An Interview with Professor John Hobkirk

What considerations influenced your career decisions from selecting dentistry to your formal retirement from full-time university duties?

My choice of dentistry reflected an interest in healthcare, good manual skills, which I enjoyed using, and the appeal of a profession with a wide range of potential working styles and environments. Quite by chance, one of the people I consulted in making this decision was a senior dental academic to whose chair I was appointed 19 years later on his retirement!

After graduation, I was attracted to the challenges of a specialist career. I gained a broad range of experience in a number of junior hospital posts and obtained the FDS qualification from the Royal Colleges of Surgeons of England and Edinburgh. At that time specialties were linked to NHS consultant posts, rather than being Dental Council–recognized, and the full breadth was only found in the dental hospitals. This, and the opportunities for research and teaching, drew me towards academia. Prosthodontics encompassed a wide range of clinical problems and treatment modalities, and was rapidly evolving with a growing research base, which included the exciting field of dental implants.

In 1970 I was appointed a lecturer in prosthodontics at Newcastle Dental School and the following year started my PhD on tissue reactions to novel implant materials. In 1974 I worked in Gothenburg as a visiting lecturer. This school had many of the leading research figures of Swedish dentistry whose work was redefining the basis of clinical practice, and it was here that my prosthodontic philosophy moved from the mechanical to the biologic. Since I was writing up my PhD at the time, I also relished the opportunity of my first meeting with P-I Brånemark and members of his team.

The following year, with my PhD completed, I was appointed to a senior lectureship/consultancy at the Eastman Dental Institute and Hospital in London, a purely graduate school. Here I developed my clinical practice in dental implants in parallel with my research work. When the head of the department retired in 1979 I was fortunate in succeeding him in the chair, a post that I held until my own retirement in 2007.

In addition to my academic and clinical roles at the Eastman I also engaged in national and international work. My focus within the department was initially on expanding staff numbers, education, and research, with an emphasis on a biologic approach. We introduced a PhD program and master's student numbers in prosthetic dentistry quadrupled. This was later complemented by an MSc in dental implantology and drew on the skills of staff in other departments of the Division of Restorative Dental Sciences, which by that time I chaired. Physical enlargement of the Eastman also gave us much-needed space, albeit at the expense of five different enabling moves!

Gradually, my university activities expanded with a period as vice-dean of the institute, central responsibilities for postgraduate medical education, involvement in distance learning, and membership of the university court and senate. My national work included membership of several British Standards Institution dental committees, including an ongoing chairmanship of the implant committee and a number of representational and policy committees of the British Dental Association. My international roles included European education initiatives and visiting professorships in Europe, North America, Africa, and Asia, in addition to editorial work, the writing of textbooks, lecturing, and research endeavors, several of which remain active following official retirement.

Which individual and scholarly ideas have been especially prominent in your career?

Of the various projects with which I have been associated, I would select our hypodontia clinic and European education initiatives.

The concept of an interdepartmental hypodontia clinic was born in 1977, following the referral of two patients with this condition to me by consultants in other specialties whose treatment had been focused within their disciplines, resulting in compromised outcomes. This led me to establish a clinic that could

deliver a multidisciplinary integrated long-term approach to management and we began seeing patients that year. The clinic brought together a group of equally young and enthusiastic colleagues and grew steadily to become an Eastman flagship. We are currently reviewing our 30-year data covering over 2,500 cases, and many patients now bring their own children to see the team. As our work became better known and our trainees moved to senior posts elsewhere, the concept became firmly established nationally and internationally. One of my last clinics before retirement included a review of the original two patients who had in effect started the process!

Chairmanship of the British Postgraduate Medical Federations' Education Committee allowed me to influence the development of postgraduate medical and dental education in the University of London. From here it was a small step, in collaboration with Hungarian colleagues, to seek funding for two successive education projects from the European Union's TEMPUS program. This had been established after the fall of the Berlin wall and involved a multinational approach to modernization of higher education in countries surrounding the EU. Coordinating these projects, which had up to twelve partners, was an intensive and exciting process, and we all learned a great deal about our cultural values and the challenges and many benefits of international collaboration.

What professional changes have impacted upon your life as a clinical professor?

As a professor I have seen major changes in both clinical and academic life.

When I was a dental student the focus was on technological perfection, whereas now this is recognized as symbiotic with the biologic and psychosocial dimensions of treatment. My career also saw the introduction of specialization and expansion of the dental team, bringing new training needs and altered patterns of working. There has also been an expansion of political interest in the professions and their regulation, spurred on by a number of high-profile medico-legal cases. We are consequently more regulated throughout our careers with increasing assessment of our knowledge, skills, and attitudes.

Academically, these changes have brought expanded requirements for education to be flexibly available across a wider range of subjects. This has required innovation in program design, teaching styles, and student assessment. Education remains core to the clinical dental academic's role, and has been highly rated in official assessment of all UK university teaching. Nevertheless, research output is often seen as the gold standard for measuring academic excellence. The clinical academic, who also has responsibilities for patient care, thus works in a potentially exciting environment, but one with frequently conflicting demands. In addition, the training pathway lacks a clear entry route and structured progression and consequently, this career has been less attractive to the outstanding student. As a result there are increasing shortages of clinical dental academic staff in many countries, and while there are now several innovative approaches to this problem, their benefits will not be instantaneous.

What have been the most exciting or disappointing items that have happened to you professionally or to our discipline?

The clinical dental academic, especially in a postgraduate environment, spends much of his time working within small groups of people, and it is in these groups that many of our most exciting and disappointing moments occur. Such events, especially the disappointments, can provide a spur to innovation; however, it is those played out on a larger scale that reflect the most exciting items that I have encountered professionally. Of these, one was conceptual—the emergence of an evidence-based biologic and psychosocial approach to treatment—and the others were technical—the discovery of osseointegration and the emergence of digital computing.

The need for dental implants had long been recognized clinically. However, at the start of my career the procedure was very uncertain of outcome, robust clinical data were lacking, and consequently, very few clinicians used the technique. A variety of tissue reactions to intrabony implants had been described, including direct bone-to-implant contact and fibrous encapsulation, sometimes naively described as a pseudo periodontal membrane. The NIH consensus development conference statement of 1978, Dental Implants: Benefit and Risk, underlines just how far implantology has evolved in 30 years, and we can perhaps reflect on the insight which P-I Brånemark brought to the subject.

The computer is now so firmly embedded in our lives that it is not easy to understand the excitement that it initially generated. For those of us whose PhD theses were typed by hand and data were, if we were fortunate, analyzed by a mainframe computer reading punched cards, this exponentially expanding technology has transformed every aspect of our work.

I would like to have seen my generation of prosthodontists more fully develop and promote the subject's identity and core values. National recognition

of specialties varies markedly from country to country, both in terms of acceptance of the principle and recognized specialisms; however, prosthodontists are often marked by their absence or small numbers. We have had to manage changing patterns of oral disease, the emergence of new treatment techniques, and extension of the dental team. In universities, the strength of a clinical subject's voice is linked to the breadth and depth of its research and teaching activity, which may be eroded by fragmentation of the specialty. Fortunately we have many talented young men and women around the world who are entering prosthodontics. They have a bright future but I sometimes wish that their inheritance was more robust.

What are your major areas of clinical research interest and why?

My major clinical research interests are dental implants, in particular implant biomechanics, together with hypodontia. Both stem from perceived clinical problems, my curiosity as to their causes and management, and my early activities in these fields. Neither was a mainstream subject when I began my work, which was one of their attractions, and both continue to provide numerous intellectual challenges.

Many of the MSc projects which I supervised were in the field of implant biomechanics and were usually undertaken by graduates with little research experience. Working with them from the formulation of a hypothesis to the trip to the binders was always a stimulating experience for both of us, and their endeavors provided a robust platform for further studies.

My PhD students, all of whom progressed from MSc programs, have also largely worked in the field of dental implants. Initially, we addressed biomechanical issues such as load transmission, functional jaw deformation, and osseoperception. Subsequently, increasing collaboration with biologists, surface scientists, and polymer chemists facilitated projects on cell/surface interactions, the modification of titanium surfaces, and drug delivery with implanted devices.

What are your views on the roles of professional organizations in addressing today's practice challenges?

Both dentists working in practice and those in salaried services need representation, access to advice and further training, and the opportunity to interact intellectually and socially with colleagues.

National dental associations have a representational role, providing a voice on dental issues and engaging with policy makers on behalf of the profession. Many provide a considerable range of material on dental practice, support for colleagues in contention with employers, large and prestigious conferences for their members, and facilitate continuing professional development. All are important.

Specialist societies, in contrast, are concerned with education and the academic and clinical advance of their subject area. There are increasing numbers of local, national, and international dental organizations that address the needs of different groups of the profession. Some include nondentally-qualified members of the dental team and representatives of patient support groups and most are linked to a specialist or treatment modality. They have done much to educate the profession, provide forums for debate, and stimulate and support research—the principal aim of some, such as the IADR. For many prosthodontists, their specialist society is an important aspect of their professional lives.

A feature of surgical education in the UK has been the role of the various Royal Surgical Colleges, which have a history stretching back more than 500 years. These prestigious bodies, which are mirrored in some other countries, have had key roles in the setting of training standards, award of qualifications, provision of training, and support of research.

International collaboration in the provision of dental education is well recognized in the EU, but has until recently been uncommon elsewhere. The process can draw on international expertise, reflect on different approaches to clinical and research problems, and develop an understanding of colleagues' cultures, their challenges, and the ways in which they are meeting them. Indeed, the opportunity to interact with prosthodontists from many parts of the world, sometimes in their own environments, has been one of the most rewarding aspects of my career. Such interchanges have been facilitated by novel approaches, such as the ICP/IJP's introduction of international master classes for young prosthodontists taught by a faculty drawn from the journal's editorial board on a pro bono basis.

What are your views on the challenges of career choices, personal fulfillment, and establishing an appropriate work-life balance?

Flexibility, an enquiring mind, hard work, recognition of one's strengths and weaknesses, and the humility to seek support when needed are essential for personal fulfillment. If you do what you find fulfilling you will be fulfilled by what you do.

Dentistry is evolving rapidly and the framework within which one works is essentially fluid in the long term. The specialty chosen as a young graduate will inevitably have evolved by the end of a career, and thus the ability to manage and hopefully initiate change is important. Never forget, however, that the profession's function is the creation and maintenance of oral health.

Specialist training and career advancement inevitably have a price, much of which is borne by the individual and those closest to them, and I will always be grateful for the support and understanding of my family. Long hours, course fees, and reduced earning capacity all have an impact on the work-life balance. Nevertheless, many find it difficult to resist the beckoning of a role that they find so fulfilling. In those jurisdictions where working hours are legally controlled, questions have been raised about the impact on specialist training, and some have voiced concerns that here the pendulum has swung too far. Those with managerial responsibilities surely have a responsibility to create teams suited to their tasks and an environment in which a healthy work-life balance exists. The final arbiter can then be the individual, based on their changing personal circumstances and aspirations.

Formal retirement from a full-time academic career must have stimulated thoughts of the past and the future. Any comments?

Reflecting on a career can be of value to successors, if they have a mind to heed history; however, its personal use is rather different. Context and interpretation are essential in the assessment against one's personal values.

I have had the good fortune to follow a career that reflected my skills and interests across a broad range of activities; however, it is the fellow travelers on my journey who have been my greatest reward. My patients, students, and colleagues have enriched my professional life and taught me much—the journey may not always have been smooth, but it was certainly stimulating!

The future is not a blank page as it carries the legacy of history as well as the potential for change. There will be many challenges and opportunities for future prosthodontists and they will need to remember the importance of adapting the roles of the specialist to the communities which they serve. Facts and skills are merely tools in that process, not end-points in themselves, and must be set in the frame of a broader picture.

I have had the privilege to meet many fine young prosthodontists from around the world, well qualified to meet the future with all its uncertainties and opportunities. I trust that in doing so they will be as fortunate as I have been in encountering opportunities for fulfillment in themselves and in their fellow travelers.