Bkurkitt
Symposium
23 - 24 June 2011
Denis Parsons Burkitt
Irish by birth, Trinity by the grace of God — a life celebrated
Dear Friends and Colleagues,

I would like to take this opportunity to welcome you to Dublin to celebrate the one hundredth year anniversary of the birth of Denis Parsons Burkitt, one of the great physician scientists of the twentieth century who had a tremendous ability to turn simple clinical observation into major scientific discovery. We are fortunate, not only to be hosting his centenary at the University of Dublin, Trinity College, where he graduated in medicine in 1935, but also as this Symposium is part of the School of Medicine Tercentenary celebrations.

The Symposium will function as an exclusive forum for family and friends of Denis together with international experts to share and compare experiences in relation to the lymphoma that is named after him. With this in mind, the first day of the conference will mainly focus on Denis, the man, physician scientist and his main legacy, the discovery and early treatment strategies of the commonest cancer in sub-Saharan African children.

The second day will focus on recent developments in terms of diagnostics, prognostic markers, risk-stratification methodologies and clinical trial outcomes. The molecular pathobiology of Burkitt lymphoma will be addressed by some of the world’s leading experts and true clinical discussion between practicing physicians and researchers on unresolved issues will follow. At the end of the second day participants will have the advantage of discussing and debating the unresolved issues, especially those most relevant in third world countries.

During the Symposium there will be, for the first time, an exhibition of a selection of key artefacts that were pivotal in nailing down the association of lymphoma incidence and geography.

I hope you find the programme exciting, as I do believe it will provide a meaningful platform providing up-to-date information, not only for basic / translational science researchers but also for clinical haemato-oncologists, nurses and students alike.

I look forward to meeting you over the next two days and to celebrate the life of Denis Parsons Burkitt in the beautiful environs of Trinity College.

Professor Owen P. Smith
Chair of Haematology, Trinity College Dublin.
This Symposium has been made possible by the generous support of:

- Roche
- GALEN
- Astellas
- Laboratoires Genopharm
- Novartis Oncology
- Fannin
- Trinity College Dublin
- The University of Dublin

Mrs Olive Burkitt and daughters Judy, Cas and Rachel
Trinity Foundation Office
Maurice Ward Group, especially Chris Primrose for the safe delivery of the donation of Dr Burkitt’s papers to Trinity College

Thank you
**PROGRAMME DAY 1  THURSDAY, 23 JUNE, 2011**

08.30 - 09.00 Registration / Refreshments in the Anatomy Building

09.00 - 09.30 Welcome and Introduction

- Professor Owen Smith, Chair of Haematology, University of Dublin, Trinity College, Ireland
- Dr Mary Robinson, Chancellor of the University of Dublin and Former President of Ireland;
- Prof Dermot Kelleher Vice-Provost of Medical Affairs TCD; Members of Dr Burkitt’s family - Mrs Olive Burkitt, Mrs Cas Boddam Whetham, Mrs Judy Howard

09.30 - 10.00 Session 1: Historical Perspectives [1]  
Chair - Professor Owen Smith, University of Dublin, Trinity College, Ireland

10.00 - 10.20 Denis Parsons Burkitt — Irish by birth, Trinity by the grace of God  
Professor Owen Smith  
University of Dublin, Trinity College, Ireland

10.20 - 10.45 Nailing Burkitt lymphoma — time with Denis in Africa  
Professor Dennis Wright  
Former Histopathologist at Makerere Medical School, Uganda

10.45 - 11.00 Burkitt lymphoma and the discovery of the Epstein-Barr virus  
Professor Sir Anthony Epstein, CBE, FRSE  
Nuffield Department of Medicine, University of Oxford, UK

11.00 - 11.15 Into and out of Africa — taking over from Denis Burkitt  
Professor John Ziegler  
University of California – San Francisco, USA

11.15 - 11.45 Q & A

11.45 - 12.00 Lunch

13.00 - 13.45 Session 2: Historical Perspectives [2]  
Chair - Professor Owen Smith, Dublin, Ireland

13.00 - 13.25 Living and dealing with Burkitt lymphoma in Tanzania  
Dr Trish Scanlan  
The Ocean Road Cancer Institute, Tanzania

13.25 - 13.50 Burkitt lymphoma in Uganda: An update on disease status  
Dr Jackson Orem  
Uganda Cancer Institute, Kampala, Uganda

13.50 - 14.20 Epidemiological insights into the pathogenesis of endemic and non-endemic Burkitt lymphoma  
Professor Ian Magrath  
International Network for Cancer Treatment and Research, Belgium

14.00 - 14.40 Prognostic factors and current treatment strategies and outcome results in children and adolescents with Burkitt lymphoma/leukaemia  
Professor Mitchell S Cairo  
Maria Fareri Children’s Hospital at Westchester Medical Center, New York Medical College, New York, USA

14.40 - 15.15 Burkitt lymphoma in adults  
Professor David Linch  
University College London, UK

15.15 - 15.40 Q & A

15.40 - 16.00 Refreshments

**PROGRAMME DAY 2  FRIDAY, 24 JUNE, 2011**

08.30 - 09.00 Registration / Refreshments in the Anatomy Building

09.00 - 09.40 Session 3: Molecular Insights  
Chair - Professor Finbarr Cotter, London, UK

09.00 - 09.40 Is Burkitt lymphoma an infectious disease — a new role for EBV?  
Professor Georg Bornkamm  
Institute of Clinical Molecular Biology and Tumour Generics, German Research Centre for Environmental Health, Germany

09.40 - 10.20 New insights into the molecular pathogenesis of Burkitt lymphoma  
Professor Riccardo Dalla-Favera  
Institute for Cancer Genetics and H. Irving Comprehensive Cancer Centre, Columbia University, New York, USA

10.20 - 11.00 Genomic approaches to molecular diagnosis and molecular targets in Burkitt lymphoma/leukaemia  
Professor Louis Staudt  
Centre for Cancer Research, National Cancer Institute, Maryland, USA

11.00 - 11.20 Q & A

11.20 - 11.40 Refreshments

11.40 - 13.15 Session 4: Therapeutic Strategies (1)  
Chair - Professor Ian Hann, Cork, Ireland

11.40 - 12.20 Staging and response evaluation of Burkitt lymphoma  
Professor John Sandlund  
St Jude Children’s Research Hospital, Tennessee, USA

12.20 - 13.00 Therapeutic developments Burkitt lymphoma/leukaemia since 1956  
Professor Ross Pinkerton  
Queensland Children’s Cancer Centre, Brisbane, Australia

13.00 - 13.15 Q & A

13.15 - 14.00 Lunch

14.00 - 15.40 Session 5: Therapeutic Strategies (2)  
Chair - Dr Elizabeth Vandenberghe, Dublin, Ireland

14.00 - 14.40 Prognostic factors and current treatment strategies and outcome results in children and adolescents with Burkitt lymphoma/leukaemia  
Professor Mitchell S Cairo  
Maria Fareri Children’s Hospital at Westchester Medical Center, New York Medical College, New York, USA

14.40 - 15.20 Burkitt lymphoma in adults  
Professor David Linch  
University College London, UK

15.20 - 15.40 Q & A

15.40 - 16.00 Refreshments
16.00 - 18.15  SESSION 6: Therapeutic Strategies & Beyond  
Chair - Professor Ian Magrath, Brussels, Belgium

16.00 - 16.40  Vaccine therapy for lymphomas — are we there yet?  
Associate Professor Stephen Schuster  
University of Pennsylvania Medical School, USA

16.40 - 17.10  Infection and cancer: the legacy of Burkitt  
Dr Joe Harford  
Director of the Office of International Affairs, National Cancer Institute, Bethesda, MD, USA

17.10 - 17.50  Burkitt lymphoma — is it possible to cure more with less?  
Round table discussion with Professor Ian Magrath, Professor John Ziegler,  
Dr Joe Harford and Professor Owen P Smith

17.50 - 18.05  Closing remarks and farewell  
Professor Owen P Smith

DENIS PARSONS BURKITT 1911 - 1993  
IRISH BY BIRTH, TRINITY BY THE GRACE OF GOD – A LIFE CELEBRATED  
A GREAT TWENTIETH-CENTURY IRISH DOCTOR
Burkitt was exposed to x-rays, he thought it unwise to work close to the toxic limits of the drugs, Burkitt discovered that not only was he curing the chemotherapy because in most patients, radiotherapy had also been used. Since monitoring patients was so difficult begging, clothed in the appearance of offering opportunities. In western countries it was difficult to assess the effect of patients. In giving Burkitt their drugs free of charge, he would use them and report on their efficacy. As Burkitt noted, logic was that due to the lack of radiotherapy equipment and that none of his patients

Water and where malaria was endemic. The malaria caused the suppression of childhood immune systems and this belt’ mapped by Burkitt in Africa corresponded to the areas where mosquitoes thrived, i.e., low level high heat and

Epstein-Barr virus was the first to be shown to be oncogenic in humans. Following this it was noted that the ‘lymphoma belt’ mapped by Burkitt in Africa corresponded to the areas where mosquitoes thrived, i.e., low level high heat and

While attending a UK lecture, Burkitt met young virologist Doctor, now Sir Tony Epstein. Burkitt sent Epstein some published in Cancer in 1961 that would make a mark in the medical world.

"Spontaneous rupture of abdominal viscera” in 1947.

While serving as a ship’s surgeon in 1938, Burkitt decided he would be a surgeon first and a missionary second and hoped to work with the Colonial Service in West Africa. During his five year sojourn as an army surgeon during World War Two, he married Olive Mary Rogers, a trainee nurse he had met while working as the Resident Surgical Officer at the Prince of Wales Hospital in Plymouth.

Despite having his application to the Colonial Office being turned down on account of his loss of sight in one eye, Burkitt passed a medical and enlisted into the Royal Army Medical Corps. He was posted to a military hospital in Mombasa. During his 18 months as an army surgeon he travelled a great deal in East Africa learning Swahili in the process. Towards the end of the war he applied again to the Colonial Office requesting work as a medical officer in Uganda. This time his application was accepted.

In 1957 Burkitt was asked to examine a five year old boy in the paediatric ward who exhibited tumours in his neck and head. A few weeks he saw another child with the same pattern of malignant jaw tumours. The tumours were extremely fast growing and those affected died within weeks. Believing he was witness to a previously undescribed cancer he began to contact a number of hospitals in Africa.

In 1961 along with colleagues Edward Williams and Clifford Nelson, Burkitt undertook a 16,000km research travel visiting at least 56 hospitals in East and Southern Africa. Their mission was to study the occurrence and distribution of lymphomas. Much to their delight, they visited some of the places Livingstone had worked a century before them. With meticulous data collection along the way they soon realised that the lymphoma was correlated with the same temperature and rainfall zones as malaria leading them to initially believe that the lymphoma may have been linked with the distribution of certain insect carriers as malaria. Always one to conduct his research in the most frugal of manners, the entire expedition cost £678.00 according to Burkitt’s biographer Brian Kellock.

Burkitt’s first published his research in The British Journal of Surgery in 1958. The publication went unnoticed. It was his article, co-written with Greg O’Conor, entitled ‘Malignant tumours in African children: A clinical syndrome’ and published in Cancer in 1961 that would make a mark in the medical world.

While attending a UK lecture, Burkitt met young virologist Doctor, now Sir Tony Epstein. Burkitt sent Epstein some tumour samples and after three years of searching, Epstein’s team demonstrated a virus in the tumour cells. The Epstein-Barr virus was the first to be shown to be oncogenic in humans. Following this it was noted that the ‘lymphoma belt’ mapped by Burkitt in Africa corresponded to the areas where mosquitoes thrived, i.e., low level high heat and water and where malaria was endemic. The malaria caused the suppression of childhood immune systems and this allowed the Epstein-Barr virus to stimulate lymphoid cells to undergo malignant transformation.

Using creative thinking, Burkitt convinced the pharmaceutical companies to supply chemotherapeutic agents. His logic was that due to the lack of radiotherapy equipment and that none of his patients had been exposed to x-rays, and relying solely on medication, the drug companies could assess what effect their drugs were truly having on patients. In giving Burkitt their drugs free of charge, he would use them and report on their efficacy. As Burkitt noted, "Chemotherapeutic agents were obtained free of charge from the manufacturers who were approached in an attitude of begging, clothed in the appearance of offering opportunities. In western countries it was difficult to assess the effect of chemotherapy because in most patients, radiotherapy had also been used." Since monitoring patients was so difficult he thought it unwise to work close to the toxic limits of the drugs, Burkitt discovered that not only was he curing the children of their tumours, he was doing it with drug doses so low that they caused none of the expected side effects. Expert pathologists from around the globe soon acknowledged that this was a newly described disease and coined the name ‘Burkitt lymphoma’ to describe this particular type of tumour. The enormity of Burkitt’s contribution can be assessed from the statistic that Burkitt lymphoma accounts for over half of the childhood cancers in Africa.

Denis Burkitt is one of the few medical doctors who won world acclaim for two medical discoveries. The first, as summarised above, was to uncover the causes and pioneer a cure for the cancer known now as Burkitt lymphoma. The second was to confirm the link between many Western diseases and the lack of fibre in the Western diet.

It was naval surgeon Captain T. L. Cleave who first introduced Burkitt to his theory that refined carbohydrates was the source of many chronic diseases in the Western world. After meticulously researching the world wide geographical distribution of bowel cancer, he hypothesised that the deficiency of fibre in the Western diet was the major factor responsible for the high prevalence of this disease in affluent societies. Although at first not considered to be notable, his publications on the role of fibre in the diet increasingly became cited over the next ten years. By 1980 his works were considered ‘citation classics’ on the subject of bowel cancer. As his publications on Burkitt lymphoma by this time were also considered ‘citation classics’ it is worth mentioning that not many men have achieved this distinction in two unrelated fields of medical research.

Burkitt was the recipient of many prestigious international awards throughout his career. In 1982 he received the Bristol-Myers Award jointly with Tony Epstein for the work they had done in discovering and establishing the importance of the virus that became known as the Epstein-Barr Virus. That same year Burkitt received the Mott General Motors Award. Denis Burkitt was also made an honorary Fellow of Trinity College, its highest award, for service in medicine and surgery. Denis Burkitt died on 23 March, 1993. His contributions relieved the world of much misery by directly providing a cure for Burkitt lymphoma and indirectly by preventing disease through his high-fibre diet. It has been noted that throughout his life he remained modest and humble. When asked to autograph a book, he used to write: ‘Attitudes are more important than abilities Motives are more important than methods Character is more important than cleverness And the heart takes precedence over the head.’

Photo Credit: http://understandingscience.ucc.ie/pages/sci_denisburkitt.htm

On a personal note, family was always of major importance in Denis Burkitt’s life and we are pleased and honoured to welcome to the Symposium his wife Olive Burkitt and two of Denis’ daughters, Judy Howard and Cas Boddam Whetham. His daughter Rachel was unable to attend but sends her regards.

References
http://understandingscience.ucc.ie/pages/sci_denisburkitt.htm

**GENERAL SYMPOSIUM INFORMATION**


The Symposium officially begins at 09:30 on Thursday, 23 June, 2011 with a Welcome by the former Irish President and the Chancellor of the University of Dublin Dr Mary Robinson, Professor Dermot Kelleher, Vice-Provost of Medical Affairs and Head of School of Medicine, Professor Owen Smith, Chair of Haematology Trinity College Dublin, and members of Dr Burkitt’s family namely Denis Burkitt’s wife Mrs Olive Burkitt and daughters Mrs Cas Doddam Whetham and Mrs Judy Howard in the Anatomy Building Lecture Theatre.

Please note that a few hotels only offer the rates if booked prior to noted dates.

**ACCOMMODATION**

Please make your own accommodation arrangements.

There are numerous hotels in the city centre. We have contacted a few for special rates and they are noted on our website at: [http://www.medicine.tcd.ie/tercentenary/news-events/burkitt-symposium.php#accommodation](http://www.medicine.tcd.ie/tercentenary/news-events/burkitt-symposium.php#accommodation). Please note that a few hotels only offer the rates if booked prior to noted dates.

**TRAVEL TO DUBLIN**

Please make your own travel arrangements to Dublin.

If arriving by air, transportation from the airport to Dublin’s city centre is best done by Aircoach, a bus service to and from both terminals at Dublin Airport. The Aircoach makes a stop at Trinity College, very close to the front gates, and within easy walking distance of several hotels. Round trip cost is approximately 12 euros. The return Aircoach to the airport leaves from Dawson Street or Suffolk Street every ten minutes which is very close to Trinity College. For more information about this service see [http://www.aircoach.ie/aircoach.journey.wizard.php](http://www.aircoach.ie/aircoach.journey.wizard.php).

Allow 30-60 minutes to get to/from the airport/city centre via Aircoach. For those wishing to take a taxi, there is a taxi rank outside the main gates of Trinity College.

If arriving by air, transportation from the airport to Dublin’s city centre is best done by Aircoach, a bus service to and from both terminals at Dublin Airport. The Aircoach makes a stop at Trinity College, very close to the front gates, and within easy walking distance of several hotels. Round trip cost is approximately 12 euros. The return Aircoach to the airport leaves from Dawson Street or Suffolk Street every ten minutes which is very close to Trinity College.

Access can also be gained via the Lincoln Place gate and from there it is a short walk around the Chemistry Building to the Anatomy Building.

**COMPLETION OF REGISTRATION**

All registration fees and any other charges must be paid in full in order to complete your registration prior to your arrival.

The Symposium will be held in the Anatomy Building Lecture Theatre. There are three main access points that can be used. The main gate to the college on College Green or the entrance from Nassau Street/Dawson Street will bring you on campus where you can walk through campus, past College Park to the Anatomy Building.

**SYMPOSIUM LOCATION**

Access can also be gained via the Lincoln Place gate and from there it is a short walk around the Chemistry Building to the Anatomy Building.

**CONFERENCE RECEPTION DESK**

The Conference Reception Desk will be located in the Anatomy Building. Upon arriving please register. You will receive your Symposium Programme as well as a Symposium badge at that time. Please wear your badge at all times during the Symposium as only delegates with official Symposium ID will be allowed into any of the sessions and functions.
Sessions
All sessions take place in the Anatomy Building Lecture Theatre. The programme details session lengths with ample time for questions at the end of the session as well as breaks.

Papers
Full papers are only available directly from the authors at their discretion. Email addresses of all delegates are available at the end of this Symposium Programme.

The proceedings of the Symposium are intended to be published in the form of a Themed Issue for the British Journal of Haematology. We will advise all participants in due course when the issue will be released.

Photocopying
There are no photocopying facilities available to use but there are a few retail outlets on Nassau Street which can provide you with this service, for example Reads located in the Setanta Centre on Nassau Street [http://www.reads.ie/photocopying.html]

Internet Access
We regret that access to the Trinity WiFi system is not available to guests. There are however many WiFi hotspots in the city centre as well as internet cafés.

Tourist Information & Post Office
A tourism information centre is located very close to Trinity College. It is housed in a renovated church and is located on Suffolk Street, just west of Grafton Street, across the street from O’Neil’s pub. You can also view tourist information at [http://www.visitsdublin.com/]. A Post Office is located just down St Andrew Street, west of the tourist centre.

Social Events
We are arranging historical walking tours of campus on the afternoon of Thursday 23 June, 2011 beginning at 16:00. Please wear comfortable shoes and bring an umbrella. You usually do not need to worry about wearing sunscreen in Dublin. More details about the tour will be available on the day.

The tour ends at 18:00 at the Old Library where participants are invited to a wine reception, an opportunity to view an exhibition featuring some of Dr Burkitt’s memorabilia in the Long Room.
Professor GEORG W BORNKAMM
Institute of Clinical Molecular Biology and Tumor Generics, Germany
Research Centre for Environmental Health, Germany

Georg W Bornkamm received his degree at the Medical School of the Ludwig-Maximilians-Universität in Munich in 1970 with a thesis in Biochemistry on histones and chromatin. In 1972 he joined the lab of Nobel Laureate (2008) Harald zur Hausen in the Department of Clinical Virology of the University of Erlangen as a post-doctoral fellow and started to work on the genomic structure of oncogenic herpes viruses. In 1975 he worked with Tomas Lindahl and Alice Adams in the Department of Biochemistry and Microbiology, Tumor and Cell Biology at the Karolinska Institute in Stockholm on the episomal nature of the Epstein-Barr virus (EBV) genome in Burkitt lymphoma and Nasopharyngeal Carcinoma. Back at the University of Erlangen he became Lecturer of Virology in 1976 (Habilitation). In 1978, he was appointed as a Professor of Virology in the Institute of Microbiology and Hygiene at the University of Freiburg (Germany).

In the early eighties, comparing the genomic structure of transforming and non-transforming EBV strains he identified the region in the viral genome that maps for EBV’s oncogene and transcriptional master regulator EBNA2. He also participated in the large prospective study on the role of EBV in Burkitt lymphoma in Uganda that had been organized and guided by Guy de Thé at the International Agency for Research on Cancer (IARC) in Lyon. From 1983 to 1989 he was Speaker and Coordinator of the Research Initiative (Sonderforschungsbereich) “Tumor Development” of the German Research Foundation (DFG) at the University of Freiburg. From 1989 to 2008 he has been Director of the Institute of Clinical Molecular Biology and Tumor Genetics in the Helmholtz Center Munich. In 1993/94 he spent a sabbatical at the German Cancer Center at Heidelberg.

In the nineties Dr Bornkamm’s laboratory contributed significantly to our understanding of EBNA2’s mode of action as a transcription factor and developed conditional EBV-immortalized cells with reconstructed breakpoints of chromosomal translocations of Burkitt lymphoma cells and with a Tetracycline-regulatable c-Myc gene that mimic essential features of Burkitt lymphoma cells and have become important tools to study the interplay between viral and cellular oncogenes. The analysis of c-Myc’s immunomodulatory function in B cell lymphoma cells led him into the field of tumor immunology and initiated his present research on the generation of high-affinity T cells against B-cell specific differentiation antigens. He received several awards including the Gottfried-Wilhelm-Leibniz Prize of the German Research Foundation. Since 2008 he is running a small group as an emeritus professor at the Helmholtz Center Munich.

RECENT REVIEWS:

Professor MITCHELL S CAIRO
Maria Fareri Children’s Hospital at Westchester Medical Center, New York Medical College, USA

Mitchell S. Cairo received his M.D. from UC San Francisco, trained in pediatrics at UCLA/Harbor General Hospital, was Chief Resident in pediatrics at UCSF, and completed a fellowship in pediatric hematology/oncology at Indiana University. He joined the hematology/oncology faculty of Children’s Hospital of Orange County (CHOC) in 1982 and established the BMT/Stem Cell Transplant program there in 1985. He was also the CHOC Principal Investigator for Children’s Cancer Group, and the Principal Investigator of the Cord Blood Collection Center and Cord Blood Transplant Center under an NHLBI award. From December 1997 to February 2000, Dr Cairo was a member of the faculty at Georgetown University where he was a Professor of Pediatrics, Medicine and Pathology, Chief of Pediatric Hematology/Oncology, Cellular and Gene Therapy, Director of Adult and Pediatric Blood and Marrow Transplantation at the Lombardi Cancer Center, and Medical Director of the NHLBI Cord Blood Collection Center at Georgetown University Medical Center. He relocated to Columbia University in New York City in March 2000, where he was the Chief of the Division of Pediatric Blood and Marrow Transplantation, a Professor of Pediatrics, Medicine and Pathology at Columbia University and director of the Phase I Pediatric Cancer Therapeutics Program and Pediatric Hematology-Oncology Fellowship Training Program, the Chief of Pediatric Hematology, Oncology and Stem Cell Transplantation. More recently, Dr Cairo has relocated in February, 2011 to the New York Medical College where he is the Chief of Pediatric Hematology, Oncology and Stem Cells Transplantation, Director of the Childhood and Adolescent Cancer and Blood Disease Center, Medical and Scientific Director of the Stem and Cellular Therapy Reengineering Laboratory and Professor of Pediatrics, Medicine, Pathology, Microbiology and Immunology and Cell Biology. Dr Cairo has over 275 peer reviewed publications and over 850 national and international presentations. He is an international leader in childhood lymphomas and leukemias, stem cell transplantation, pediatric cancer developmental therapeutics, unrelated donor stem cell transplantation and experimental hematopoiesis. His major research interests and expertise include blood and marrow transplantation, experimental and developmental immunology, molecular genetics of lymphoma, developmental therapeutics and clinical leukemia and lymphoma investigation.

Dr Cairo has focused a major part of his research in Burkitt Lymphoma. Dr Caro has led the CCG/COG Burkitt lymphoma studies for the past 20 years. He was one of the three Co-Chairs and the CCG Chair of the French-American-British (FAB) Burkitt lymphoma study that resulted in a significant reduction in both chemotherapy and radiotherapy and an improvement in survival in this patient population. Dr Cairo has also focused on novel immunological approaches both antibodies and cellular based therapies for Burkitt lymphoma. Lastly, Dr Cairo’s laboratory has identified a number of specific genetic defects in Burkitt lymphoma and has developed targeted approaches to these genetic defects.
Riccardo Dalla-Favera, M.D. holds the Joanne and Percy Uris Chair of Clinical Medicine, he is Professor of Pathology, and Professor of Genetics & Development at the College of Physicians & Surgeons of Columbia University. He is also the Director of the Institute for Cancer Genetics, and the Director of the Herbert Irving Comprehensive Cancer Center at Columbia University. He is the Director of the Specialized Center for Research on Lymphoma at Columbia University. He is the author of 200 publications and the co-editor of the textbook "Non Hodgkin Lymphoma" (Lippincott, Williams & Wilkins publishers).

Dr Dalla-Favera has been recognized with several national awards, including the Stohlman Award from The Leukemia Society of America, two NIH MERIT Awards (1989, 2005), and the 2006 William Dameshek Prize for Outstanding Contribution to Hematology from The American Society of Hematology. In 2011 he has been elected to the Institute of Medicine of the National Academy of Sciences, USA.

Dr Dalla-Favera has been an active researcher in the field of lymphoma research for more than 30 years. His career started with his pioneering work on the cloning and chromosomal mapping of human proto-oncogenes, including c-Myc (1-2). This work established the basis for the seminal work on the involvement of c-Myc in chromosomal translocations in Burkitt lymphoma (3-5). Then, his research has continued to yield new insights into the pathogenesis of human B cell lymphomas, and, in particular, on the identification of the genetic lesions and biological mechanisms responsible for the development of these diseases (6-10).


Dr Joe Harford received a Ph.D. in Biochemistry from the University of Maryland Medical School and conducted basic research in molecular biology and cell biology. Dr Harford has published over 120 scientific papers. Dr Harford is one of the founding editors for Current Protocols in Cell Biology.

In 1993, Dr Harford became the chief scientist for RiboGene, Inc. (now Questcor Pharmaceuticals, Inc.), a biotechnology company where he managed four drug discovery programs in infectious diseases. From 1996 to 1999, Dr Harford served as Chairman of the Scientific Advisory Board of RiboGene, Inc. and served in a similar capacity for SynerGene Therapeutics, Inc., an early-stage biopharmaceutical company that focuses on molecular therapeutics for cancer. Dr Harford is a co-inventor on two issued U.S. patents related to drug discovery. In 1996, Dr Harford returned to the NIH where he served as Associate Director of the NCI and Chief of Staff of the Office of the Director.

In July 2002, Dr Joe Harford was named Director of the Office of International Affairs of the National Cancer Institute. In this capacity, he has responsibility for a number of bilateral and multilateral interactions between the NCI and foreign cancer research institutions and other foreign entities. Dr Harford serves as the Chair of the Strategic Advisory Group of the Ireland-Northern Ireland-NCI Cancer Consortium and as NCI Liaison to the Middle East Cancer Consortium, the US-Japan Co-operative Cancer Research Program, the African Organization for Research and Training in Cancer, the American-Russian Cancer Alliance, and the International Network for Cancer Treatment and Research. Dr Harford has represented the United States to the Governing Council of the WHO’s International Agency for Research on Cancer and represented NIH for two years as a member of the Board of Trustees of the Human Frontier Science Program, an international non-governmental, nonprofit association devoted to the promotion of basic research. In July 2006, Dr Harford was named as Strategic Leader for Knowledge Transfer by the Union for International Cancer Control (UICC). In 2008, UICC altered its committee structure, and Dr Harford was named to the UICC Board of Directors (NCI Liaison), the Solidarity Fund Taskforce, the Childhood Cancer Taskforce, and the Strategic Coordinating Committee. Dr Harford has been appointed by the Irish Minister for Health and Children to the National Expert Group on Cancer Biobanking. Dr Harford also serves on the Executive Committee of the Breast Health Global Initiative that strives to develop, implement and study evidence-based, economically feasible, and culturally appropriate Guidelines for International Breast Health and Cancer Control for low and middle-income countries to improve breast health outcomes and access to breast cancer screening, detection and treatment for women.

In 2007, Dr Harford was recognized by the Arab Medical Association Against Cancer with an award, the citation of which reads “In recognition for his significant contribution to enhance the status of cancer care and cancer research in the region and for his unwavering efforts to support needed infrastructure and create opportunities in cancer education, training and capacity building to help cancer patients and their families throughout the Arab world.”
Ian Magrath received his qualifications in medicine from the University of London. He holds a higher doctoral degree in Medicine and is a Fellow of the Royal College of Physicians and the Royal College of Pathologists. He has a special interest in the pathogenesis and treatment of non-Hodgkin’s lymphomas, stemming from early in his career when he spent 2 years as Director of the Lymphoma Treatment Center in Kampala (University of Makerere), Uganda. He subsequently joined the National Cancer Institute (NCI), Bethesda, Maryland, and became Chief of the Lymphoma Biology Section of the Pediatric Oncology Branch, where his work was focused on the treatment and molecular pathogenesis of B cell lymphomas, particularly Burkitt lymphoma, as well as the role of Epstein-Barr virus in the pathogenesis of the latter disease. During the last 35 years, he has had a particular interest in cancer control in developing countries and has been involved in the conduct of cancer control projects, clinical trials and basic research in many parts of the world, including India, Pakistan, Nepal, China, Mexico, Argentina, Brazil, Turkey, Tanzania, Kenya, Nigeria and Egypt. This led to his present position as President of the International Network for Cancer Treatment and Research (INCTR) in Brussels (in 2000), although he retains a position at the NCI. Dr Magrath is also adjunct Professor of Pediatrics at the Uniformed Services University of the Health Sciences in Bethesda, Maryland. He has authored over 350 original articles, chapters, reviews, commentaries and editorials relating primarily to the pathogenesis and treatment of malignant lymphomas, pediatric cancers, cancer in developing countries and Epstein Barr Virus. He has also edited several books, including “New Directions in Cancer Treatment,” “The Non-Hodgkin’s Lymphomas” (now in its 3rd edition as “the Lymphoid Neoplasms”), and “Gene Therapy.” He serves or has served on several international committees and advisory boards for a number of organizations, including the World Health Organization, the International Atomic Energy Agency (PACT), the European School of Oncology, the International Union for Cancer Control, the International Union for Cancer Control and the American Association for Cancer Research. He has won a number of awards for his work and been invited to give several special lectures at major meetings of professional societies or Universities.

SELECTED PUBLICATIONS:


Dr Orem served as a Fogarty Clinical Research Scholar in the Division of Hematology/Oncology (September 2002 to January 2004). Dr Orem specialized in clinical oncology at the Division of Hematology/Oncology and Case Center in line with research activities of the Developmental Therapeutics Program. He is currently involved in the delivery of cancer care in resource-poor settings as well as the treatment of viral-associated malignancies including Burkitt lymphoma and the care of patients with compromised immune functions.

His honours include: Recipient German Academic Exchange Scholarship (1993-1996); Recipient Fogarty Foundation Fellowship (2002-2004); Elected first Chair of International Burkitt lymphoma Task Force (2008); Invited speaker Greater Seattle Chamber of Commerce Conference (2008); Invited education faculty American Society for Clinical Oncology (2008); Annual Conference (2009); Invited speaker 42 International Society of Pediatric Oncology October 2010, Boston Massachusetts.

SELECTED PUBLICATIONS:


Ross Pinkerton is senior staff specialist in paediatric oncology at the Royal Children’s Hospital, Brisbane and Director of the Queensland Children’s Cancer Centre. He graduated from the Queen’s University Belfast and trained in paediatrics in Dublin and London. As Leukemia Research Fund clinical fellow at the Hospital for Sick Children Great Ormond Street between 1982-84 he was involved in the development of treatment programmes for childhood lymphoma. In 1985-86 he worked at the Centre Leon Berard, Lyon, investigating the role of high dose therapy and autologous stem cell rescue in lymphoma and the use of chemotherapy purging of reinfused marrow. He returned to the Royal Marsden Hospital, London and was appointed consultant paediatric oncologist in 1990 and was involved in the development of the children’s cancer service and the research facility at the Institute of Cancer Research.

He was appointed Cancer Research UK professor of paediatric oncology at the Institute in 1995 and chaired the United Kingdom Children’s Cancer Study Group (UKCCSG) from 1999-2002. As chair of the UKCCSG NHL working group he developed close links with the French paediatric oncology group leading to collaborative studies in Burkitt lymphoma and the eventual French American British FAB LMB trials.

His research interests have focussed on the development of novel chemotherapy strategies and the mechanism of drug resistance in children’s cancers. He has played an active role in the development and execution of national and international clinical trials in a range of paediatric tumour types and chaired the UKCCSG New Agents group.

He is the author of over 250 peer reviewed papers including a number on the management of childhood lymphoma. He editor of textbooks including ‘Evidence Based Paediatric Oncology’ and ‘Paediatric Oncology.’

In 2003 he moved to Australia as director of cancer services at the Mater Hospital Brisbane and Professor of Oncology at the University of Queensland and is currently clinical lead of the statewide Paediatric Haematology Oncology Network.
Dr John T. Sandlund, Jr., M.D. completed his undergraduate training at the Ohio State University. He also received his medical degree from the Ohio State University College of Medicine and graduated a member of A.O.A. He subsequently completed his pediatric internship and residency training at the Columbus Children’s Hospital in Columbus, Ohio. Dr Sandlund then received his pediatric hematology-oncology fellowship training along with an additional year of training as a biotechnology fellow at the National Cancer Institute, National Institutes of Health in Bethesda, Maryland. Dr Ian Magrath was his mentor at the NCI and provided key leadership in his career development which focused on the pediatric non-Hodgkin lymphomas (NHL) - specifically Burkitt lymphoma. In 1987, Dr Sandlund was recruited to the St Jude Children’s Research Hospital in Memphis, TN, as an assistant member with a joint appointment at the University of Tennessee, College of Medicine as an assistant professor. He is currently full member at St Jude and professor of pediatrics at the University of Tennessee, College of Medicine. Dr Sandlund’s research at St Jude has focused on pediatric NHL and acute lymphoblastic leukemia (ALL). He has been the principle investigator (PI) for a number of frontline clinical trials at St Jude and more recently the PI of a phase I/II pilot study in the Children’s Oncology Group, where he is also a member of the NHL steering committee. He is currently the clinical director of the leukemia lymphoma division and oversees NHL research initiatives at St Jude. He has authored or co-authored over 150 publications. His current research initiatives include: Burkitt lymphoma: prospective study of biologic features and late effects of therapy; lymphoblastic leukemia: development of MDD/MRD risk based clinical trial; and anaplastic large cell lymphoma: study of targeted therapy using immunotherapeutic agents. He also participates in the international outreach program at St Jude.

Dr Trish Scanlan is a graduate of University College Dublin and spent most of her Irish career at Our Lady’s Children’s Hospital Crumlin in Dublin. In 2007 she relocated to Dar es Salaam in Tanzania as the INCRT East Africa Programme Co-ordinator and to run the National Children’s Oncology Centre in the Ocean Road Cancer Institute. The service has recently relocated to the University Hospital. She is still in Tanzania and admits, she is still mostly sane!

Stephen J. Schuster is the Robert and Margarita Louis-Dreyfus Associate Professor of Chronic Lymphocytic Leukemia and Lymphoma, Associate Professor of Medicine, and Associate Professor of Radiation Oncology at the University of Pennsylvania School of Medicine in Philadelphia, Pennsylvania. He also serves as Director of the Lymphoma Program and Director of Lymphoma Translational Research at the Abramson Cancer Center of the University of Pennsylvania. After graduating from Jefferson Medical College and completing a residency in Internal Medicine at Pennsylvania Hospital, Dr Schuster went on to clinical and research fellowships at the Cardeza Foundation for Haematologic Research. In 1989, he became a member of the Cardeza Foundation and joined the faculty at Jefferson Medical College. He joined the Haematologic Malignancy Department at the University of Pennsylvania in 1998. Since that time, his research has focused on the development and application of novel immunotherapies for non-Hodgkin lymphomas and chronic lymphocytic leukemia, including use of autologous tumor-derived vaccines, autologous co-stimulated T cells for immune reconstitution after chemotherapy, radioimmunotherapy, and monoclonal antibody therapy.

Dr Schuster is a recipient of the deVilliers Society Award for outstanding support to the cause of fighting blood-related cancers and improving the quality of life for patients and their families, the Research Recognition Award, and the Hope Award for Medical Achievement from the Leukemia and Lymphoma Society. He has received numerous awards for outstanding teaching and research from both Jefferson Medical College and the University of Pennsylvania.
Professor OWEN PATRICK SMITH  MA, MB, BA Mod.(Biochem.), FRCPCH, FRCPI, FFpathRCPI, FRCPEdin, FRCP Glasg, FRCPath, DHMSA, Hon FTCD
Professor of Haematology, The University of Dublin, Trinity College Dublin, Ireland
Consultant Paediatric Haematologist, Our Lady’s Children’s Hospital, Crumlin, Dublin 12

Professor Smith is a Consultant Paediatric Haematologist at Our Lady’s Children’s Hospital Dublin, and is Professor of Haematology at the University of Dublin, Trinity College Dublin. His active research areas of interest include: childhood and adolescent leukaemias & lymphomas, bone marrow failure syndromes, angiogenesis and haematological malignancies, the molecular and cellular basis of the inflammatory - coagulation interface in human disease. The co-author of more than 300 research original articles, letters, books, book chapters and papers, Professor Smith is a Fellow of the Royal College of Pathologists, the Royal College of Physicians of Dublin, London, Glasgow, Edinburgh and the Royal College of Paediatrics and Child Health. He is a member of numerous associations and societies, including; the Medical Research Council Childhood Leukaemia Working Party, the International Berlin Frankfurt Munster Study Group for Childhood Leukaemia, the United Kingdom Haemophilia Centre Directors’ Organisation, the Paediatric Haematology Forum of the British Society of Haematology, and the European Paediatric Network for Severe Congenital Neutropenia. He was awarded the Graves Medal by the Royal Academy of Medicine and Health Research Board in 2001 for his research into the pathobiology and novel therapeutic strategies in severe sepsis that had received international acclaim. In 2006, Professor Smith was awarded the St Luke’s Medal by the Royal Academy of Medicine and St Luke’s Hospital for his work on improving outcomes in adolescent cancers with specific reference to the haematological malignancies. He was admitted to Honorary Fellowship of Trinity College Dublin (the oldest and most valued tradition of the University) in 2009.

Professor LOUIS M STAUDT  M.D. Ph.D.
Chief, Lymphoid Malignancies Section, Deputy Chief, Metabolism Branch, Centre for Cancer Research, National Cancer Institute, Maryland, USA

Dr Staudt received his B.A. from Harvard College in 1976, graduating Cum Laude in Biochemistry. He was awarded a Medical Scientist Training Program fellowship at the University of Pennsylvania School of Medicine and received his M.D. and Ph.D. degrees in 1982. His Ph.D. thesis in the field of immunology, performed in the laboratory of Walter Gerhard, revealed somatic hypermutation as a mechanism of rapid antibody diversification during normal immune responses. Following Internal Medicine training, he joined Nobel Laureate David Baltimore’s laboratory at the Whitehead Institute as a Jane Coffin Childs Fellow. There he cloned and characterized the first tissue specific transcription factor, Oct-2. He established his laboratory in the Metabolism Branch, National Cancer Institute, in 1988, and currently studies the molecular basis of human lymphoid malignancies. Dr Staudt is currently Deputy Chief of the Metabolism Branch and he also co-directs the Lymphoma/Leukemia Molecular Profiling Project (LLMPP), a multi-institutional consortium that aims to develop a new molecular framework for the diagnosis of all lymphoid malignancies. Dr Staudt serves on the Editorial Boards of Cancer Cell, The Journal of Experimental Medicine and Genome Biology. He has received numerous awards for his research, including the 2009 Dameshek Prize from the American Society of Hematology for outstanding contribution in hematology.

Dr Staudt’s laboratory initiated the use of genomic-scale gene expression profiling to define the molecular basis of therapeutic response and survival in lymphoid malignancies. This effort revealed that the most common type of non-Hodgkin’s lymphoma, diffuse large B-cell lymphoma, is actually comprised of three distinct diseases with different responses to chemotherapy. With respect to Burkitt lymphoma, Dr Staudt’s laboratory created a gene expression-based diagnostic method that distinguished this entity from diffuse large B cell lymphoma (Dave et al. NEJM 2006 354:2431). This molecular diagnosis was based on 4 gene expression signatures, with Burkitt lymphomas having high expression of c-Myc and its target genes, and a subset of germinal center B cell-restricted genes, and low expression of NF-kB target genes and MHC class-I genes. Importantly, Dr Staudt’s gene expression-based diagnostic method identified a substantial number of cases as ‘molecular’ Burkitt lymphoma that appear to be misdiagnosed as diffuse large B cell lymphoma by current diagnostic methods. This distinction is critically important because Burkitt lymphoma and diffuse large B cell lymphoma require different chemotherapeutic regimens to be cured.
Professor DENNIS HOWARD WRIGHT  
Former Histopathologist at Makerere Medical School, Uganda

I was educated at the City of Norwich boys grammar school before going to the University of Bristol to study Medicine. I was educated at the City of Norwich boys grammar school before going to the University of Bristol to study Medicine. I was awarded an intercalated BSc in Physiology in 1953 and qualified MB, ChB (Hons) in 1956. After internships in paediatrics and surgery I trained in Clinical Pathology at Bristol Royal Infirmary. In 1960 the Recruitment Board allowed me to take up the post of Lecturer in Pathology at Makerere College, Uganda, instead of doing two years national service. Soon after my arrival in Uganda Dr Greg O’Conor, who collaborated with Denis Burkitt on two early publications, left Uganda and I took over as “Mr Burkitt’s pathologist”. He called me to theatre when he operated on lymphoma cases so that I could collect fresh tissue, blood and bone marrow. In return I was able to give him a rapid cytological diagnosis and on many occasions administer the first dose of cyclophosphamide while I had a needle in a vein for blood taking. Denis and I collaborated together on a number of published studies on Burkitt lymphoma. Together, we edited a book on Burkitt lymphoma in 1970. We travelled together to a number of meetings in Europe and America. At a Symposium on lymphoreticular tumours in Africa held in Paris in 1963 I proposed that the tumour, then often given the unsatisfactory name “African lymphoma” or “childhood lymphoma” should be called Burkitt lymphoma. This was accepted except that some of the big guns insisted that we use the term Burkitt’s tumour since they were not sure that it was a lymphoma.

I was awarded an MD for my thesis ‘Malignant lymphomas in Uganda’ in 1965. Denis left Uganda in 1966 and I followed in 1968 to take up the post of Senior Lecturer and later Reader in Pathology at the University of Birmingham. In 1971 I was appointed Professor of Pathology at the newly formed Medical School at the University of Southampton.

Professor JOHN L. ZIEGLER  
M.D. M.Sc.  
Professor at University of California-San Francisco, San Francisco, California, USA

John L. Ziegler, M.D., M.Sc. was educated at Amherst College where he received a bachelors degree in English Literature in 1960. After earning an M.D. at Cornell University Medical College he undertook medical residency training at Bellevue Hospital and Memorial-Sloan-Kettering Hospitals in New York City. Joining the National Cancer Institute in 1966, he embarked on a long career in cancer research. He was the founding Director of the Uganda Cancer Institute in 1967 and after five years of research, teaching and clinical work in Uganda he was honored by the Albert and Mary Lasker Award in 1972 for improving the cure rate of Burkitt lymphoma, a common childhood malignancy. During the 1970s he was Chief of Pediatric Oncology and later Director of Clinical Oncology at the National Cancer Institute. As Dr Ziegler joined the University of California San Francisco as Professor of Medicine in residence and Chief of Staff for Education at the VA Hospital. Here, he participated in the early research on the AIDS epidemic, being the first to show an association with malignant lymphoma and Kaposi’s sarcoma — tumors he encountered earlier in Uganda. Ziegler was also instrumental in the discovery of viral causes of Burkitt lymphoma and Kaposi’s sarcoma.

In 1981 Dr Ziegler joined the University of California San Francisco as Professor of Medicine in residence and Chief of Staff for Education at the VA Hospital. Here, he participated in the early research on the AIDS epidemic, being the first to show an association with malignant lymphoma and Kaposi’s sarcoma — tumors he encountered earlier in Uganda. Ziegler was also instrumental in the discovery of viral causes of Burkitt lymphoma and Kaposi’s sarcoma.

In 1985 Prof Ziegler became the Founding Director of the UCSF AIDS Clinical Research Center and made many scientific contributions in the area of HIV-associated malignancies, both in the USA and in Uganda. He was invited to consult with the World Health Organization in 1994-96 and in 1997 earned a masters degree in epidemiology at the London School of Hygiene and Tropical Medicine.

From 1998 to 2007, Ziegler has directed the Cancer Risk Program at the UCSF Comprehensive Cancer Center, now one of the leading genetic counseling and testing centers for hereditary cancer in northern California. Starting in 2007, he was named Director of the Global Health Sciences Graduate Program, crafting a curriculum for a masters degree in global health sciences at UCSF. This Program, the first of its kind in the US, graduated an inaugural class of 7 students in 2009 and enrollment has quickly reached 30 students annually. Ziegler has authored over 240 scientific articles, chapters and reviews and is the recipient of numerous awards that honor his work in cancer and global health.

Ziegler has had a career-long interest in medical education and, as a recipient of two Fulbright awards, has taught clinical medicine for eight years at Makerere University in Kampala, Uganda. He has also taught as visiting professor at Cambridge and Oxford Universities, Cairo University, and at the London School of Hygiene and Tropical Medicine.