy programme. We need to improve our clinical-grade laboratory facilities in order to allow an increased range of diseases to be treated by this powerful technology.

The care of children and young people dying from cancers and non-malignant diseases has not previously been a focus for academic activity at the Institute, although GOSH has long been strong in this area. During 2008, a team led by Dr Renee McCulloch and Dr Finella Craig succeeded in a national competition to establish an academic unit of children’s palliative care. Funded by the True Colours Trust, this award will allow us to recruit a world-class professor who will develop a national network to advance knowledge, education and clinical practice in this important and growing area of paediatrics.

Seven-year-old Ellie is wearing her favourite pyjamas for her stay on Rabbit Ward. She is being treated for gastro-oesophageal reflux.



Director’s report continued

The Institute’s senior staff had many individual successes during 2008. For the third year in succession, we attracted prestigious Higher Education Funding Council for England clinical senior lectureships from the Department of Health. Dr Paul Brogan gained an award for his research into the molecular basis of vascular inflammatory disease and Dr Mark Peters was appointed for work in developing new approaches to children’s intensive care.

A number of Institute staff also gained promotion at University College London. Dr Atul Singhal became professor of childhood nutrition for his ground-breaking research into the factors that affect early childhood nutrition and their implications for adult health and disease. Atul has identified particularly rapid growth in newborn babies as a powerful risk factor for later cardiovascular disease, a finding with far-reaching public health implications. Dr John Achermann became reader in paediatric endocrinology for work on the genetic basis of endocrine disorders, particularly affecting the testes and adrenal gland. Dr Elina Hypponen became reader in paediatric epidemiology for life-course and genetic epidemiological investigations of the relationship between diabetes, growth and vitamin D. Dr Rod Scott became reader in paediatric neuroscience for research in childhood epilepsy, with a landmark study on the incidence and management of status epilepticus. Dr Jane Sowden became reader in developmental biology for ground-breaking research to identify stem cells capable of repairing the damaged retina.

In closing, let me look forward to the ever-changing environment in which the Institute and Great Ormond Street Hospital (GOSH) must operate. The 2008 RAE was the last of its kind, and will be succeeded by a new method of research assessment – the Research Excellence Framework. Our research outputs will be judged increasingly on ‘metrics’, such as how many times a publication is cited by others in the field. The coming year will also mark the development of UCL Partners, a new association in which UCL is collaborating with its associated NHS trusts to focus effort on translational research for patient benefit. Already, the Institute has led the way in establishing Child Health as a key theme within UCL’s Academic Health Sciences Partnership (AHSP). During 2009, we will participate in a UCL bid to the Department of Health for national AHSP status. Through the Institute’s excellent 2008 RAE performance, and the ever more widespread involvement of the ICH and GOSH in research collaboration, we hope to maintain and extend our position as the UK’s leading centre for excellence in child health.

Andrew Copp
Director
The UCL Institute of Child Health

Jayandra is 11 and has acute lymphoblastic leukaemia (ALL). Ongoing research is constantly improving the prospects for children with this condition.



Chief executive’s report

This year’s review, as always, demonstrates the value of the research carried out across Great Ormond Street Hospital (GOSH) and the UCL Institute of Child Health (ICH). This important work has benefits not only for patients at GOSH but also for many other children nationally and internationally.

As hoped, we have started to adapt to the new NHS research funding streams to make sure high quality research continues in our two organisations. This process has been greatly facilitated by the support of the special trustees of Great Ormond Street Hospital Children’s Charity. The move from infrastructure support in the form of Culyer money to the new NHS research funding has been more difficult for the hospital services, but that is another story.

Everyone is rightly delighted by the fantastic results achieved in the Research Assessment Exercise. This is one measure of what is being achieved by researchers working from bench to bedside. In order to ensure that children can benefit from research findings as quickly as possible, we recognised the need to have dedicated space in the hospital for a clinical research facility, rather than making use of clinical space whenever it was available. A very generous donation from Mrs Phyllis Somers and the Friends of the Children of Great Ormond Street has made this a reality and the Somers Clinical Research Facility has recently opened.

Another way we can maximise our ability to undertake high quality research is to collaborate with researchers and clinicians doing similar work within UCL and beyond, in areas of adult research, for example. Researchers can gain from developments

in adult research and vice versa, allowing us at GOSH to offer the most up-to-date treatment and care for children. Research must also help us find better ways of caring, not just diagnosing and treating. This is what has inspired us to play a part in creating a new partnership called UCL Partners, an Academic Health Science Centre (AHSC).

At GOSH/ICH, we concentrate on research into children’s diseases and problems (from the prenatal period and throughout childhood) but some of the children we look after will have problems throughout their adult life. Health in childhood is an important determinant of adult health, so we should also be contributing to research into the impact of prenatal and childhood events on adults. To do this we must work across UCL and its affiliated hospitals. There are good examples of where this is already happening but the formation of UCL Partners will make it easier.

AHSCs have to be accredited and, as I write, UCL Partners is going through this process. I would like to thank Professor David Goldblatt, director of research and development, and Ms Jo Southern, head of the research and development office, for all the work they have done on this. Next year I hope to be able to describe some real benefits for children from the formation of UCL Partners.

Jane Collins

Jane Collins
Chief executive
Great Ormond Street Hospital

Ella is three and is doing some colouring-in whilst waiting for an X-ray for her kidney condition.



Research and development report

This has been a year of building capacity, which is fundamental to us maintaining our position as global leaders in children’s health research.

During 2008 we saw the opening of the brand new Somers Clinical Research Facility at Great Ormond Street Hospital, built with the support of a generous donation from Mrs Phyllis Somers. The facility, occupying space in the Frontage Building where previously outpatients were seen, provides bespoke research space with eight flexible-use private rooms, a fully equipped laboratory, a large meeting/ seminar room, an attractive waiting area with activities for children including an interactive sound wall and accommodation for a full complement of research staff.

The Somers Clinical Research Facility has the capacity to support many different types of research studies, from questionnaire-based studies through to ‘first in man’ evaluation of new therapeutics. The dedicated team of research staff offer support to researchers in the logistics involved in setting up and running projects, as well as delivering excellent clinical care to patients enrolled in studies. It is our hope that this facility will continue to develop its role within the hospital, allowing us to undertake studies that may not otherwise have been possible, and to enhance our research capacity in collaborating with other NHS organisations, universities and industry.

The Biomedical Research Centre (BRC), funded by the National Institute of Health Research, is the only BRC focused exclusively on children’s research in the UK. During this past year we have consolidated important links with other BRCs within University College London (UCL), those based at UCL Hospital NHS Trust and Moorfields Eye Hospital/Institute of Ophthalmology. The three BRCs have combined to provide joint financial support to a number of collaborative projects from the three organisations following an open competition for funds. These projects, as well as other work in the BRC, underpin the translational research encouraged

by the Department of Health through the National Institute for Health Research (NIHR).

In a further move to consolidate child health research across UCL-associated trusts, relationships between the trusts and UCL are to be formalised through the formation of an Academic Health Sciences Partnership, endorsed by the Department of Health. UCL Partners, which includes UCL Institute of Child Health, the Institute of Ophthalmology and the three associated hospitals (GOSH, University College London Hospitals and Moorfields) is in the process of adopting the key themes that will form the initial research, clinical and education/training platforms for the partnership. Child health is likely to form an important component of the new partnership and we look forward to closer working with our partners that will add value to the excellent research already conducted at GOSH/ICH. It is envisaged that the formation of UCL Partners will enhance collaborations between partners and maximise outputs.

Some of the many GOSH/ICH research successes are highlighted in this 2008 edition of the Research Review. The impact of our work on the lives of children and the care of future generations is implicit, but we would especially like to thank the children who have agreed to tell their stories in this report.

Professor David Goldblatt
Director of clinical research and development

Ms Jo Southern
Head of research and development office

Khalid is five years old and is being treated for combined immune deficiency, care that he can’t get at home in Saudi Arabia.

For sick children and their families, research can make the impossible possible and provide hope of a healthy life.



Odysseus is eight months old and was born with intestinal failure. He has a twin sister at home who is waiting for him to get better.



Dr Colin Wallis

I first encountered children with cystic fibrosis as a paediatric registrar. I was always impressed with their courage to live life to the full, in spite of severe disease. At that time, nearly 30 years ago, cystic fibrosis was considered a lethal disease in childhood.

There is still no cure but current therapies have changed the outcomes significantly and now many children with cystic fibrosis live into adulthood – although not without considerable effort and dedication to arduous treatment programmes. Recent evidence indicates that to improve the outcome for cystic fibrosis further, we have to intervene early.

Working with the Cystic Fibrosis Team at Great Ormond Street Hospital and meeting the physiologists at the ICH’s Portex Unit (Respiratory Medicine) prompted our research to find the best techniques to detect early changes in the health of these children. I hope the breakthroughs we make now will benefit children with cystic fibrosis for generations to come.

Tackling cystic fibrosis in the crucial early years

Dr Colin Wallis is pioneering new ways to ensure children with cystic fibrosis stay healthy throughout childhood, by beginning treatment early in the natural history of the disorder before symptoms take hold. He works jointly with the Cystic Fibrosis Unit at Great Ormond Street Hospital (GOSH) and the Portex Anaesthesia Unit at the UCL Institute of Child Health (ICH).

The UK Newborn Screening Programme Centre, a collaboration between GOSH, ICH and the University of London’s Institute of Education, has led a national screening programme for cystic fibrosis. As a result, all children inheriting this genetic disorder can now be monitored from shortly after birth. However, despite such advances in diagnosis, there remains no cure for cystic fibrosis, which includes progressive decline in lung function as one of a number of life-limiting symptoms.

Halting the inevitable deterioration in lung function of patients with cystic fibrosis is essential if these children are to grow up to lead productive adult lives. Dr Wallis and his colleagues have established the London Cystic Fibrosis Collaboration (LCFC), a unique venture which pools expertise and patients from several leading treatment centres in Greater London.

“Historically, one of the biggest challenges we’ve faced when treating cystic fibrosis has been our ability to gather reliable, long-term information on the wellbeing of the children we see,” says Dr Wallis. “The LCFC has enabled us to monitor large numbers of children continuously and in detail over the last nine years. It has provided us with a unique patient resource in terms of the research we can carry out in the future, and we’ve built up strong relationships with individual children and their families. There’s a real sense of mutual trust and engagement in the work we’re doing.”

By placing the patient at the heart of their research efforts, Dr Wallis and his team have devised a series of innovative tools to measure the health of a child’s lungs. One such innovation gives children an incentive to blow into a spirometer (a piece of equipment that measures lung function) by linking its output to a video game of a ball rolling down a bowling alley. “Until now, it’s been hard to get children under six years old to co-operate with a lung function test,” remarks Dr Wallis. “Hook the test up to a tenpin bowling game, however, and it’s hard to get them to stop!”

By combining this test with other surveillance methods that are simple to perform, acceptable to the child and family, and reliable in the measurements they provide, Dr Wallis hopes to precipitate a shift in the treatment of screened children being diagnosed with cystic fibrosis. Great Ormond Street Hospital Children’s Charity is funding a programme of research that will quantify the benefit of interventions to tackle cystic fibrosis early, at a point before children begin to show signs of deterioration.

Dr Wallis stresses the importance of coupling this early treatment with accurate surveillance techniques: “We need to be able to pick up the differences our treatments are making before the disease takes hold. Waiting for these children to become unwell is waiting too long.”



Joseph’s story

by his parents Stephen and Kerry

“In December 2007 we were blessed with our first child Joseph, and to us he was and always will be the most perfect little boy. After all the neonatal tests in hospital came back clear, we happily took our little boy home. So it was a devastating shock to discover five weeks later that Joseph had cystic fibrosis. Not only was it difficult to comprehend that he had a life-threatening disease but also the fact that it was us, his parents, who had given him the illness.

“We felt like we had woken up in another life and were not sure how to live in it.

“The staff at Great Ormond Street Hospital were very supportive. They helped us to integrate his medicinal requirements into our routine in stages, so we were not too overwhelmed. They were also very positive about Joseph’s future. They told us that having him diagnosed so early through newborn screening meant he would be on preventative treatment and had a good chance of living a healthy and active life, and that we’d need to think about Joseph’s retirement.

“A year later, Joseph is a healthy, gorgeous, happy little boy who is an inspiration to us and a delight to all who are lucky enough to meet him.”



Dr Lyn Chitty
I trained initially as a scientist before doing a PhD in the Chest Unit at King's College Hospital in London. I studied medicine at King's while completing my PhD and it was there I was inspired to specialise in obstetrics. I was first exposed to clinical genetics during my elective year preparing for my Membership of the Royal College of Gynaecologists (MRCOG) exam. The team at Great Ormond Street Hospital persuaded me that because geneticists were rarely trained in obstetrics, and obstetricians had little experience in genetics, there was a hole which I should try to fill. From there on, I trained jointly in fetal medicine and genetics.

I'm privileged to be actively involved in the evolution of prenatal diagnosis as we develop ever safer and more sophisticated techniques for detecting childhood disease before birth. My motivation lies in working closely with colleagues in many disciplines so that we can offer families the highest possible standard of care and the support they need at a very difficult time in their lives.

Dr Chitty at work in the Fetal Medicine Unit examining the face of an unborn baby.

Prenatal testing with peace of mind
Risks to the unborn child associated with prenatal testing could be eradicated through a national study being led by Dr Lyn Chitty. A geneticist and specialist in fetal medicine, Dr Chitty works jointly between the UCL Institute of Child Health (ICH) and University College London Hospitals NHS Foundation Trust.

Every year around 650,000 women are screened during pregnancy to assess the health of their baby. In most cases, techniques such as ultrasound imaging allow doctors to examine the developing fetus non-invasively. However, if the baby might be born with a genetic disease, doctors may need to perform more conclusive tests on samples of fetal tissue, taken using a needle, from inside the womb. The results of such tests show whether or not the disease is present.

More than 30,000 women have these invasive tests each year in the UK. However, the procedures currently used to extract the sample of fetal tissue carry a small, yet significant, risk of miscarriage. Dr Chitty and her colleagues hope to eliminate this risk by using some of the latest genetic techniques to measure tiny quantities of the baby's DNA that are present in the mother's blood.

"Developing tests that can reliably detect genetic diseases in the unborn child, all from a small sample of maternal blood, has been a huge challenge for the field of obstetrics," Dr Chitty says. "We've been working closely with SAFE (the Special Non-Invasive Advances in Fetal and Neonatal Evaluation Network), a pan-European network of centres of excellence performing research into prenatal testing. We're now in a unique position to see whether this technology can be applied for the benefit of babies and parents across the UK."

Crucial to Dr Chitty's plans to develop these safer tests has been the recent award of a £2 million programme grant from the National Institute for Health Research (NIHR). This grant will fund a UK-wide collaborative study, and the results have the potential to transform the way prenatal testing is carried out across the country.

Because the test involves nothing more than giving a blood sample, it eliminates any risk of miscarriage. Dr Chitty explains, "this study will evaluate these new techniques in a large population. We hope we can develop the standards needed to diagnose a number of genetic disorders such as cystic fibrosis, as well as Down's syndrome and certain sex-linked conditions. We will also be looking carefully at what parents want and need to know, how to educate health professionals and how these tests should be offered to women. There's huge potential here to reassure expectant mothers that their child will be born healthy."

Looking ahead, Dr Chitty plans to extend the range of conditions that can be detected with a genetic test. Great Ormond Street Hospital Children's Charity has funded a three-year study to identify potential genetic causes of childhood diseases for which there are currently no medical explanations. "We're still a long way from understanding what makes so many newborn children ill," Dr Chitty says. "Ultimately, we want to offer a 100 per cent safe way of detecting inherited diseases so that, wherever possible, we can start therapy before the child is born."



Dr Kevin Mills

It is an intensely rewarding role working on the frontline where research and the NHS meet, often as the last hope of a diagnosis or treatment. This has led me to remain at the ICH since 1992.

I came here after graduating from Cardiff University, where I studied chemistry and biochemistry, and after a stint working in the biotechnology industry. I applied for a research assistant position in the mass spectrometry laboratory of Professor Peter Clayton at the ICH and never looked back.

We develop new methods to diagnose disease and our methods have been translated into clinical procedures in chemical pathology departments at Great Ormond Street Hospital and worldwide. The continual investment and support in mass spectrometry at the ICH has resulted in our laboratories being some of the best equipped in Europe, allowing us to become world leaders in genetic metabolic disease research, which ultimately benefits the patients.

Biological mass spectrometry

The biological mass spectrometry facility at the UCL Institute of Child Health (ICH) contains state-of-the-art analytical equipment that allows researchers to identify potential markers of disease and develop tests for early diagnosis and screening. Lecturer Dr Kevin Mills runs the ICH Biological Mass Spectrometry Centre.

The value of the Biological Mass Spectrometry Centre lies in the incredible diversity of the research that the facility supports. Current projects range from developing new prenatal tests for Down’s syndrome, fetal kidney disease and Fabry disease, to new techniques to understand and treat diabetes and epilepsy, as well as ground-breaking research into neural tube defects, eczema and rare genetic metabolic diseases.

Dr Mills explains that mass spectrometers are essentially weighing machines for atoms and molecules: “The power is in the machine’s extreme sensitivity and specificity,” he says. “Mass spectrometry is unrivalled in its ability to identify and quantify biological molecules in very small samples. Our portfolio of mass spectrometers allows researchers and clinicians at the ICH to detect and measure a single disease-causing agent, or a protein in a soup of millions of other molecules; the medical equivalent of finding a needle in a haystack.”

Because it is so sensitive, the mass spectrometer can diagnose diseases before symptoms become apparent in patients. This allows treatment to begin as early as possible, before the disease takes hold. One example of a method developed by Dr Mills’ group is a screening test for Fabry disease. This inherited condition prevents the body from breaking down a naturally occurring metabolite (a molecule called CTH). Its build-up eventually becomes toxic, causing damage to the blood vessel walls and kidneys.

Because of the late onset of symptoms in this disease, the condition often remains undiagnosed until irreversible damage to kidneys and blood vessels has already occurred. Undiagnosed or untreated, most patients currently do not survive beyond their 40s. “By measuring the build-up of CTH, the screening test allows us to diagnose Fabry disease earlier, as well as to monitor the benefit of the treatment we’re giving,” Dr Mills says. “This ultimately translates into better survival prospects and quality of life for our patients.”

Recently, the centre has acquired a new type of mass spectrometer that enables researchers to detect and identify proteins from tissue sections, without the need for prior extensive laboratory preparation. In collaboration with Professors John Harper and Robin Callard, researcher Ms Kate Bennett has been using this new technology to study eczema and Netherton’s syndrome, a severe skin disease.

“Because of defects in the skin barrier, patients with eczema and Netherton’s are at high risk of skin infection and inflammation,” Ms Bennett explains. “Using this technology we’ve identified a protein that interacts with LEKTI, a molecule which controls the natural process of skin cell shedding. The benefit of the new spectrometer is that we can test skin just using cells scraped from the forearm, rather than from a biopsy, to see which other proteins interact with LEKTI. Knowing this brings us a step closer to knowing what the underlying cause of eczema and Netherton’s might be – and closer to a life-changing treatment for these patients.”

Sara’s story

by her mum Shahida

“My daughter, Sara, was born nine weeks premature, weighing less than 2kg, but she was sent home as she was healthy and drinking her milk properly. However, the midwife noticed Sara’s weight was decreasing, so we took her back to the hospital, where she began to have breathing problems. She was put onto a ventilation machine and doctors said she might not survive.

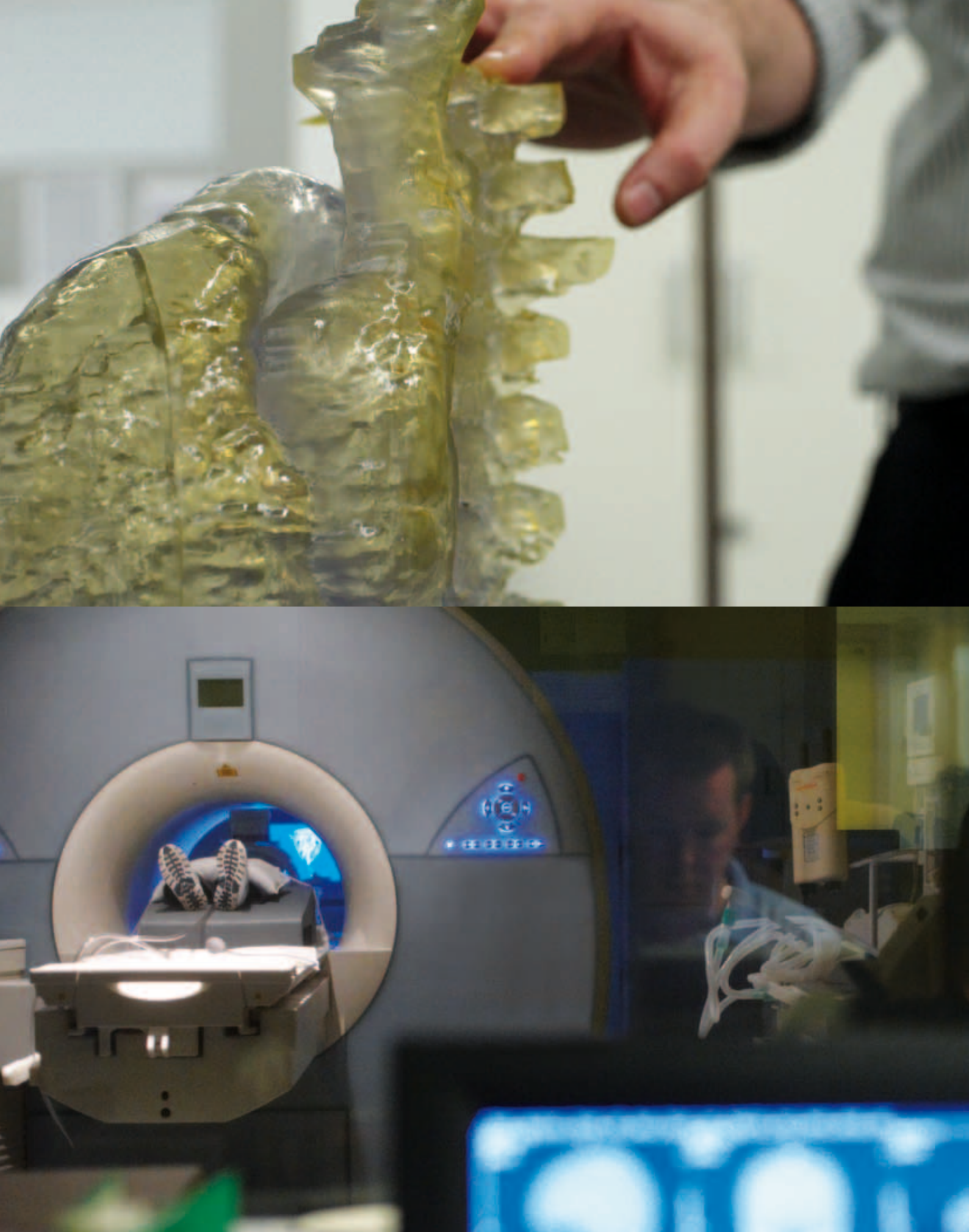
“Following a blood transfusion and a three-week stay at local hospitals, we were referred to Great Ormond Street Hospital (GOSH). By this time she had lost a kidney and tests at GOSH found it was due to a blood clot. Doctors also diagnosed her with a rare skin condition known as Netherton’s syndrome.

“After three months Sara returned home and was pretty stable, only visiting GOSH for regular check-ups. But she was tube-fed until she was about two years old and tended to throw up anything she took in. The feeding tube also meant she was often bed bound and so her development was slow. After the tube was removed Sara needed additional supplements to help her gain weight. She had little hair growth until she was about four, when she was also found to have weak eyesight. This has now become even weaker, but her hair is now much stronger and doesn’t fall out so much.

“Sara’s skin condition has been up and down ever since her diagnosis. When it’s good, it’s really good – she eats, laughs and plays like her brothers and sisters – but when it’s bad, she doesn’t like eating or drinking and her skin becomes so sore that even walking is painful.

“Sara’s now 11 years old and even though she is small for her age, she has a big heart and takes every day as it comes. Her doctors, Dr Harper and Dr Saeed, are always there whenever help or advice is needed and she’s met some amazing people at GOSH.”





Personalised heart valve treatment

Using the latest advances in cardiac imaging and computer modelling, Dr Andrew Taylor and his colleagues are developing a new generation of implants for children with faulty heart valves, potentially removing the need for open-heart surgery for thousands of patients every year.

Dr Andrew Taylor

I was inspired to do cardiac imaging by Dr Jane Somerville at the Brompton Hospital over 10 years ago. The challenge was to use magnetic resonance imaging (MRI) to diagnose, characterise and define the treatment of children and young adults with congenital heart disease.

I've sought to develop this work throughout my career, in particular with the innovative research I now carry out at Great Ormond Street Hospital and the UCL Institute of Child Health in collaboration with the cardiology team. Our challenge is to ensure that new devices for treating heart disease are introduced as safely and quickly as possible, so that patients can benefit from these new technologies.

My two most notable achievements since being appointed to the ICH have been my appointment as the Royal College of Radiologists' Roentgen Professor for 2006, and most importantly, establishing the Centre for Cardiovascular Magnetic Resonance Imaging at GOSH. I am proud to run this unit and am fortunate to work with a great team.

Ongoing collaboration between the Cardiac and Imaging Teams at Great Ormond Street Hospital (GOSH) has led to a worldwide programme, pioneered by Professor Philipp Bonhoeffer, for replacing faulty heart valves without the need for open heart surgery. Hundreds of patients have already benefitted from this innovative procedure; however, the implants currently used to deliver the replacement valve can only be used in a small proportion of cases.

“Less than 15 per cent of the patients we see who need valve replacements are able to undergo the non-surgical procedure,” says Dr Taylor. “The reason is that everyone’s heart is unique. Our implant, though life-saving, was never designed to be a one-size-fits-all.”

The challenge for Dr Taylor and his team has been to find a way to develop implants for a wider range of patients, while ensuring optimal safety and reliability. “Advances in computer modelling mean we can now design and test patient-specific implants in a virtual environment,” explains Dr Taylor. “This helps us to understand how well the implant will perform across a variety of anatomical settings. Feeding back this information lets us constantly refine our designs, maximising our chances of success when we carry out the procedure in patients.”

Furthering this success, Dr Taylor has developed a tool that lets cardiologists and surgeons physically examine the structure of a patient’s heart and plan their approach without the patient having to enter an operating theatre. The tool combines detailed magnetic resonance images of the heart with a technology called rapid prototyping. “The result is a detailed 3D photocopy of the patient’s heart vessels,” says Dr Taylor. “We’ve demonstrated that having this realistic physical representation of the patient’s anatomy really helps the cardiologists and surgeons to make better decisions about the operation. They’re very tactile people, after all.”

With the help of colleagues such as Silvia Schievano, and support from Great Ormond Street Hospital Children’s Charity, Dr Taylor plans to develop a raft of implants that could prevent up to 10,000 patients a year from having to undergo open-heart surgery. For the first time, a new dual-source computerised tomography (CT) scanner will allow researchers to look at how the valve implants perform in patients post-operatively. Dr Taylor is excited about this pioneering step into the unknown. “The new CT scanner really closes the loop on our work. Gathering information on how these implants are working within the patients themselves will provide us with an exceptionally detailed picture of what’s going on. Every patient is different, and we’re taking huge steps to make sure the treatment they receive is tailored precisely to their needs.”

A 3D plastic photocopy, created from scans of a patient’s heart, gives surgeons a chance to examine an exact replica of the heart’s anatomy prior to surgery.



Dr Neil Sebire

As a paediatric pathologist, I work with tissue samples taken from across the spectrum of childhood disease, in order to make diagnoses and, from a research perspective, understand the symptoms and processes of disease itself.

I first became interested in figuring out what happens in diseased tissue while doing my MD on complications of twin pregnancies at King’s College Hospital. During this time I became fascinated by the mechanisms of disease, and this prompted me to re-train in general and paediatric pathology – quite a journey from my initial specialty of obstetrics and gynaecology!

It is a privilege to work as part of a number of talented research teams throughout Great Ormond Street Hospital and the UCL Institute of Child Health, and to contribute to the wider understanding of how disease develops. Our current research into the causes of unexpected infant deaths will hopefully reduce future cases and allow us to provide the same level of diagnostic expertise to all children, even those who may die.

Sections of tissue are stained and mounted on glass slides before being examined under a microscope to help further research into the causes of childhood diseases.

Understanding and preventing sudden infant death

Dr Neil Sebire and colleagues hope to revolutionise childhood autopsies by bringing some of the latest imaging and diagnostic techniques to the world-class tissue testing department at Great Ormond Street Hospital (GOSH). One of their overarching ambitions is to apply this research to understand and help prevent sudden unexplained deaths in infants.

GOSH’s tissue testing department is the largest of its kind in the UK, receiving more than 4,500 specialist requests to analyse specimens every year. The work, supported by Great Ormond Street Hospital Children’s Charity, investigates how cells and tissues behave, important for a wide range of research studies. The department also investigates the cause of death of several hundred infants each year.

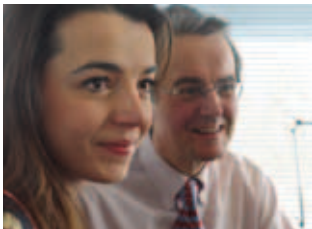
“Tragically, around one in every 500 apparently healthy children will die unexpectedly in infancy,” says Dr Sebire. “Currently, we’re only able to determine a cause of death in less than half of these cases via a detailed specialist autopsy. Understandably, this can be a devastating time for children’s families.”

Until now, medical advances have been adopted slowly. “Childhood autopsy is undoubtedly a very difficult field to approach as a researcher,” admitted Dr Sebire. “But this shouldn’t stop us from striving to do things better.”

Dr Sebire’s latest research looks into developing new laboratory techniques for investigating deaths, particularly for detecting infection, and the feasibility of using Magnetic Resonance Imaging (MRI) to provide detailed anatomical information at autopsy without an invasive post-mortem examination. This forms the first phase of a large study at GOSH, supported by the Department of Health and led by Dr Andrew Taylor. A major hurdle was to overcome established perceptions that recently bereaved parents would not want to be involved in this work.

“Not identifying a definite cause of death isn’t the same as saying there’s no reason for a child’s death – it just means we have to develop new ways of figuring out what’s happened,” says Dr Sebire. “Given this, we hoped some of the families of children who died unexpectedly would share our vision for research to improve autopsies. What inspired us was the families’ overwhelming support. Of the initial group of parents we approached, almost all agreed to take part in the study, and all of the parents we spoke to felt that learning more about the autopsy process helped them cope with the sudden and untimely loss of their child.”

Initial successes in the MRI study are encouraging for future phases of the research. Dr Sebire’s long-term vision is to offer the world’s first ever keyhole autopsy service, minimising the need for a traditional autopsy, by using non-invasive imaging to target tissue biopsies via a tiny incision. Looking ahead, Dr Sebire is confident that this will provide sufficient tissue for a full range of modern diagnostic tests. “We’re paving the way for a whole new area of research,” he says. “I’m confident that our work will allow us to find a cause of death in more cases, but in a less invasive way. Understanding the mechanism behind every childhood death is crucial if we are to prevent unnecessary loss of life.”



Professor David Skuse

I first started to work with autistic children about 30 years ago, in the country’s pioneering centre for autism research at the Maudsley Hospital. At that time, the condition was considered to be closely (if not invariably) associated with mental retardation.

Since then, both my research and my clinical experience have shown that many affected children have normal intelligence. I became interested in developing better ways of identifying these children – the more closely I studied them, the more concerned I became that their needs were often not managed well in psychiatric or educational terms. By the time they reach adolescence, such children are likely to develop a host of complications as a consequence of everyday frustrations.

In my clinical and research work, I’m hoping to find ways of identifying these children at an earlier age and making sure they achieve everything they are capable of at school.

Making inclusive education for autistic children a success

The transition from primary to secondary school can be a particularly challenging and unsettling time for children with autism. Professor David Skuse and Ms Marianna Murin’s research aims to ensure these children are offered the support they need at school to develop to their full potential.

Improvements in recognising autism have led to higher estimates than previously thought in the number of children affected by this spectrum of social and communication disorders. However, large numbers of autistic children with normal intelligence (high functioning autism) grow up without early diagnosis or formal treatment and often fail to adapt psychologically to life at mainstream secondary schools, despite a policy of inclusive education.

Professor Skuse manages the UK’s National Centre for High Functioning Autism, based at Great Ormond Street Hospital (GOSH). He felt a major issue in treating high functioning autism was a lack of awareness of the ways in which it could affect a child’s development. “Current NHS guidelines for managing autism tend to focus on pre-school children, or those with more obvious symptoms, such as severe cognitive impairments. But nearly all the autistic children we see at GOSH have a normal IQ, and their condition is usually not recognised until they are at school.”

Problems often escalate at the point when children are due to make the transition from primary to secondary school. “The increased social complexity and change in physical surroundings of secondary school demands a huge adjustment from any child,” Ms Murin explains. “Many autistic children are desperate to form new social relationships, but struggle to interact with their peers. The consequences may be bullying, or overly withdrawn or aggressive classroom behaviour. At worst, serious secondary mental health problems develop, including anxiety, depression and self-harm. Non-specialist services tend to focus on these secondary manifestations of autism, but do not recognise their root cause.”

To address these issues, Professor Skuse, Ms Murin and their team are leading an ambitious research project, funded by Great Ormond Street Hospital Children’s Charity. They plan to use the unique store of patient information gathered at the national centre over the past 10 years to follow up previously identified autistic children into adolescence. Their hope is to define warning signs that identify children at particularly high risk as they move between schools. In parallel, they will develop and evaluate a package of intervention strategies: a transition pack, that teachers and learning support assistants can use in school to help autistic children in their new environment.

Playing a key role in the success of this research will be the strong ties that the centre has with community-based child and adolescent mental health services. This network of collaborating centres can draw on a wide variety of consultants, speech therapists and special needs co-ordinators. “No one has targeted this particular group of children before,” says Professor Skuse. “The partnerships we’ve built up with other mental health units over the years will ensure we can tailor the outputs of our research to the needs of those most affected by autism. We can reduce school exclusions, prevent secondary mental health disorders, and enable children to achieve their full academic potential. I’m confident that with a solid, evidence-based programme of support, these children could go on to do fantastic things.”



**Scarlet’s story
by her dad Alan**

“My wife had suspected Scarlet might have some form of autism from a very early age, certainly before she started school, but I admit to having been very sceptical. Her infants’ school teachers certainly hadn’t picked anything up.

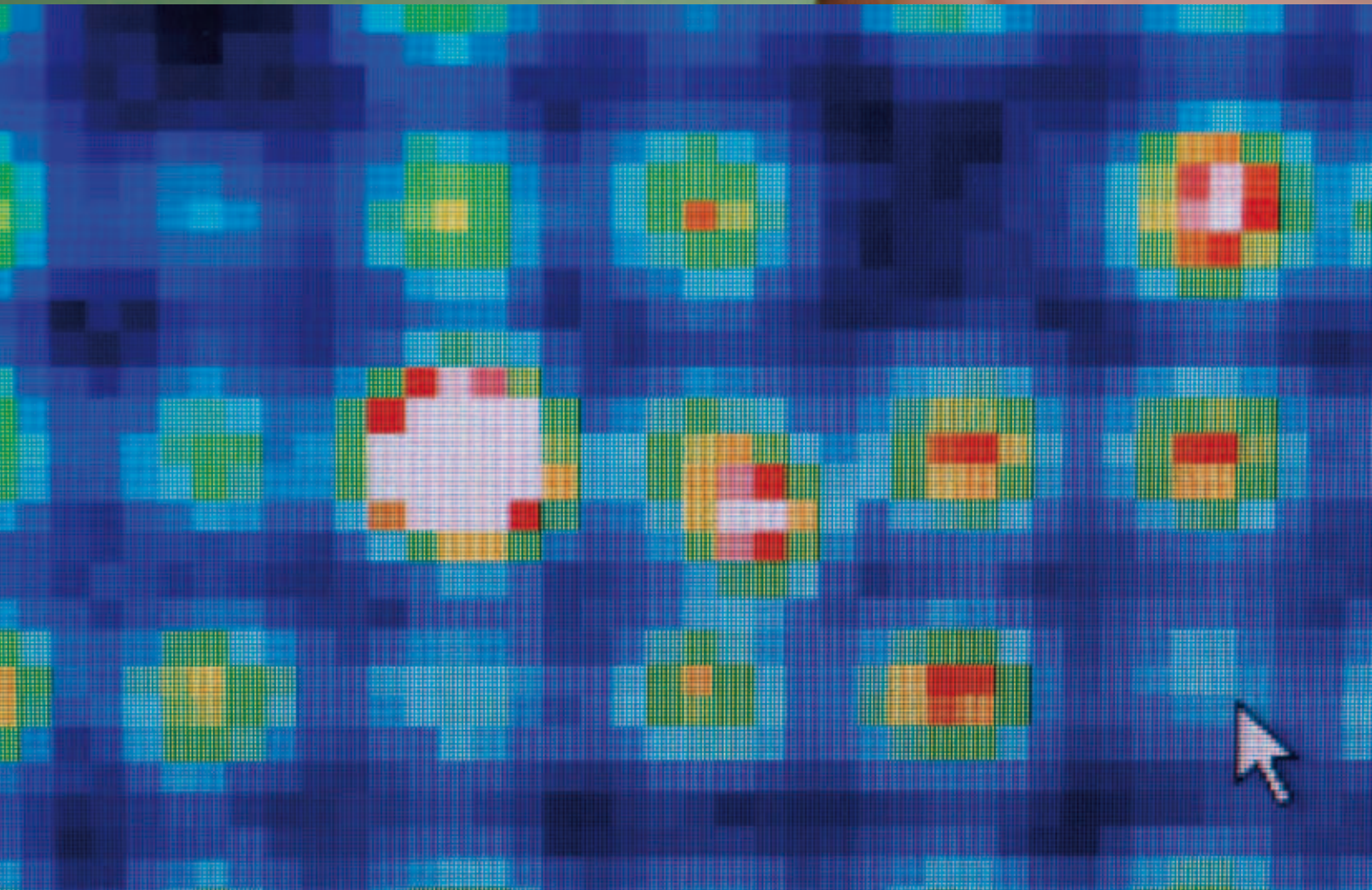
“After years of failing to understand why she just wasn’t like other kids, and watching her become increasingly isolated from her peers and falling further behind in school, our local paediatricians referred her to Great Ormond Street Hospital (GOSH). I had always thought that GOSH dealt only with children who had life-threatening illnesses, and not those with conditions which threaten their quality of life.

“The consultants in the Department of Child and Adolescent Mental Health undertook a wide-ranging and thorough analysis of Scarlet and concluded that she is a highly intelligent child who has a combination of Asperger’s syndrome, attention deficient hyperactivity disorder and Tourette’s syndrome. Her natural intelligence had in fact allowed some of her symptoms to be masked.

“This diagnosis has helped Scarlet to begin to understand and accept why she is different from her classmates, and has empowered us and given us the confidence to seek the long-term help needed for her future development.

“It is apparent to us that without GOSH’s clear conclusions and ongoing support, we would have continued to be directionless in our quest for Scarlet to benefit effectively from the education system and ultimately to lead an independent life.

“Thank you Great Ormond Street Hospital.”



Dr Mike Hubank

Living organisms are complicated things, so I have never been satisfied with a purely reductionist approach to biological and medical problems. I was frustrated that the huge quantities of data generated by our new genomics technologies were mostly going to waste. Then, a chance visit from two colleagues, Professor Robin Callard (Immunobiology at ICH) and Professor Jaroslav Stark (then in Mathematics at UCL) changed all that.

They were looking for huge quantities of data so they could try out some interesting mathematical techniques. The result was a successful grant application to the Biotechnology and Biological Sciences Research Council, and an exciting new direction for me.

Now I am focused on connecting advanced genomic technologies and mathematical approaches to provide meaningful descriptions of complex biological systems – it’s a lot of fun!

Researchers can carry out nearly two million genetic tests on a single microarray chip no bigger than a thumbnail. Each test appears as a microscopic spot of light, giving researchers information on which genes could be responsible for causing a patient’s condition.

Gene microarrays

Dr Mike Hubank works in the UCL Institute of Child Health (ICH) Microarray Centre, which uses mathematical modelling of genes to develop a holistic understanding of a patient’s condition and treatment.

Microarray technology allows researchers to measure the activity of thousands of genes or proteins at a time. Researchers can then keep track of the biological connections the genes or proteins are making by using a mathematical formula to model their activity. Using this model, for example, it is possible to calculate a patient’s response to certain drugs. “If we have a better understanding of a patient’s gene activity when a drug is administered, we may be able to target those biological pathways that will avoid, say, drug resistance,” Dr Hubank explains. “Ultimately, this allows us to make medicines more personalised.”

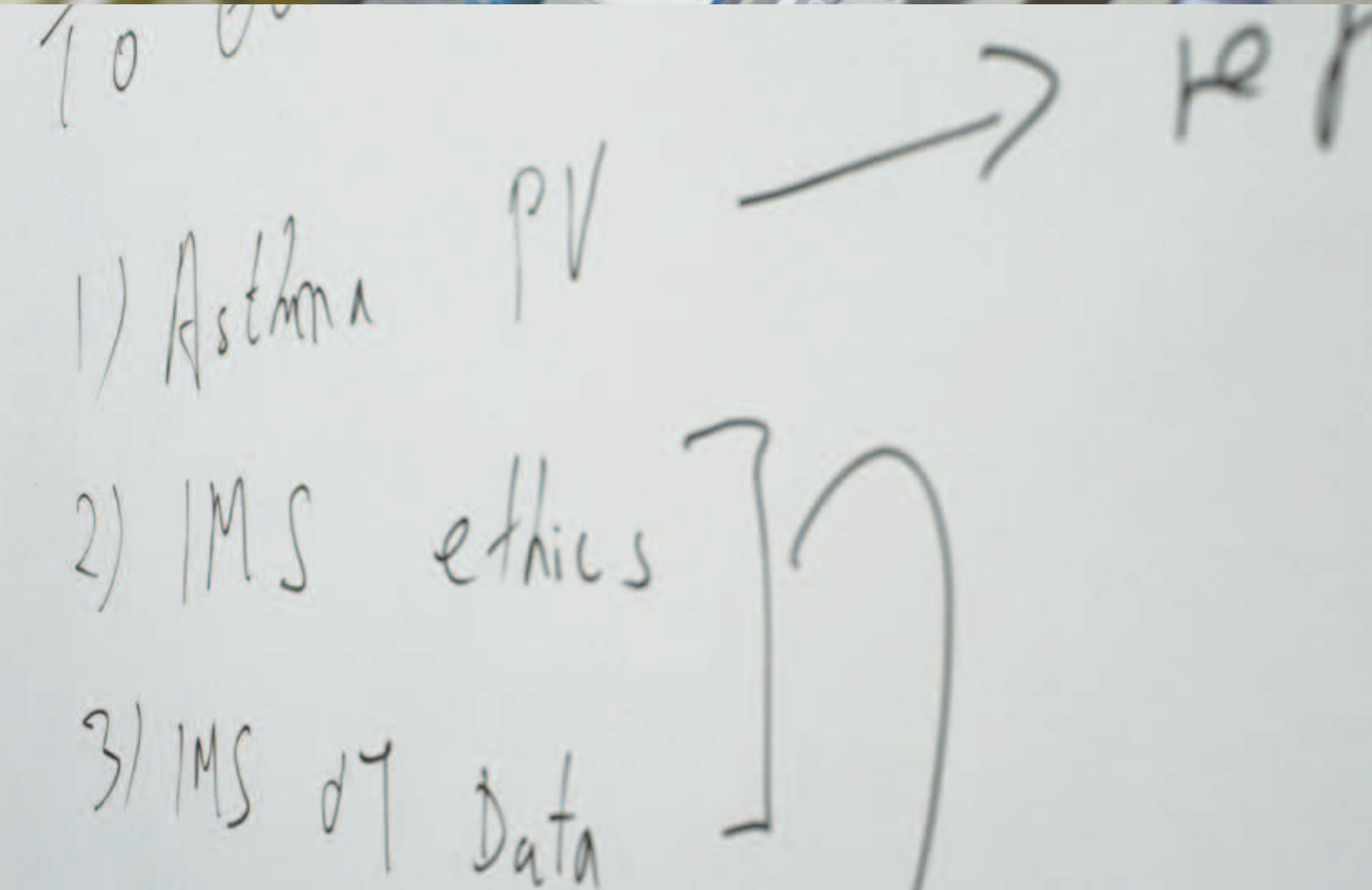
Dr Hubank is enthusiastic about the potential for gene expression and protein analyses to inform a huge array of disciplines. “You can look at all the data and begin to understand what biological factors are controlling what processes,” he says. “Researchers are now being encouraged to look at the bigger molecular picture, rather than a few discrete genes or proteins.”

Dr Hubank collaborates with several of Great Ormond Street Hospital’s (GOSH) clinical scientists. “We have recently been awarded a grant with Dr Perry Elliot, Dr Petros Syrris and Professor William McKenna to sequence the genes of children with hypertrophic cardiomyopathy,” he says. Another collaboration with Professor Adrian Thrasher and Dr Steve Howe enabled Dr Hubank to identify mutations that led to leukaemia developing in a patient who had successful gene therapy. “There are many other exciting projects under way where these state-of-the-art approaches will help identify the causes of disease in children and contribute to their successful treatment,” he says.

Further to this work was the establishment in July 2008 of UCL Genomics – bringing together University College London’s (UCL) three main microarray facilities, including the ICH Microarray Centre, UCL’s facility in the Division of Infection and Immunity, and the Wolfson Institute Scientific Support Services facility. The unit works with cancer, immunology and cardiology services and scientists involved in patient-based research.

“We’ve established several platform technologies that allow complex analysis, expression profiling and chromosomal studies,” says Dr Hubank. “The aim is to retain knowledge and technology, focus resources on areas of expertise, and then make it available to the wider UCL community. The technology and robotics cost a lot of money so by having one unit there’s far less duplication. There are also dedicated people who are employed to use the technology and analyse data. We want to build on our expertise and create a core of technological and analytical genomics, so that knowledge and skills are not lost if a researcher leaves.”

The unit’s services are offered on a cost recovery basis, and include genotyping, analysis of profile disease genes and DNA sequencing. “We can help design the best experiments to produce the most meaningful data, and ensure these data are of the highest quality,” Dr Hubank says.



Children’s medicines

Shaping national drug guidelines and improving the safety and quality of medicines prescribed to children is the focus of Professor Ian Wong’s research activities.

Professor Ian Wong

About nine years ago I read an article in the Pharmaceutical Journal about drug companies not investing in medicines for children. I thought we could do better than that and so six years ago I made the change to paediatric pharmacy and took the job that I have today.

Two people have inspired me during my career: the School of Pharmacy ex-dean Professor Alexander Florence, and children’s health czar, Professor Al Aynsley-Green. They both recognised the importance of paediatric pharmacy and supported the establishment and advancement of the Centre for Paediatric Pharmacy Research.

The centre, where I’m director, works with the UCL Institute of Child Health and Great Ormond Street Hospital. The set-up is ideal as ICH has the clinical research expertise and the hospital’s wonderful clinical environment provides the patients. We all work together to improve the quality and safety of medicines for children.

Understanding the national impact of prescribing drugs for children is leading to better guidelines to improve paediatric healthcare across the UK.

Professor Wong is director of the Centre for Paediatric Pharmacy Research, which since its inception five years ago, has brought together the School of Pharmacy, the UCL Institute of Child Health and Great Ormond Street Hospital (GOSH). The centre’s research focuses on prescribing and administering drugs to children and young people. A number of its projects have already made a national impact.

The first study, CHAPTER (Children and Adolescents Psychotropic medication Therapy Evaluation Research), investigated the use of medications in more than 500,000 children and adolescents in general practice, such as antidepressants and drugs for treating mental illness. “We saw a significant increase over the past 10 years in the prescribing of these medications in the UK and Europe. This is somewhat concerning given the relative lack of information on the long-term effects of prescribing these medicines to children,” says Professor Wong. The results were presented to members of the UK and European parliaments.

Building on CHAPTER, Professor Wong convened a specialist research group at the National Institute for Health Research, to develop research proposals to assess the long-term effects of prescribing drugs to children with mental health disorders. One of the most recent projects considers medications used in adolescents with attention deficit hyperactivity disorder (ADHD).

“Many adolescents with ADHD experience significant problems at the point that they are discharged from paediatric care,” Professor Wong says. “Yet there were no clear guidelines for treating ADHD in adolescents. There was an urgent need to evaluate this formally, which is why we set up the CADDY study [Cessation of Attention deficit hyperactivity Disorder Drugs in the Young].”

Results of the CADDY study showed that a significant number of adolescents with ADHD might have had their medication terminated inappropriately. These findings were used by Professor Wong in collaboration with the National Institute for Health and Clinical Excellence (NICE). “The CADDY and CHAPTER research results have supported further work with NICE to develop guidelines for diagnosing and treating ADHD,” he says. “The recently published guideline will improve the care and management of adults and children with ADHD across the UK.”



Stem cell treatments for gut disorders

Gastroenterologist and clinician scientist Dr Nikhil Thapar is pioneering a new stem cell treatment to improve the lives of patients with life-threatening gut disorders.

Dr Nikhil Thapar

Challenges in medicine are fascinating, mostly because they can be overcome, albeit with a bit of lateral thinking, a lot of hard work and a dose of good luck! One of the main challenges in paediatric gastroenterology is the management of children suffering incurable nerve and muscle disorders of the gut.

My approach was to join forces with the clever science that has taught us how humans develop before birth. The ‘lateral thinking’ was to explore whether specialised stem cells exist in the gut and if so whether they could be used to repair nerve and muscle defects. The ‘good luck’ was the opportunity to work (‘hard work’!) with eminent researchers in the field and to get my clinician scientist and honorary consultant positions within the UCL Institute of Child Health and Great Ormond Street Hospital. This is a glorious community of academics and clinicians that share a vision of improving paediatric care, and of children and parents that tolerantly work with them to achieve it.

A relatively common gut disorder is Hirschsprung’s disease, where regions of the gut have no nerves. Patients with the disease are often very unwell and without treatment can die. Although surgical techniques to remove diseased sections of the gut and advances in artificial feeding have led to improved patient survival, there remain significant post-operative complications, including incontinence and a reduced quality of life. Current surgical treatment is not designed to cure but rather to be palliative, to enable children to survive and to limit disease complications.

Dr Thapar is investigating the potential to improve these children’s lives by developing new curative treatments. “Over the years I’ve been looking after this challenging group of children in the clinical setting, while also doing research on their condition in the lab,” Dr Thapar says. His research group have discovered that stem cells can be isolated from healthy regions of gut tissue and transplanted into abnormal gut to replenish missing nerves.

Dr Thapar uses endoscopy, a minimally invasive procedure, to harvest the nerve stem cells from the regenerating lining of the gut. “Much of our success has come from using endoscopy, a very common procedure carried out in our state-of-the-art investigation unit on more than 30 children every week,” he says. “The children are mostly investigated as day cases and can often return home within a couple of hours of the procedure.”

The critical question is how best to deliver the stem cells to the diseased area of gut that needs repair. This research was recently awarded major grant funding from the Medical Research Council to move the project into pre-clinical trials. It is hoped that such therapies will eliminate the need for surgery to remove sections of the bowel and improve long-term prognosis.

If successful in Hirschsprung’s disease, Dr Thapar is confident a number of other disorders may be amenable to this therapy, such as those resulting in swallowing difficulties and incontinence due to anal sphincter dysfunction. “Healthy gut is a very large and readily accessible tissue that may act as a source of many different types of stem cells potentially useful for diseases that affect any part of the human body,” he says.

Great Ormond Street Hospital and the UCL Institute of Child Health (ICH) is one of the only UK centres dedicated to paediatric neurogastroenterology. Dr Thapar explains that a critical factor in making this research possible was a team of basic scientists at the ICH, led by Dr Alan Burns, who are world-renowned experts in developmental and molecular biology of the gut and its nervous system. “We have a multidisciplinary research team dedicated to improving the care of patients with severe gut disorders, with expertise from basic science right through to practical clinical management. Without this critical teamwork, the stem cell research would not be happening.”

Toby’s story

by his mum Lesley

“Our son Toby was born with Hirschsprung’s disease and after the trauma and heartache of three operations at Great Ormond Street Hospital (GOSH) he finally came home with no bag on his tummy. However, the next four years were a rollercoaster of emotions.

“Toby had frequent bouts of pain, sickness, bloating and acute diarrhoea. Sometimes we were changing up to 24 nappies a day. We were told this shouldn’t happen following successful surgery, which made us feel frustrated and desperately worried.

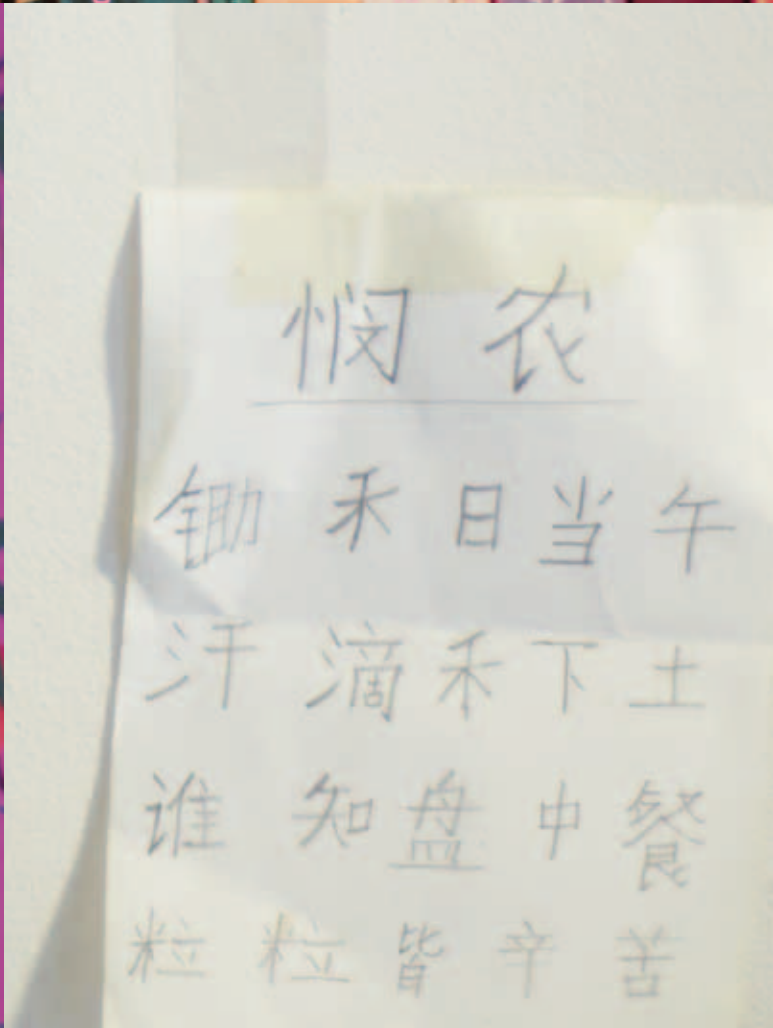
“Finally, Toby was referred to the GOSH Gastroenterology Team. A series of tests to establish whether or not the nerves in his remaining bowel were functioning normally showed they were not and were causing yet more problems.

“The Gastroenterology Team explained that surgery for Hirschsprung’s was often not the complete solution and this situation was common. Although this was disappointing, we were relieved to find reasons for his ongoing symptoms. The doctors’ understanding of why this was happening meant that some treatment was possible. Toby was put on tube feeding, a range of medicines were tried and finally he was given a permanent ileostomy. The improvement was dramatic.

“Toby is now 19 and although he still has problems, he is at university, plays sport when fit enough (including rugby) and is looking forward to the rest of his life. We know that, thanks to ongoing research work at GOSH, it’s likely that his children, if they have Hirschsprung’s, will avoid much of the pain he suffered.

“On behalf of Toby and generations of Hirschsprung’s children yet to come, we thank you GOSH.”





Dr Therese Hesketh

After training in paediatrics in the UK in 1986, I went to work in Asia. I was based in China, which was just opening up to the outside world at that time. I had planned to be there for one year but ended up staying for five. With Chinese and American colleagues we pioneered neonatal and paediatric intensive care in five major Chinese cities and outreach education for paediatricians and paediatric nurses in 11 provinces.

After handing the projects over to Chinese counterparts, I returned to the UK to train in public health, but kept close links with China. So, when I came to work at the UCL Institute of Child Health in 1996, I built on my links with China to develop a number of projects in the area of population and reproductive health. These included studies in adolescent health, HIV/AIDS, the health of rural to urban migrants and their children and the impacts of the One Child Policy.

This Chinese poem is pinned to Dr Hesketh's noticeboard in her office. It is taught to Chinese school children so that they recognise the hard work of peasants in producing just one grain of rice and therefore appreciate the food they are given.

Healthcare in China's poor urban and rural areas

Restoring equality to China's healthcare system is the vision behind Dr Therese Hesketh's initiative to improve delivery of healthcare to poor people across the country, which launched in December 2008.

The project, funded by the Department for International Development, aims to make China's healthcare more affordable and efficient by introducing evidence-based protocols for doctors, improving access to healthcare and engaging in public education.

Dr Hesketh has worked in China for the past 22 years. She explains that the country used to have an enviable health system that provided basic healthcare to most of the population. Then, in the early 1980s, economic reform led to major changes in the way that healthcare was financed and resulted in the disappearance of universal, free basic healthcare. A fee-for-service system was introduced, leaving many people in the poorer rural and urban areas unable to afford even basic treatment.

Dr Hesketh believes that the fee-for-service system has contributed to the decline in the quality of healthcare, with the financial incentives encouraging doctors to over-treat patients with more profitable treatments in preference to simpler therapy. "There's a massive culture of inefficiency and waste," says Dr Hesketh. "Wealthier people flock to specialist centres in the cities for minor conditions while rural facilities are often underutilised."

Working with a number of Chinese organisations, and with the support of the Chinese government, Dr Hesketh's project aims to address these problems in several ways. The first aim is to redirect medical practice towards evidence-based treatment and management protocols for doctors. To encourage doctors to participate, bonuses will be paid according to their adherence to the protocols. In the short term the government will meet the resulting shortfall in doctors' pay from not over-prescribing.

The second aim is to engage health insurers to encourage better use of health services. Rural and social health insurers will pay for limited packages of treatment, approved within the scope of the doctors' evidence-based protocols, along the lines of the Diagnostic Related Groups that are used in many countries. Health insurers will also be encouraged to refuse reimbursement to patients who self-refer to a higher level of care, for example, bypassing their local hospital to seek inappropriate specialist care.

The third aim relates to public education through media such as television and newspapers. Through education, the community will develop an understanding of why these changes are being made and how this will affect them.

The project has been earmarked for 20 Chinese counties, with a population of 15 million, and will be rolled out across five counties at a time. "We have to prove ourselves first," Dr Hesketh says. "Then we'll have a good model which we can apply to the rest of the country."

Collaboration is key to our research success: working across disease areas, in state-of-the-art laboratories, partnering with leading clinicians.

Reaction Tubes (8 Tubes/Strip)

Part No. N801-0580

SG20C4-

Made in Singapore

www.appliedbiosystems.com

- Flexible
- Moldable
- Self-Sealing
- Odorless
- Moisture-Resistant
- Thermoplastic
- Semitransparent
- Practically Colorless



See Other Side For
Dispensing Instructions



U.S. Patent Nos. 5,318,379; 5,918,659
Patents Applied For
Non-reusable consumable code
Store roll in box when not in use

Awards, honours and prizes 2008

Staff from the UCL Institute of Child Health (ICH) and Great Ormond Street Hospital (GOSH) received national and international recognition for their research achievements during 2008.

Mr Luis Apolonia received a Bogue Research Fellowship to spend 10 weeks at the Salk Institute, California, USA.

Mr Yogesh Bajaj was awarded a PhD for the thesis *Causes of deafness in East London Bangladeshi children*.

Dr Torsten Baldeweg was awarded first prize in clinical science at the UCL Cardiovascular Science Day for the poster *Memory impairment in association with hippocampal injury in children with transposition of the great arteries (TGA) with and without ventricular septal defect*.

Dr Doris-Eva Bamiou was awarded a Higher Education Funding Council for England/Department of Health senior lectureship.

Dr Lorenzo Biassoni spoke at the 42nd European Society of Paediatric Nephrology conference in Lyon, France. Dr Biassoni has also been appointed as a member of the Administration of Radioactive Substances Advisory Committee (ARSAC), Department of Health on a four-year appointment.

Dr Paul Brogan was awarded a Higher Education Funding Council for England/Department of Health clinical senior lectureship.

Dr Martin Chadwick was awarded first prize in clinical science at the UCL Cardiovascular Science Day for the poster *Memory impairment in association with hippocampal injury in children with transposition of the great arteries (TGA) with and without ventricular septal defect*.

Miss Shun-Kai Chan was runner-up in biomedical sciences at the UCL Graduate School Poster Competition, for the poster *Modeling fetal programming in a dish: from nephrogenesis to cystic kidneys*.

Dr Rebecca Chilvers was awarded a PhD for the thesis *A story without words: investigation of a dominantly inherited verbal memory disorder in a large family*.

Dr Richard Chin was the winner of the 2008 Bupa Foundation Epidemiology Award. The award is given for work that shows excellence in the epidemiological study of human disease. He received £10,000 towards continued research work.

Dr Mankin Choy was awarded a PhD for the thesis *MRI investigations of an animal model of status epilepticus*.

Dr Patricia Cogram was awarded a PhD for the thesis *Inositol and protein kinase C in the prevention of neural tube defects*.

Professor Andrew Copp delivered the Casey Holter lecture ‘*Genetics and embryology of neural tube defects*’ at the 52nd Annual Meeting of the Society for Research into Hydrocephalus and Spina Bifida, Providence, Rhode Island, USA. Professor Copp was also the Dean’s Distinguished Seminar Speaker at the University of Colorado, Colorado, USA giving the lecture ‘*Neural tube defects: genetics, development and prevention*’.

Dr Roman Cregg was awarded a National Institute for Academic Anaesthesia Research Training Fellowship towards completion of his Neuroscience MPhil/PhD at UCL.

Dr Michelle de Haan was awarded first prize in clinical science at the UCL Cardiovascular Science Day for the poster *Memory impairment in association with hippocampal injury in children with transposition of the great arteries (TGA) with and without ventricular septal defect*.

Dr Sofia de Noronha was awarded a PhD for the thesis *Immunological studies of a murine model of Wiskott-Aldrich syndrome (WAS)*.

Professor Carol Dezateux was appointed to the Medical Research Council (MRC) Strategy Board and as chair of the Careers Overview Group.

Dr Marie-Klaire Farrugia was awarded a PhD for the thesis *Short-term fetal bladder outflow obstruction: morphology, physiology and in-utero urodynamics in the ovine model*.

Professor David Gadian was awarded first prize in clinical science at the UCL Cardiovascular Science Day for the poster *Memory impairment in association with hippocampal injury in children with transposition of the great arteries (TGA) with and without ventricular septal defect*.

Mr Robin Garrett-Cox was awarded a PhD for the thesis *Effects of glutamine in neonatal endotoxaemia*.

Professor Ruth Gilbert was appointed to the National Institute for Health Research (NIHR) Healthcare Associated Infection (HAI) Board.

Mrs Rachael Gregson was awarded a PhD for the thesis *Characterisation of manual chest physiotherapy and respiratory response in mechanically ventilated children*.

Miss Astrida Grigulis was awarded first prize for her poster in the Royal Society of Tropical Medicine and Hygiene’s competition for the poster *The lives of Malawian nurses: the stories behind the statistics*.

Dr Mike Grocott was awarded the Pinkerton Medal of the Association of Anaesthetists of Great Britain and Ireland.

Dr Dalia Haroun was awarded a PhD for the thesis *Body composition in childhood obesity*.

Mrs Summer Hawkins was awarded runner-up for biomedical sciences at the UCL Graduate School poster competition for the poster *Does the environment influence obesity in pre-school children and their mothers?*

Dr Ah-Fong Hoo was awarded second prize at the Homerton University Hospital poster competition for the poster *Infants with recurrent wheeze, lung function and clinical risk factors for asthma*.

Dr Aparna Hoskote was awarded first prize in clinical science at the UCL Cardiovascular Science Day for the poster *Memory impairment in association with hippocampal injury in children with transposition of the great arteries (TGA) with and without ventricular septal defect*.

Dr Stephen Howe was awarded the Bogue Foundation Travel Fellowship, the British Society of Gene Therapy (BSGT) Travel Fellowship and the American Society of Gene Therapy (ASGT) Travel award. Dr Howe has also been awarded the ASGT Excellence in Research Award for his abstract entitled *Molecular analysis of a severe adverse event in the UK SCID-X1 gene therapy clinical trial* and the BSGT poster prize at the annual meeting in Edinburgh for his poster *Combinatorial mutations cause leukaemia in a clinical trial for SCID-X1 gene therapy*.

Awards, honours and prizes 2008 continued

Dr Patricia Hunter was awarded the prize for best basic science presentation at the Young Investigators Meeting of the 2008 Paediatric Rheumatology European Society meeting.

Dr Marina Johnson was awarded a PhD for the thesis *The role of mannose-binding lectin in health and disease*.

Dr Larissa Kerecuk was awarded an Amgen Bursary at the Renal Association Meeting.

Dr Sachin Khambadkone was awarded first prize in clinical science at the UCL Cardiovascular Science Day for the poster *Memory impairment in association with hippocampal injury in children with transposition of the great arteries (TGA) with and without ventricular septal defect*.

Professor David Latchman was appointed by the Mayor of London as a member of the London Skills and Employment Board. Professor Latchman was re-elected as chairman of London Higher and was also elected as a councillor of the CBI London Council. Professor Latchman was appointed a board member of London First.

Mr Aidan Lavery was the winner of the Health Informatics Professional Awards in Information Management and Technology (Health) at strategic management level.

Professor Catherine Law was awarded the Royal College of Physicians Milroy Lectureship for 2009. Professor Law's lecture will be called '*Will our children be healthy adults?*' Professor Law was also appointed programme director of the National Institute for Health Research (NIHR) Public Health Research Programme.

Dr Kirsty Little was awarded a PhD for the thesis *Measuring the impact of public health programmes for HIV-infected pregnant women and their children in resource-limited settings: estimating mother to child transmission and assessing paediatric treatment need*.

Dr Claire Lye (née Gannon) was awarded a PhD for the thesis *Teashirts in the mammalian urinary tract*.

Dr Stephen Marks was awarded a PhD for the thesis *Childhood-onset lupus nephritis: aetiopathogenesis, histopathology and management*.

Dr Clare Munns was awarded a PhD for the thesis *Mechanisms and plasticity of cold sensitivity in peripheral neurons*.

Dr Monica Munoz was awarded first prize in clinical science at the UCL Cardiovascular Science Day for the poster *Memory impairment in association with hippocampal injury in children with transposition of the great arteries (TGA) with and without ventricular septal defect*.

Dr Elizabeth Neal was awarded a PhD for the thesis *A randomised controlled trial of two ketogenic diets in the treatment of childhood epilepsy*.

Dr Kiran Nistala was awarded the Young Investigator Award from the British Society for Rheumatology (BSR) and presented his work at the plenary of the BSR Scientific Conference.

Mr Pascal Odent was awarded first prize in the UCL Institute of Child Health poster competition for the poster *Early breastfeeding practices and survival in Nepalese infants: does colostrum help?*

Dr Bola Olusanya was awarded a PhD for the thesis *Infant hearing screening models for the early detection of permanent childhood hearing loss in Nigeria*.

Dr Mark Peters was awarded a Higher Education Funding Council for England/ Department of Health clinical senior lectureship.

Dr Paul Riley was one of the two recipients of the Outstanding Achievement Award 2008 from the European Society of Cardiology.

Dr Kate Riney was awarded a PhD for the thesis *Improving the detection of structural and associated functional brain abnormality in focal epilepsy of childhood*.

Miss Emma Scrase was winner of the Best Abstract award at the 2008 Association for Respiratory Technology and Physiology conference.

Miss Harriet Shannon won first prize at the UCL Institute of Child Health poster competition for the poster *Timing of chest wall vibrations within the breath cycle*.

Dr Joe Standing is the first pharmacist to obtain a PhD under the auspices of the Centre for Paediatric Pharmacy Research, a collaboration between GOSH/ICH and the School of Pharmacy, University of London.

Professor Janet Stocks received a special award from the Association for Respiratory Technology and Physiology for advancing ideals and standards of respiratory physiology and measurement practice.

Professor Adrian Thrasher was selected by the National Institute for Health Research (NIHR) as an NIHR senior investigator. These are the most prominent and prestigious researchers funded by the NIHR.

Mr Vi Tran was awarded a PhD for the thesis *Tetralogy of Fallot with pulmonary atresia: with special reference to the morphology of the bronchial arteries*.

Professor Faraneh Vargha-Khadem was awarded first prize in clinical science at the UCL Cardiovascular Science Day for the poster *Memory impairment in association with hippocampal injury in children with transposition of the great arteries (TGA) with and without ventricular septal defect*.

Dr Brigitte Vollmer was awarded a PhD for the thesis *The neural basis of epilepsy and cognitive impairment in children born pre-term*.

Dr Suellen Walker was appointed as a visiting assistant professor in the Department of Anesthesiology, University of California, San Diego, USA for six months to conduct a collaborative research project with Professor Tony Yaksh.

Dr Klaus Werner was awarded a PhD for the thesis *Auditory processing in the syndrome of infantile spasms*.

Dr Martin Woodward was awarded a PhD for the thesis *Identification of genes regulating glucocorticoid and antigen-mediated thymocyte apoptosis*.

Grants and donations 2008

The UCL Institute of Child Health continues to receive grants from the following organisations:

A

Abbott Laboratories
Academy of Medical Sciences
Actelion Pharmaceuticals Ltd
Action Medical Research
Addenbrooke's NHS Trust, Cambridge
Alcon Laboratories Ltd UK
Anatomical Society of Great Britain and Ireland
Antisoma Research Ltd
Arthritis Research Campaign
Association for International Cancer Research
Association of Paediatric Anaesthetists
Astellas Pharma Inc.
Asthma UK
Astrazeneca (UK) Ltd
Autism Speaks
Avent Ltd
AVI Biopharma

B

Baily Thomas Charitable Trust
Barts and the London Charitable Foundation
Baxter Healthcare Corporation
Baxter Healthcare Limited
Bayer HealthCare AG
BDF Newlife
Big Lottery Fund
Bill Gates Foundation
Bioenvision
Biomarin Pharmaceutical Inc
Bio Products Laboratory
Biotechnology and Biological Sciences Research Council
BLISS
Bone Cancer Research Trust
Bone Marrow Research Trust
British Council (France)
British Educational Communications and Technology Agency
British Eye Research Foundation
British Heart Foundation
British Lung Foundation
British Medical Association
Bupa Foundation

C

Cancer and Leukaemia in Childhood
Cancer Research UK
Cathal Hayes Research Foundation
Centocor Inc
Central Research Fund (University of London)
Cerebra Foundation
Charles Hawkins Fund for Handicapped Children
Child Growth Foundation
Child Health Research Appeal Trust
Children's Cancer and Leukaemia Group
Children's Research Fund
Children's Hyperinsulinism Fund
Children's Trust
CHILDREN with LEUKAEMIA
Chronic Granulomatous Disease Trust
CLIC Sargent
Cord Blood Charity
Coronary Artery Disease Research Association
CP Charitable Trust
CSL Behring AG
Cyberonics Europe
Cystic Fibrosis Research Trust
Cystinosis Foundation Ireland
Cystinosis Research Network Inc

D

David Baum International Foundation
Department for Innovation, Universities & Skills
Department for International Development
Department of Health
Diabetes UK
Dimpleby Cancer Care Research Fund
Dona Estefania Hospital
Duchenne Parent Project
Dystrophic Epidermolysis Bullosa Research Association

E

Economic and Social Research Council
Eli Lilly and Company
Elimination of Leukaemia Fund
Emergency Nutrition Network
Engineering and Physical Sciences Research Council

Enid Linder Foundation
Epilepsy Research Foundation
European Molecular Biology Organisation
European Society for Immunodeficiencies
European Society for Paediatric Endocrinology
European Union

F

F Hoffman-La Roche Ltd
Fight for Sight
Fondation genevoise de bienfaisance
Valeria
Fondation Milena Carvajal
Foundation Eugenio Litta
Foundation for the Study of Infant Deaths

G

General Charitable Trust of the Institute of Child Health
Genzyme Corporation
Gilead Sciences Inc
GlaxoSmithKline
Great Ormond Street Hospital
Children's Charity
Guide Dogs for the Blind Association

H

Health and Care Infrastructure Research and Innovation Centre
Health Foundation
Health Protection Agency
Health Technology Assessment
Heart Research UK
Help the Aged
Hestia Foundation
Higher Education Funding Council for England
H J Heinz Company Limited
HSA Charitable Trust
Human Early Learning Partnership

I

Institute of Biomedical Science
Institute of Education
International Association for the Study of Pain
International Centre for Child Studies
Ipsen Ltd
Isis Pharmaceuticals Inc

J

Jennifer Trust for Spinal Muscular Atrophy
Johns Hopkins University

K

Kay Kendall Leukaemia Fund
Kellogg Marketing and Sales Company (UK) Limited
Kellogg's UK Ltd
Kidney Research Aid Foundation
Kidney Research UK
Kids Company
Kids Kidney Research

L

Leukaemia Research Fund

M

Macular Disease Society
March of Dimes Foundation
Marie Curie Cancer Care
Mary Kitzinger Trust
Mason Medical Research Foundation
Medical Research Council
Medical Research Council of Canada
Medtronic Ltd
MEND Central Ltd
Meningitis Trust
Merck & Co Inc
Merck, Sharp and Dohme
Milena Carvajal – Prokartagener Foundation
Moulton Charitable Trust
Muscular Dystrophy Association
Muscular Dystrophy Campaign
Myositis Support Group

N

National Alliance for Autism Research
National Eczema Society
National Institute for Health Research
National Institute of Mental Health
National Institutes of Health
National Kidney Research Fund
Neuroblastoma Society
Newlife Foundation for Disabled Children
North Bristol NHS Trust
North Thames Cleft Regional Service
Novartis Pharmaceuticals AG

Grants and donations 2008
continued

Novartis Pharmaceuticals (UK) Ltd
Novo Nordisk UK
Nuffield Foundation
Nutricia Ltd

O

Olivia Hodson Cancer Fund
Options Consultancy Services Ltd
Organon Laboratories Ltd
Orphan Europe (UK) Ltd

P

Paediatric Rheumatology
Discretionary Fund
Parkinson's Disease Society
Pfizer Ltd
Pharmaxis Ltd
Philips Electronics (UK) Ltd
PHLS Communicable Disease
Surveillance Centre
Physiotherapy Research Foundation
PPP Foundation
PTC Therapeutics Inc

Q

Quintiles (UK) Ltd

R

Rank Bequest
Research Autism
Research into Ageing (formerly British
Foundation for Age Research)
Rho Inc
Roche Products Ltd
Ross Products Division
Royal Academy of Engineering
Royal College of Paediatrics
Royal College of Surgeons of England
Royal Society

S

Samantha Dickson Research Trust
Sanofi-Aventis
Sanofi Pasteur SA
Santhera Pharmaceuticals Ltd
Save the Children
Saving Newborn Lives
(Save the Children US)
Search

Shire Human Genetic Therapies AB
SHS International Limited
Siemens Plc
Simons Foundation
Sir Halley Stewart Trust
Sir Jules Thorn Charitable Trust
Skeletal Dysplasia Group for
Teaching and Research
Society for Mucopolysaccharide Diseases
Spencer Dayman Meningitis Laboratories
Sport Aiding Medical Research for Kids
Stanford University

T

Tanita (UK)
Tavistock and Portman NHS Trust
Teenage Cancer Trust
Telethon Association Française
contre les Myopathies
Tibotec Pharmaceuticals Ltd

U

UBS AG
Ulverscroft Foundation
Food and Agriculture Organization
of the United Nations
UNICEF
United Kingdom Children's
Cancer Study Group
UCL Futures
UCL/UCLH Biomedical Research Centre
University College London Hospitals
Biomedical Research Centre
University of Iowa
University of London Central
Research Fund
US Agency for International Development

V

Vitol Charity Fund

W

Wellbeing (the Health Charity
for Women and Babies)
Wellchild
Wellcome Foundation
Wellcome Trust
World Health Organization
Wyeth Laboratories
Wyeth-Lederle Vaccines

Senior academic staff 2008

Biochemical and nutritional
sciences theme

Theme leader

Professor Alan Lucas

Nutrition unit

MRC professor of paediatric nutrition
and head of unit

Professor Alan Lucas MA MB
BChir FRCP MD FRCPCH FmedSci

Professor of biochemistry

Professor David Muller BSc PhD

Professor of childhood nutrition

Dr Atul Singhal MB BS DCH MRCP MD

Emeritus professor

Professor Brian Wharton MD MBA DSc
FRCP(L)(E)(G) FRCPCH DCH

Reader in paediatric nutrition

Dr Jonathan Wells MA MPhil PhD

Reader in childhood nutrition

Dr Mary Fewtrell MD BMBCh
FRCPCH MRCP DCH MA

Senior lecturer

Dr Margaret Lawson MSc PhD SRD

Surgery unit

Nuffield professor of paediatric
surgery and head of unit

Professor Agostino Pierro MD
FRCS (Eng) FRCS (Ed)

Reader in paediatric gastroenterology

Dr Keith Lindley BSc PhD
MRCP(UK) MRCPCH

Senior lecturer

Dr Simon Eaton BSc PhD

Honorary senior lecturers

Mr David Albert FRCS
Mr Peter Ayliffe FRCS (Eng)
FRCS (Maxfac) FDS RCS (Eng)
Mr Martin Bailey BSc FRCS
Mrs Mary Calvert BDS FDSRCS (Ed)
MOrth MSc
Mr Joe Curry MBBS FRCS (Eng)
FRCS (Paed Surg)
Mr David Drake MB BChir FRCS FRCPCH
Mr Robert Evans BSc BDS MScD FDSRCS
(Eng) DOrth MOrth RCS (Ed)

Mr Ben Hartley BSc MB BS FRCS
ORL-HNS)
Mr Robert Hill RCS
Dr Susan Hill BM MRCP DCH
Mr Barry Jones MS FRCS
Mr David Jones FRCS FRCS Ed (Orth)
Mr Loshan Kangesu BSc MBBS FRCS
MS FRCS (Plast)
Mr Edward Kiely FRCSI FRCS
Dr Michael Mars PhD BDS FDS DOrth
Mr Fergal Monsell MSc FRCS FRCS (Orth)
Mr Hilali Noorden MA FRCS (Eng)
FRCS (Orth)
Dr Neil Shah MB BS PhD
Mr Paul Smith FRCS
Dr Virpi Smith FIBMS PhD
Mr Brian Sommerlad FRCS
Mr Stuart Tucker FRCS

Cancer theme

Molecular haematology and
cancer biology unit

Reader in molecular neurobiology
and acting head of unit

Dr Jonathan Ham BSc PhD

Emeritus professor of haematology
and oncology

Professor Judith Chessells MD FRCP
FRCPath

Visiting professor of molecular
haematology

Professor Paul Brickell BA MA PhD

Visiting professor of haematology
and oncology

Professor Ian Hann MD FRCP FRCPath

Reader in paediatric and
developmental pathology

Dr Neil Sebire BSc MB BS DM FRCPath

Senior lecturers

Dr John Anderson BA MB BS MRCP PhD
Dr Michael Hubank BA PhD
Dr Arturo Sala PhD

Honorary senior lecturers

Dr Peppy Brock MD PhD
Dr Julia Chisholm MRCPCH MA PhD
Dr Ann Goldman MB BCh FRCP

Senior academic staff 2008
continued

Dr Gill Levitt BSc MRCP DCH
Dr Raina Liesner BA MB BChir MRCP
Dr Antony Michalski MB ChB MRCP
Dr David Webb MD FRCP FRCPATH
MRCPCCH
Lecturer
Dr Owen Williams BSc PhD
Honorary lecturer
Dr Alison Leiper MB BS MRCP

Cardiorespiratory sciences theme

Theme leader
Professor John Deanfield

Cardiac Unit
The British Heart Foundation Vandervell professor of congenital heart disease and head of unit
Professor John Deanfield MD BChir FRCP
Professor of cardiothoracic surgery
Professor Marc de Leval MD FRCS (retired 2006, but still holds honorary contract)
The British Heart Foundation Joseph Levy professor of paediatric cardiac morphology
Professor Robert Anderson BSc MD FRCPATH
Professor of cardiology
Professor Philipp Bonhoeffer MD FSCAI
Professor of cardiothoracic surgery
Professor Martin Elliott MD FRCS
Professor of cardiology
Professor William McKenna BA MD DSc FRCP FESC FACC
Reader in cardiovascular imaging
Dr Andrew Taylor BA (Hons) MD MRCP(UK) FRCR
Senior lecturers
Dr Andrew Cook PhD (British Heart Foundation lecturer)
Dr Perry Elliott MBBS MD MRCP
Ms Catharina van Doorn MD FRCS (C/Th)

Honorary senior lecturers
Dr Kate Brown BChir MRCP (joint with Portex)
Dr Michael Burch MB ChB MD FRCP FRCPCH
Dr Allan Goldman MB BChB MRCP MSc
Dr Nick Piggott MB BS MRCPI MRCPCCH
Dr Philip Rees MB BChir DRCOG FRCP
Dr Margrid Schindler MD MB BS FFICI-ANZCA (joint with Portex)
Dr Ian Sullivan MB BChir FRACP
Mr Victor Tsang MB BS MS MSc FRCS FRCS (Ed)
Dr Robert Yates BSc(Med) MB Bch

Portex Anaesthesia, Intensive Therapy and Respiratory Medicine Unit
Professor of respiratory physiology and head of unit (from June 2008)
Professor Janet Stocks PhD
Smiths Medical professor of anaesthesia and critical care and head of unit (until June 2008)
Professor Michael (Monty) Mythen FRCA
Emeritus professor of paediatric anaesthesia

Professor David Hatch
Honorary reader in paediatric intensive care
Dr Quen Mok MB BS MRCP MRCPI DCH
Honorary reader in cardiovascular genetics
Dr Hugh Montgomery BSc MB BS MRCP MD
Honorary reader in respiratory paediatrics
Dr Colin Wallis MB ChB FCP (Paed) MD DCH FRCP
Senior lecturers
Dr Eleanor Main BA PhD
Dr Mark Peters MB BCh MRCP
Dr Suellen Walker MB BS MM(PM) MSc FANZA FFPMANZCA

Honorary senior lecturers
Dr Paul Aurora BSc MB BS MRCP MSc
Dr Robert Bingham MB BS FRCA
Dr Ann Black MB BS DRCOG FRCA
Dr Philip Cunningham MB BS DA FRCA
Dr David de Beer BSc MB ChB DCH FRCA
Dr Robert Dinwiddie MB ChB FRCP FRCPCH DCH
Dr Hilary Glaisyer MB BS MRCP FRCA
Dr Andreas Goebel MD PhD FRCA
Dr Mike Grocott BSc MBBS MRCP FRCA DipClinSci
Dr Louise Harding MB BS FRCS
Dr Jane Herod BSc MB BS FRCA
Dr Richard Howard BSc MB ChB FRCA
Dr Elizabeth Jackson BSc MB BS MRCP FRCA
Dr Ian James MB ChB FRCA
Dr Adrian Lloyd-Thomas MB BS FRCA
Dr Richard Martin MBBS FRCA DCHyp FRSM MSBST
Dr Angus McEwan MB ChB FRCA
Dr Reema Nandi MB BS FRCA MD
Dr Kar-Binh Ong BA MB BS FRCA
Dr Andy Petros MB BS MSc FRCP FRCPCH
Dr Christine Pierce MD BSc BBS MRCP
Dr Nick Pigott MB BS MRCPI MRCPCCH
Dr Michael Sury MB BS DA FRCA
Dr Mark Thomas BSc MBBChir FRCA
Dr David Walker BM (Hons) MRCP FRCA
Dr Isabeau Walker BSc MBBChir FRCA
Dr Glyn Williams MBBS FRCA MD

Patient care research and innovation centre
Chair of children’s nursing research and head of unit
Professor Linda Franck PhD RN RGN RSCN FRCPCH FAAN
Senior lecturer
Dr Faith Gibson MSc (Cancer Nursing) RSCN RGN CertEd RNT PhD
Honorary senior lecturer
Dr Debbie Sell SRSALT FRCSLT PhD

General and adolescent paediatrics theme

General and Adolescent Paediatrics Unit
Reader in adolescent health and acting head of unit
Dr Russell Viner FRCP FRCPCH FRACP PhD MBBS (acting head of unit from September 2008)
Emeritus professor of child health and head of unit
Professor Brent Taylor PhD MB ChB FRCP FRACP (retired September 2008)
Professor of paediatrics
Professor R Mark Gardiner MBBCh MD FRCPCH FMedSci
Honorary professor of paediatric medicines research
Professor Ian Wong BSc MSc PhD MRPharmS ILTM (HE)
Reader in molecular cell biology
Dr Sara Mole PhD
Senior lecturers
Dr Eddie Chung MBChB MRCP
Dr Hannah Mitchison PhD
Dr Alastair Sutcliffe MD MRCP MRCPCCH
Lecturers
Dr Indrani Banerjee PhD
Dr Jill Ellis PhD
Dr Kate Everett PhD
Dr Christina Georgoula MRCPCCH
Dr Camilla Salvestrini MD

Genes, development and disease theme

Theme leader
Professor Peter Scambler

Clinical and Molecular Genetics Unit
Professor of clinical and molecular genetics and head of unit
Professor Gudrun Moore BA PhD

Professor of paediatric metabolic disease and hepatology
Professor Peter Clayton MD FRCP FRCPCH
Professors of paediatric endocrinology
Professor Mehul Dattani MD FRCP
Professor Peter Hindmarsh BSc MB MD BS FRCP (joint with UCL Medicine)
Professor of clinical genetics and dysmorphology
Professor Raoul Hennekam MD PhD
Emeritus professor of paediatric genetics
Professor Marcus Pembrey BSc MB BS MD FRCP FRCPCH FMedSci
Emeritus professor of child health and growth
Professor Michael Preece MD MSc FRCP FRCPCH
Emeritus professor of molecular genetics
Professor Susan Malcolm PhD FRCPATH
Emeritus professor of molecular embryology
Professor Marilyn Monk
Emeritus professor of biochemistry
Professor Bryan Winchester MA PhD
Honorary professor of neonatal paediatrics
Professor John Wyatt BSc MB BS DCH FRCP (joint with UCL Paediatrics and Child Health)
Reader in paediatric endocrinology and Wellcome Trust senior fellow in clinical science
Dr John Achermann MA MD MRCP MRCPCCH (joint with UCL Medicine)
Reader and honorary consultant in clinical genetics
Dr Maria Bitner-Glindzicz BSc MB BS PhD FRCP
Reader in genetics and fetal medicine
Dr Lyn Chitty BSc PhD MB BS MRCOG

Senior lecturer
Dr Elizabeth Carrey PhD
Honorary senior lecturers
Dr Angela Barnicoat BSc MD DRCOG FRCP
Dr Caroline Brain MB MD FRCP FRCPCH
Dr Maureen Cleary MD MRCP MB ChB
Dr Ying Foo PhD
Dr Barbara Gibbons BSc FRCPATH
Dr Stephanie Grunewald MD
Dr Khalid Hussain MB ChB MSc MRCP MRCPCCH
Dr Richard Jones BSc MBChB DPhil MRCPATH
Dr Melissa Lees MRCP MSc MD FRACP
Dr Alison Male BSc MBBS MRCP
Mrs Gail Norbury MA MSc MRCPath
Dr Elisabeth Rosser FRCP BSc MB BS
Dr Ashok Vellodi FRCP FRCPCH
Dr Louise Wilson BSc MB ChB FRCP
Lecturers
Dr Shamima Rahman MA MRCP MRCPCCH PhD
Dr Owen Williams PhD (joint with Molecular Haematology and Cancer Biology)

Molecular Medicine Unit
Professor of molecular medicine and head of unit
Professor Peter Scambler BSc MB ChB FRCPATH FMedSci
Professor of medical and molecular genetics and Wellcome Trust senior research fellow and honorary consultant in clinical genetics
Professor Philip Beales BSc MD MRCP
Reader in molecular cardiology
Dr Paul Riley BSc PhD

Senior academic staff 2008
continued

Medical Molecular Biology Unit
Professor of human genetics and head of unit
Professor David Latchman MA PhD DSc FRCPath FRSA
Reader in molecular and cellular biology
Dr Anastasis Stephanou BSc PhD
Honorary senior lecturer
Dr Richard Knight MD PhD
Lecturer
Dr Vishwanie Budhram-Mahadeo BSc PhD

Nephro-urology Unit
Professor of nephrology and head of unit
Professor Adrian Woolf MA MD FRCPCH
Emeritus professors of paediatric nephrology
Professor Martin Barratt FRCP CBE
Professor Michael Dillon FRCP FRCPCH
Professor of nephrology
Professor Robert Kleta MD PhD
Reader in paediatric nephrology
Dr Lesley Rees MD FRCP FRCPCH
Honorary readers in paediatric nephrology
Dr Richard Trompeter FRCP FRCPCH
Dr William van’t Hoff BSc MD FRCP FRCPCH
Senior lecturer
Dr Paul Winyard BM BCh MA PhD FRCPCH
Honorary senior lecturers
Dr Detlef Böckenhauer MD PhD
Mr Francis Calder MB FRCS (joint with Guy’s and St Thomas’ NHS Foundation Trust)
Mr Peter Cuckow FRCS (joint with The Middlesex Hospital)
Mr Patrick Duffy MB FRCS
Mr Geoff Koffman MBChB FRCS (joint with Guy’s and St Thomas’ NHS Foundation Trust)

Miss Rozanne Lord MB BS FRCS (joint with Royal Free Hampstead NHS Trust)
Mr Nizam Mamode BSc MBChB MD FRCS(Gen) (joint with Guy’s and St Thomas’ NHS Foundation Trust)
Dr Stephen Marks MBChB MSc MRCP(UK) DCH FRCPCH
Mr Imran Mushtaq MD FRCS
Mr John Taylor MD FRCS (joint with Guy’s and St Thomas’ NHS Foundation Trust)
Dr Kjell Tullus MD PhD FRCPCH
Honorary lecturers
Ms Eileen Brennan RGN RSCN ENB 147 DMS MSc
Mr Divyesh Desai MB MChir
Dr Sarah Ledermann MRCP

Infection and immunity theme

Theme leader
Professor Christine Kinnon

Immunobiology Unit
Professor of vaccinology and immunology, director of clinical research and development and head of unit
Professor David Goldblatt MB ChB PhD FRCP FRCPCH
Professor of immunology
Professor Robin Callard BSc MSc PhD DipMath BA (Maths) DSc
Professor of experimental immunology
Professor Tessa Crompton PhD
Professor of paediatric dermatology
Professor John Harper MD FRCP FRCPCH
Emeritus professor of molecular immunology
Professor Malcolm Turner DSc (Med) PhD FRSC FRCPath
Honorary senior lecturer
Dr David Atherton MA MB BChir FRCP
Lecturer
Dr Wei-Li Di MB BS PhD

Infectious Diseases and Microbiology Unit
Professor of infectious disease and immunology and head of unit
Professor Nigel Klein BSc MB BS MRCP PhD FRCPCH
Honorary professors
Professor Diana Gibb MBChB (Hons) MRCP MD MSc Dip Obs FRCPCH
Professor Alan Phillips PhD FRCPCH
Senior lecturer
Dr Mona Bajaj-Elliott BSc PhD
Dr Paul Brogan BSc (Hons) MBChB (Hons) MRCPCH MSc PhD (joint with Rheumatology Unit)
Honorary senior lecturers
Dr David Cubitt MSc PhD
Dr Susan Hall BSc PhD
Dr John Hartley BSc MB BS MSc DTM&H MRCP FRCPath
Dr Marian Malone MB BCh BAO FRCPath
Dr Karyn Moshai MBChB MRCP MRCPCH DTM&H
Dr Vas Novelli FRACP FRCP FRCPCH
Dr Delane Shingadia MBBS MPh MRCP FRCPCH
Dr James Soothill MD MB BS FRCPath
Clinician scientist
Dr Helen Baxendale BSc MB BS PhD MRCP MRCPCH
Honorary clinical senior lecturer
Dr Garth Dixon BSc MB ChB PhD MRCP FRCPath

Molecular Immunology Unit
Professor of molecular immunology and head of unit
Professor Christine Kinnon BSC PhD
Professor of paediatric immunology
Professor Bobby Gaspar BSc MB BS MRCP
Professor of paediatrics and immunology and Wellcome Trust senior fellow
Professor Adrian Thrasher MB BS PhD FRCP FMedSci

Professor of human molecular genetics
Professor Robin Ali BSc PhD (joint with Institute of Ophthalmology)
Reader in molecular biology
Dr Kenth Gustafsson PhD
Reader in transplantation immunology
Dr Persis Amrolia BSC MBBS MRCP MRCPath PhD
Reader in molecular genetics
Dr Stephen Hart BSc MSc PhD
Reader in stem cell transplantation
Dr Paul Veys MBBS FRCP FRCPath FRCPCH
Senior lecturer
Dr Waseem Qasim BMedSci MBBS MRCP MRCPCH PhD
Honorary senior lecturers
Dr Cathy Cale BSc MB ChB PhD MRCP MRCPCH MRCPath
Dr Graham Davies MA FRCP FRCPCH
Dr Alison Jones MRCP PhD
Lecturers/clinician scientists
Dr Siobhan Burns MB BCh MRCPI PhD

Rheumatology Unit
Reader in paediatric rheumatology and head of unit
Dr Lucy Wedderburn BA PhD MB BS FRCP MRCPCH
Professor of paediatric rheumatology and director of the centre of paediatric and adolescent rheumatology
Professor Patricia Woo CBE MB BS BSc PhD FRCP FRCPCH FMedSci
Honorary senior lecturers
Dr Paul Brogan BSc (Hons) MBChB (Hons) MRCPCH MSc PhD (joint with Infectious Diseases and Microbiology)
Dr Clarissa Pilkington BSc MBBS MRCPCH
Dr Nathan Hasson MBChB FRCPCH
Lecturer
Dr Bin Gao MMed PhD

Neurosciences and mental health theme

Theme leader
Professor Francesco Muntoni

Audiological Medicine Unit (moved to UCL Ear Institute 2008)
Professor of audiological medicine and head of unit
Professor Linda Luxon BSc MB BS FRCP
Honorary senior lecturers
Dr Ewa Raglan Med Dip (Hons) LRCP MRCS FRCS
Dr Doris-Eva Bamiou ENTspec MSc (Distinction) PhD

Behavioural and Brain Sciences Unit
Professor of behavioural and brain sciences and head of unit
Professor David Skuse MD FRCP FRCPsych FRCPCH
Professor of developmental psychopathology
Professor Peter Hobson MB BChir PhD CPsychol FRCPsych
Professor of neurodevelopment disorders
Professor Tony Charman MA MSc PhD CClinPsy (left Dec 2008)
Honorary senior lecturers
Dr Danya Glaser MB BS DCH FRCPsych
Dr Jon Goldin MB BS
Dr Jill Hodges BA MSc PhD
Dr Dasha Nicholls MB BS MRCPsych

Developmental Biology Unit
Reader in developmental biology and head of unit
Dr Patrizia Ferretti PhD
Reader in developmental biology
Dr Jane Sowden BA PhD
Reader in craniofacial developmental biology and genetics
Dr Phil Stanier PhD (joint with Neural Development Unit)

Honorary senior lecturer
Dr Agn s Bloch-Zupan BChD
MBiolMedSc Specialist Certificate PhD

Developmental Cognitive Neuroscience Unit
Professor of developmental cognitive neuroscience and head of unit
Professor Faraneh Vargha-Khadem MA PhD
Visiting professor
Professor Mortimer Mishkin MA PhD
Reader in developmental cognitive neuroscience
Dr Torsten Baldeweg MD
Reader in developmental cognitive neuroscience
Dr Michelle de Haan PhD
Honorary lecturers
Dr Luc Berthouze BSc Msc PhD
Dr Margaret Mayston BSc Msc PhD
Dr Peter Rankin BSc Msc DClinPsy
Lecturer
Dr Federique Liegeois BSc MSc PhD

Dubowitz neuromuscular centre
Professor of paediatric neurology and head of unit
Professor Francesco Muntoni MD FMedSci
Reader in cell biology
Dr Jennifer Morgan PhD (joined February 2008)

Neural Development Unit
GlaxoWellcome professor of developmental neurobiology, head of unit and director
Professor Andrew Copp MBBS DPhil FRCPath FMedSci
Reader in craniofacial developmental biology and genetics
Dr Phil Stanier PhD (Joint with Developmental Biology Unit)
Reader in development neurobiology
Dr Andrew Stoker PhD

Senior academic staff 2008
continued

Wellcome Trust University Award Fellow

Dr Juan Pedro Martinez-Barbera BA PhD

Senior lecturer

Dr Alan Burns BSc PhD

Lecturer

Dr Nick Greene BA PhD

Clinician scientists

Dr Thomas Jacques BA MA MB

BChir PhD MRCP

Dr Nikhil Thapar BSc BM MRCP(UK)

MRCPCH(UK) PhD

Neural Plasticity Unit

Professor of clinical neurophysiology

and head of unit

Professor Martin Koltzenburg MD FRCP

Neurosciences Unit

Prince of Wales’s chair in childhood

epilepsy and head of unit

Professor Helen Cross MB ChB MRCP

Professor of childhood epilepsy

Professor Brian Neville FRCP FRCPCH

Professor of paediatric neurosurgery

Professor Richard Hayward FRCS

Professor in paediatric neurosciences

and international child health

Professor Charles Newton MB

ChB MD MRCP

Professor of paediatric neurology

Professor Fenella Kirkham MA MB BCh

MRCP FRCP

Honorary professor

Professor Sheena Reilly BappSci PhD

Visiting professor

Professor David Taylor MD FRCP

FRCPsych (Hons) FRCPCH

Reader in paediatric neuroscience

Dr Rod Scott MB ChB PhD MRCP

MRCPCH

Senior lecturer

Dr Vijeya Ganesan MB ChB MD MRCP

MRCPCH

Honorary senior lecturers

Dr Sarah Aylett MB BS MRCP FRCPCH

Dr Martin Bax MB BCh DM MA FRCP

(Hons) FRCPCH

Dr Stewart Boyd MD FRCPCH

Dr Lucinda Carr MD MBChB DCH

FRCPCH

Dr Hilary Cass BSc FRCP FRCPCH MILT

Dr Carlos de Sousa MB BS BSc

MD FRCP FRCPCH

Dr Catherine DeVile MA MB BS MD

MRCP MPCPCH

Dr Jane Evans MD

Miss Silvia Gatscher Dr med univ

Dr Brian Harding MA DPhil BM

BCh FRCPath

Mr William Harkness FRCS

Dr Cheryl Hemingway MBChB BA

FCP FRCPCH MMed

Dr Isabel Heyman BSc MB BS

MRCPsych PhD

Dr Jeremy Parr MBCHB MD MRCPCH

Dr Matthew Pitt MD MRCP

Dr Prab Prabhakar MBBS MRCPCH DCH

Dr Robert Robinson MA MBBS MRCP

Dr Alison Salt MSc DCH FRCAP FRCPCH

Dr Patricia Sonksen MD FRCP DObst

MRCOG

Mr Dominic Thompson MB BS BSc

FRCS (SN)

Dr Sophie Varadkar BA MB BCh

BAO DCH MSc MRCPi

Dr Steve White MA DPhil MB BChir

MRCPsych FRCP

Honorary lecturer

Dr Naomi Dale MA MB PhD

C.Psychol (BPS)

Ulverscroft research group

Reader in ophthalmic epidemiology

and director of the Ulverscroft visual

research group

Dr Jugnoo Rahi MSc PhD FRCOphth

Honorary professors

Professor Richard Abadi PhD

Professor Tony Moore FRCOphth

Honorary reader

Miss Isabelle Russell-Eggitt MA FRCS

FRCOphth

Senior lecturer

Dr Jane Sowden BA PhD

Principle research fellow

Dr Richard Clement PhD BSc

Honorary senior lecturers

Mr Kanwal Nischal FRCOph

Dr Dorothy Thompson BSc PhD MBCO

Honorary lecturer

Dr Alki Liasis PhD CPSM

Radiology and Physics Unit

Rank professor of biophysics and

head of unit

Professor David Gadian DPhil FMedSci

(chair of biophysics)

Professor of paediatric imaging

Professor Isky Gordon FRCR

FRCP FRCPCH

Honorary professor of medical physics

Professor Andrew Todd-Pokropek PhD

(joint with Department of Medical Physics

and Bioengineering, UCL)

Honorary senior lecturers

Dr Alex Barnacle BA MRCP FRCR

Dr Lorenzo Biassoni MD FEBNM

Dr Tim Cox FRCR

Dr Rose de Bruyn DMRD FRCR

Dr Marian Easty MBBS MRCP FRCR

Dr Melanie Hiorns MB BS MRCP FRCR

Dr Wui Khean ‘Kling’ Chong MD MRCP

FRCR

Dr Keiran McHugh DCH FRCR FRCPI

Dr Amaka Offiah MRCP FRCR PhD

Dr Oystein Ølsen cand.med (Norway) PhD

Dr Catherine Owens MRCP FRCR

Dr Derek Roebuck BMedSc FRCR

FRANZCR FHKAM (Radiology)

Dr Dawn Saunders MB MD FRCR

Senior lecturers

Dr Christopher Clark PhD

Dr Mark Lythgoe PhD

Lecturer

Dr Martin King PhD

Population health sciences theme

Theme leader

Professor Carol Dezateux

Centre for international health

and development

Professor of international child health

and head of unit

Professor Anthony Costello MA MB BChir

FRCP FRCPCH

Professor of child health and nutrition

Professor Sally Grantham-McGregor MB

BS MD DPH FRCP

Professor of disability studies

Professor Sheila Wirz MEdFCST PhD

Professor of international child health

Professor Andrew Tomkins MB BS FRCP

FRCPCH FFPHM FMedSci

Senior lecturer

Dr Therese Hesketh MFPHM MRCPCH

PhD MPH DTM&H DCH

Honorary senior lecturers

Dr Richard Lansdown MA PhD

DipPsych FBPsS Cpsychol

Dr Felicity Savage MS BM BCh FRCP

Lecturers

Dr Sarah Barnett PhD

Dr Zelee Hill PhD

Dr Audrey Prost PhD

Dr Andrew Seal PhD

Paediatric Epidemiology and

Biostatistics Unit

Professor of epidemiology and

head of unit

Professor Carol Dezateux MD MSc FRCP

FRCPCH FFPHM FMedSci

Professor of medical statistics

Professor Timothy Cole BA BPhil MA PhD

ScD HonFRCPCH FMedSci

Professor of clinical epidemiology

Professor Ruth Gilbert MSc MD MRCP

Professors of public health and

epidemiology

Professor Christine Power BA MSc PhD

MFPHM

Professor Catherine Law OBE MD FRCP

FRCPCH FFPH

Professor of paediatric epidemiology

Professor Marie-Louise Newell MSc

PhD MFPHM

Professor of epidemiology

Professor Catherine Peckham CBE MD

FFPHM FRCP FRCPCH FRCPath FRCOG

FMedSci

Honorary professors

Professor Diana Gibb MBChB (Hons)

MRCP MD MSc Dip Obs FRCPCH

Professor Clyde Herztman MD BSc MSc

FRCP

Professor Heather Joshi MA Mlitt

Professor Orly Manor BSc MSc PhD

Professor Brent Taylor PhD MB ChB

FRCP FRACP

Reader in epidemiology and

public health

Dr Elina Hypponen MSc MPH PhD

Reader in ophthalmic epidemiology

and director of the Ulverscroft visual

research group

Dr Jugnoo Rahi MSc PhD FRCOphth

Senior lecturers

Dr Helen Bedford BSc MSc PhD FFPH

FRCPCH

Dr Mario Cortina Borja BSc MSc PhD

Dr Patricia Tookey BA MSc PhD MFPHM

Dr Angela Wade BSc CStat MSc PhD ILTM

Honorary senior lecturers

Dr Catherine Bull MA MB BChir MRCP DCH

Dr David Elliman FRCPCH MFPHM

Dr Carlo Giaquinto MD

Dr Elizabeth Miller BSc MB BS

MFPH FRCPath

Dr Angus Nicoll CBE MSc FRCP

FFPHM FRCPCH

Dr Sandy Oliver BA PhD

Dr Nigel Rollins MB BCH MRCP

DCH MD FRCPch

Dr Christopher Wren MB BCh FRCP

Lecturer

Dr Claire Thorne BA MSc PhD

The planning and executive committee of the UCL Institute of Child Health (ICH)

Director
Professor Andrew Copp MBBS DPhil FRCPath FMedSci

Vice-dean and theme leader Genes, Development and Disease
Professor Peter Scambler BSc MB ChB FRCPath FMedSci

Director of Clinical Research and Development
Professor David Goldblatt MB ChB PhD FRCP FRCPCH

Director of learning and teaching
Professor Sheila Wirz MEdFCST PhD

Nuffield professor of paediatric surgery
Professor Agostino Pierro MD FRCS (Eng) FRCS (Ed)

Theme leader, Biochemical and Nutritional Sciences
Professor Alan Lucas MA MB BChir FRCP MD FRCPCH FMedSci

Theme leader, Cardiorespiratory Sciences
Professor John Deanfield MD BChir FRCP

Head of unit, General and Adolescent Paediatrics
Professor Brent Taylor PhD MB ChB FRCP FRACP (retired September 2008)

Dr Russell Viner (Acting head of unit from September 2008)

Theme leader, Infection and Immunity
Professor Christine Kinnon BSc PhD

Theme leader, Neurosciences and Mental Health
Professor Francesco Muntoni FMedSci

Theme leader, Population Health Sciences
Professor Carol Dezateux MD MSc FRCP FRCPCH FFPHM FMedSci

Chief executive, Great Ormond Street Hospital
Dr Jane Collins MSc MD FRCP FRCPCH

Medical director, Great Ormond Street Hospital
Mr Rob Evans BSc BDS MScD FRSEFRCS

Representative from ICH Research Assessment Exercise Committee
Professor John Deanfield MD BChir FRCP

Non-executive members

Director of financial services
Mr Bas Ahsan BSc FCCA

Institute manager
Justine Abbot (joined September 2008)

Head of research and development office
Ms Emma Pendleton BSc MSc (until April 2008)

Ms Jo Southern BSc MSc (from September 2008)

Head of estates and facilities
Mr Nigel Seymour FIMLS

The Board of Great Ormond Street Hospital for Children NHS Trust

Chair
Sir Cyril Chantler MA MD FRCP FRCPCH FMedSci

Executive directors

Chief executive
Dr Jane Collins MSc MD FRCP FRCPCH

Deputy chief executive
Mr Trevor Clarke BSc (Hons) MSc (until August 2008)

Chief operating officer
Ms Fiona Dalton (from August 2008)

Chief finance officer
Mrs Claire Newton MA ACA MCT

Co-medical director
Mr Robert Evans BSc BDS MScD FRSEFRCS

Co-medical director
Dr Barbara Buckley (from June 2008)

Director of nursing, education and workforce development
Professor Judith Ellis MBE PhD MSc BSc (Hons) RSCN RGN RNT PGCE

Non-executive directors
Ms Yvonne Brown LLB (from June 2008)

Professor Andrew Copp MBBS DPhil FRCPath FMedSci

Dr Gillian Dalley BA MA (Econ) PhD

Ms Helen Dent Msc BEd

Mr Andrew Fane MA FCA

Mr Charles Tilley FCA

Non-Trust Board members

Director of clinical research and development
Professor David Goldblatt MB ChB PhD MRCP FRCPCH

Director of information and communication technology
Mr Mike Large (from October 2008)

Director of estates and facilities
Mr Mike Ralph CEng BEng (Hons) FIMechE FIHEEM

Director of redevelopment
Mr William McGill MSc

Director of partnership development
Ms Maria Collins SRN MFPH FFPH

Interim director of human resources

Executive director, Great Ormond Street Hospital Children’s Charity
Mr Charles Denton (until May 2008)

Mr Tim Johnson (from May 2008)

Administration 2008
continued

**Special trustees for Great Ormond
Street Hospital Children’s Charity**

Chairman of special trustees

Mr John Ballard CB

Trustees

Ms Susan Burns

Ms Margaret Casely-Hayford

Mr Richard Glynn

Mr Alan Charles Hodson

Mr Thomas Hughes-Hallett

Mr Hugo William John Llewelyn

Associate trustees

Mr David Doubble MA FRICS OBE

Mr David Elms MA FCAA

Mr Andrew Fane MA FCA

Mr Gary Steinberg MSc FRSC

Mr Michael Weston

**Trustees of the Child Health
Research Appeal Trust**

Chairman

Mr Andrew Fane MA FCA

Treasurer

Mr Hugh Stevenson

Dr Jane Collins MSc MD FRCP FRCPCH

Professor Andrew Copp MBBS DPhil

FRCPATH FMedSci

Professor David Goldblatt MB ChB PhD

FRCP FRCPCH

Professor David Latchman MA PhD DSc

FRCPATH FRSA

Mr Andrew Ross MA MBA

Jay is eight, and his favourite superhero is Batman. He is being treated for Hirschprung’s disease but is looking forward to going home to Wales soon.



**UCL Institute
of Child Health**
30 Guilford Street
London WC1N 1EH
020 7242 9789

**Great Ormond Street
Hospital for Children
NHS Trust**
Great Ormond Street
London WC1N 3JH
020 7405 9200
www.gosh.nhs.uk

Produced by Great Ormond Street
Hospital Marketing and Communications

Designed by Wardour, London
+44(0)20 7016 2555

Photography by Richard Learoyd
and Elsa Gomez-Garcia

Printed by Granite, utilising vegetable-
based inks on Revive 50:50 silk.

Thank you to everyone who was
interviewed or gave permission for
their picture to be used for this review,
as well as the many members of the
UCL Institute of Child Health and
Great Ormond Street Hospital staff who
helped during its production. See also
www.gosh.nhs.uk for information on
papers published during the year and
the online version of this review.

 **Mixed Sources**
Product group from well-managed
forests, controlled sources and
recycled wood or fibre
www.fsc.org Cert no. TT-COC-002238
© 1996 Forest Stewardship Council