

The British Neuro-oncology Society (BNOS) meeting in Cambridge this June marks a milestone in the society's history; this being the 30th annual multidisciplinary meeting of neuro-oncology researchers in the UK. Throughout its existence, Professor Geoff Pilkington has been, and remains, one of the key individuals in the society. Geoff has been at the forefront of neuro-oncology in the UK

and internationally since the early 70s. Amongst his career highlights are his involvement in the very earliest studies on stem cells in brain tumours and his work on mechanisms of glioma invasion. Were he not at the forefront of neuro-oncology research Geoff claims he would have been a double internationalist in cricket and rugby union and now enjoying life as a sports journalist; the world of sport's loss has very

much been neuro-oncology's gain.

At this year's annual meeting, Geoff will succeed Prof Charles Davis as President of BNOS. To mark this, *Oncology News* has invited Geoff to reflect on the past 30 years (or more) of neuro-oncology research in the UK, through the activities of BNOS and its predecessors, and to provide insight into his vision for neuro-oncology research in the UK.



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The British Neuro-oncology Society: Thirty years of endeavour to champion an under-recognised discipline

Researching brain tumours in the 1970s was a somewhat lonesome pursuit, with very few people in the UK engaged in similar activities. Communication with colleagues overseas to discuss mutual interests was also difficult given this was in the pre-internet age. For my part as a young investigator, it was long library sessions and twice yearly British Neuropathological Society conferences, as well as the occasional international conference, which enabled me to learn more about the biology and clinical consequences of this devastating group of neoplasms.

Having moved from the National Hospital for Nervous Diseases (now the National Hospital for Neurology and Neurosurgery), Queen Square, London, I spent nine years at the Middlesex Hospital, then a large teaching hospital in central London. In 1980 things began to change and I moved, with my mentor, Peter Lantos, to the Department of Neuropathology, Institute of Psychiatry, deep in South London and a stone's throw from Kings College Hospital. At this time we had forged an ongoing collaboration on murine models of astrocytoma with David GT Thomas, a consultant Neurosurgeon at Queen Square, and John Darling from David's team, thus beginning a long collaboration and friendship.

In addition, David expressed a strong interest in bringing together UK-based laboratory researchers and clinicians involved in the diagnosis and treatment of the main form of intrinsic brain tumour, known generically as glioma, and to instigate a fairly informal 'club' to meet, present and discuss research and clinical practice. Through his vision, inspiration and enthusiasm, as well as a substantial input from John, the *British Glioma Group* was born. In 1981 the first of what would become a series of annual conferences was held at Queen Square and, along with a variety of UK speakers, we were joined by Darell Bigner from Duke University, USA. The group gained impetus and held successful meetings at Southampton and Bristol, organised by Roy Weller and

Hugh Coakham respectively. Evidence of increased interest in the meetings was reflected in the attendees list being extended from 44 in 1982 to 85 by 1983.

Following the inaugural meeting it became the norm to hold the meetings over a two day period - with the first day beginning with "Bar opens at 6pm" followed by a relaxed dinner. This informality continued through the 1980s. Indeed, it became a sort of jovial tradition during the annual dinner for the local organiser to stand up and announce that, due to the informality of the occasion, there would be no speeches; this was invariably followed by a speech of thanks to all who had helped with the meeting and generally included the presentation of a bouquet of flowers to the organiser's secretary/PA! When I look back and recall Hugh Coakham's virtuoso saxophone performances in the guise of Dr Jazz in 1980s it is clear the template for lavish dinners with ever more entertaining social events and exotic venues of the 21st century had already been set.

These conferences, which were largely research-based, continued to be held at different centres across the UK until 1989 when it was decided to change the name to the *British Neuro-oncology Group* in order to encompass tumours other than glioma. Through most of these early years John Darling and I acted as joint treasurer/secretary/organisers until Robin Grant and Tracy Warr took over the responsibilities, while we tried to spread the word of multidisciplinary conferences throughout Europe and further afield. It is, perhaps, gratifying that this format was the first of its kind and more national groups were formed throughout Europe, North America and further afield. Finally, in 2004 the group became the *British Neuro-oncology Society (BNOS)*, with more structure and purpose. It has continued to grow and prosper rapidly over the ensuing years. We have now met at over 20 different centres and 2011 sees the 30th annual conference, which will be held in Cambridge from 29th June - 1st July and boasts perhaps the most varied and stimulating programme yet.



Professor John L Darling,
Past President of BNOS and a key figure in initiation and development of the Society.

Over the last 30 years we have entertained some of the key international figures in Neuro-oncology including Lucien Rubinstein, Darell Bigner, Paul Kleihues, Victor Levin and many others. It is of interest to note how the topics covered through the years since 1981 have changed and how concepts and studies have either 'come and gone' or have formed the basis of present practise and research endeavour. For example, in the 1980s there was considerable focus on the application of monoclonal antibodies in both diagnosis and therapy. Stereotactic neurosurgery and both animal and three-dimensional in vitro models also featured in meetings of the '80s.

The 1990s saw a move towards genetic studies, p53-related investigations, novel delivery systems and studies of tumour angiogenesis. We also heard a lecture by Ken Culver in 1993 about the first gene therapy approaches for glioma using HSVtk. There were also presentations on gamma-knife surgery and, with the broadening nature of the group from 'glioma' to 'neuro-oncology', papers were also submitted on schwannoma, meningioma, pituitary tumours and metastases. During this decade the issues of quality of life and indicators of patient performance also came to the fore.

With the advent of the new millennium molecular analyses and the beginnings of a molecular basis for tumour classification were apparent. Loss of heterozygosity 1p19q and MGMT promoter methylation status were main discussion topics through the first decade of the century and issues such as day surgery and cancer stem cells also captured the imagination. The BNOS 2010 meeting in Glasgow brought with it a wonderful presentation on IDH-1 mutations by Andreas Von Deimling, which is perhaps an indicator for the development of further biomarkers which might permit stratification of patients into groups based on likely response to therapy and/or prognosis. However, throughout the years of **BNOS** there has been a continued strong interest in radiotherapy, drug sensitivity, neuro-imaging, proliferation control and tumour cell invasion and heterogeneity.

In addition to the changing spectrum of research and clinical practice being presented, the formulation of conferences underwent changes. In 1997 a series of Education Days was introduced which resulted in an extension of the meeting to encompass three days. These sessions have been a huge success over the years. We have now set up a postgraduate forum in which our younger members can present their work and contribute in a very real way to the Society's activities and aims. A Young Investigator award was established in 2010; prizes for best poster and best oral presentations had already been in place since 1998. Other activities within the conference programmes have included open debates on 'hot topics', commercial symposia, *Association of Neuro-*

Oncology Nurses (ANON) nurse symposia and, over the past three meetings, a neuropathology symposium sponsored by the *British Neuropathological Society (BNS)*. We now regularly see in excess of 200 delegates at conferences as the scope and quality continually increases. Abstracts are now published in *Neuro-Oncology* which reaches a highly appropriate audience of readers.

Throughout the 1980s we were able to rely on the generous support of the Upjohn company's Medical Science Liaison department to help with offsetting the costs of the meeting, but as the meetings became larger and with Upjohn's withdrawal from the UK it became necessary to take on support from various commercial sponsors who have now become indispensable to us in engineering a high quality programme.

Since becoming a Society BNOS no longer simply functions as an organisation with a remit of convening annual conferences. Our membership comes from neurosurgeons, neuroscientists, neurologists, neuropathologists, neuroradiologists, neuropsychologists, neuropsychiatrists, clinical nurse specialists, oncologists, radiotherapists, members of charities and many more disciplines. In this context the Society is central to promoting all branches of medicine related to neuro-oncology and leads the way in enhancing both clinical practice and research through interaction with appropriate national and international bodies.

In David Thomas, John Darling and Charles Davis, I am fortunate to succeed three previous Presidents who have worked enormously hard in developing and professionalising the Society. There is still, however, much to do in order to achieve further professionalisation and recognition of the Society which will involve communication and interaction with other national medical and scientific bodies. However, I do have some specific aims which include encouraging and helping our younger members in their careers, integrating the clinical nurse specialists into the Society in a more substantial way, increasing membership to include all disciplines involved with neuro-oncology in its broadest sense and, in particular, ensuring that paediatric neuro-oncology is a main facet of our strategic planning. With this latter aim in mind, I am pleased to be working with Professor David Walker, himself a paediatric neuro-oncologist,

who will become Vice-President of the Society in June. I am also committed to engaging more with mainstream oncology and, to these ends, we are already organising neuro-oncology symposia jointly with NCRI groups to both educate general oncologists about brain tumours and, perhaps more importantly for us, to learn from those with experience in other branches of oncology and cancer research.

I also wish to forge closer relationships with the brain tumour charities which constitute a significant force in furthering the discipline to the benefit of patients and professionals alike and will aim to engage increasingly with the All Party Parliamentary Group in bringing our clinical and research endeavours to the fore.

Brain tumours remain very much the Cinderella of the oncology world; the discipline is under-reported, under-researched and under-funded, but, through BNOS and the united forces of the charity sector, we can change all that.

The BNOS Council is now composed of some 20 members, who represent many sub-disciplines and geographic locations. David Jellinek has played an outstanding and central role as Secretary for several years now and, with Jeremy Rees in place as Treasurer, I am assured of the efficiency and resolve of Council to foster the Society's activities. We have also been extremely fortunate to secure the services of Jenny Loughlin (administrator@bnos.org.uk) as Administrator to the Society. Jenny has been an all-important lynch-pin in our activities over the past few years and has not only kept us in focus but has instigated several new, more professional systems which have enhanced the effectiveness of Council. She has now been joined by our new Communications Officer, Elizabeth Tudball (communications@bnos.org.uk) to whom we wish great success in her new role with **BNOS**.

Over the next two years I look forward to witnessing sustained growth and development of the Society and am sure that, through increased interaction between professionals, parliamentarians and charities we can increase our research effort with the net result of improved care pathways, quality of life and survival times for patients with all forms of central nervous system tumour. ■

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