Diamantina Health Care Museum Association Inc – Oral History Project

This transcript is an edited version of the conversation on the tape.

Researchers interested in the fine detail and vocal nuances of the interview are encouraged to listen to the aural version.

Interview with: **Professor Bryan Emerson** Friday 15th October, 1999

Interviewer: Sue Pechey

Site: Princess Alexandra Medical Library.

SP: Could you start by just talking briefly about your childhood and education?

BE: I grew up in Townsville, first of all in South Townsville and then later in North Ward. I went to the Townsville Grammar School for 4 years. I first went to Charters Towers because the Schools in Townsville had closed in about 1941, because of the war, and came back to Townsville Grammar in 1942-46 or thereabouts. I had a very good grounding, won an open scholarship, came to Brisbane and decided that Medicine was the best thing to do.

SP: Right. How did you make the decision for Medicine?

BE: Well there had been a variety of opportunities, although there wasn't a great deal of background about University Education in North Queensland at that time and Medicine seemed a very interesting activity. I was also keen on teaching so that combined both an interesting profession with a potential for teaching.

SP: And how many brothers and sisters have you got?

BE: I have one younger sister, 3 years younger but our family has lived in North Queensland for many generations. My mother and one of my grandparents were born there, ever since they came out to Australia in 1820 and settled in North Western New South Wales and then Central Queensland (Bowen District) and then in the Maryborough District.

SP: And what did your parents do?

BE: My father was the District Superintendent of the Railway in Townsville and my mother was a mother.

SP: As they all were in those days. So when you came down here to Brisbane?

BE: I entered St. John's College, which was not the relatively luxurious place that it is now. It was then in old houses on Kangaroo Point and the University was over the river at George Street. We would walk to the ferry and walk across that way to the University. The Medical School occupied huts in Victoria Park - old army huts. It was in 1946 when I started. The War was over and the huts that had been built there were unused space. There was a big expansion of Medical Students numbers after the War. In fact we had over 200 in our first year and the failure rate was about 50%. Quite a few were returned soldiers, much older than we Schoolies. It was a big change in my life to move from home and settle in Brisbane. Study kept me pretty busy but it was enjoyable. We still have many friends who used to be in the same student group at that time.

SP: Was St. John's College a happy experience?

BE: It was very different experience that had both plusses and minuses. I have kept in touch with many colleagues since that time. As an institution it is much better than it was when I was a student – it really is a superb institution now and has very good management.

SP: Okay so when you graduated, what did you do?

BE: Well that was in 1952. PA Hospital didn't exist at that time so I became a first and then a second year intern at Brisbane Hospital. At that stage, I really had experience in pretty well every section of the Hospital. Even then most Medical Registrars did some time as Psychiatry Registrars. I became a Medical Registrar in my third year after Graduation. I then passed my Membership Exam of the Royal Australasian College of Physicians in 1957, which was 5 years from Graduation. I then became a Lecturer in Medicine – John Tyrer had just arrived in Brisbane and the University had set up a Professorial Unit at The Royal Brisbane Hospital in about 1955. I became a lecturer there in 1957 and a Senior Lecturer in 1960 – Senior Lecturer in Materia Medica and Therapeutics. This concerned drug therapy and there's been an incredible change in the drugs available for treatment since that time. We can now achieve so much more than we could achieve with drugs then but there was a lot of teaching required. We had a Drug

Museum in which samples of the various drugs and tablets were available. This was much more limited than what is available currently. However, there was a lot of good teaching needed and that set me down to reinforce all my undergraduate learning so that I would have a pretty firm basis in Medicine. I enjoyed very much my time as a Senior Lecturer.

SP: It does sort out your knowledge to teach.

BE: Yes it certainly does. Then in 1963 I won a study grant from the College of Physicians in Australia and went to London. This was my first overseas experience up to 10 years after graduation. Flying was much more difficult then. I went to Westminster Hospital with Prof Malcolm Milne and undertook research on renal disease. I had by that stage completed my doctoral thesis on "Gout and Lead Nephropathy" and this research and my activities at that time put me into the renal field. At the end of that time, the Department of Medicine, which had been entirely at The Royal Brisbane, expanded to set up an academic appointment at the Princess Alexandra Hospital and I applied for that in 1963. I was living an academic life at that time which had three components – one was patient care, and I certainly enjoyed that - secondly, teaching and education, providing a different challenge and thirdly, a research component, which was quite a unique experience for me. I had not fully realised that expanding the medical knowledge base was an essential part of a medical academic role. At that time research was very largely in University academic Centres. I had acquired a taste for that and have expanded my experience ever since. In 1963 and whilst I was in London I applied for the readership which was at this Hospital (PAH). At that stage, I wasn't appointed – they regarded me as being rather too junior – I was only a 10 year Graduate in my early 30's. Of course there was also the tradition of appointing English graduates and at that stage everyone in the Academic Department of Medicine apart from John Tyrer was an English graduate. They hoped they would get someone more eminent and more senior. So they readvertised and I applied again and was appointed as Reader in Medicine at the end of 1963 when we returned from England.

SP: Yes. Can you describe the Hospital when you arrived?

BE: Well, structurally it was very much as it is now but the big difference I guess was in the wards. The admissions policy was that every patient who needed to be admitted would be admitted as an in-patient. This meant that there was constant pressure on beds and in each bay of the ward, where there were 6 beds regularly, 3 more beds were placed down the middle between the others so that we had 9 patients in each bay. I was looking after on an average of 36 patients as the sole consultant. I was the only full-time academic appointed to the Hospital for the first 5 years, which was quite a clinical challenge. There was also an enormous difference in the way the wards were organised. There was one Ward Sister who ran everything and who knew everything about the patients, and who actually ran the ward very efficiently. Sometimes she might also have had a Staff Nurse (a 4th year Trainee) but otherwise trainee nurses did all the work in the wards and by and large it was well done. The older Sisters had a reputation for being bossy, but in fact they were supremely efficient in the way they ran their wards and the patients were extremely well cared for. Things have changed so that the wards are not really comparable in any way now. Some of the wards where we would have had 9 patients, they now have 4. That in it-self is good, but we still have problems with bed numbers.

The other big difference was that the Medical Specialties had not differentiated at that time. All the physicians were General Physicians and only Neurology was regarded as being different from medicine. Other than Neurology, eventually a few others separated, such as Nephrology, which was the area in which I had developed my research interest. There was no National Organization and no special training in Nephrology and in fact there was very little training specifically in the way of kidney disease. At that time, people would actually die of kidney failure. I remember palpating the first kidney transplant that I had ever seen in London in 1963. One could place one's hands on the patient's abdomen and feel the transplanted kidney in their groin where it had been placed. It was at about this time when I came home, that with several others, we founded an Australasian Society of Nephrology so that was one new development there. In 1964 there was virtually no Medical specialty development. There was very little senior full time staff in the Hospital because the work could be managed quite

effectively by visiting Physicians with a rotating Registrar and an Intern (or Residents as we used to call them then) trainee. There was also a Medical Supervisor, Kevin Murphy – he was the only other fulltime senior clinical staff member. Thus my coming in as a senior fulltime appointee to the Princess Alexandra Hospital made a difference in that particular aspect. The actual University appointment had been engineered by Owen Powell who was the first Superintendent and a great live wire. He approached the University and obtained the University's support and organized funding to convert an empty Wing – A3 of the Hospital which was being built and was not finished - into a University Section for Medicine, Surgery and Obstetrics and Gynaecology. What was built was one office and one laboratory for each department. This was to be the nucleus of a University Section here and from this it has steadily grown.

SP: What was the relationship between your jobs as a University Staff Member here and say the Hospital staff, both here and perhaps still over at Royal Brisbane at that stage?

BE: Well, the big difference between a University appointee and a Hospital appointee (whether they're full time or part time) is that the University appointment clearly included responsibility under at least 3 headings: The first would be patient care; the second would be education and the third would be research and these have to be a component of every specific University appointment. That is easily accepted now but, back in 1963 and with the free Public Hospital system prior to Medicare and the policy that every patient who needed care would have it provided, made patient care the dominant activity of the Hospital. The funding was not liberal, technology wasn't very great, so patient care readily became the number one activity and took over from everything else. This is reflected by the fact that I always had 35 in-patients to care for. At the moment, physicians feel that, if they've got 10 patients to care for, they're heavily laden. However, I enjoyed it enormously and, of course, seeing so many patients strengthens one's own ability as a physician, so it's never a bad thing to do particularly when you're young. However, while everybody accepted the importance of education and of research, the demands of patient care were such that there wasn't much time left for either. However, I knew that if I was going to

continue in an academic career and succeed in it, I was going to have to ensure that I maintained a balance between my patient care activities, research and the education of students and the Hospital staff. This was much less recognised then than now, where there are full time appointees to look after the education of the Hospital staff and undertake research activity. I realized that research was always going to be a major activity for an academic and in fact one of the intrinsics in the job. The salaries certainly were no attraction and considerably less than they would have been in the visiting or the full time staff.

SP: How were Students brought into the place, how did you decide when and how students had contact with both you and the patients?

BE: Well at that stage there were 3 clinical years – the 4th 5th and 6th clinical year and the department's headquarters were still at Royal Brisbane Hospital and remained so pretty well until 1984 when I became Head of Department when they were decentralized. Everything was centered on Royal Brisbane Hospital and so our teaching program had to fit in with them. So we just took some of the students that were principally allocated to the Department of Medicine here. Now that organisation was such that the University Department took all Students at some stage during the 5th year of their course so that there were 240 students to be educated in internal medicine. Their introductory studies and their clinical signs teaching had been done in 4th year and they had some basic knowledge of medicine by 5th year and they would have a certain degree of polish by their final year. We would take 8 –10 students every 2 months (that would be 4 times a year) and they would be totally related to this Hospital during this time, principally seeing the patients that I worked with and looked after. There was no one else in the Hospital from a University point of view with that particular responsibility. This was the pattern for many years – 35 patients and 8-10 students. My Registrar and I were responsible for these students' training in all the areas of medicine, largely from the patients in the Wards relating to those general medical beds. That changed subtly as specialties developed and, as things changed within the Hospital, they had a variety of experiences as more specialties developed and developed in a variety of different ways.

SP: And you had a professional relationship with John Tyrer that predated your appointment here?

BE: Yes – I was a Lecturer at Royal Brisbane and Senior Lecturer there before I moved to PAH and he remained my immediate superior throughout. John was a very different and quite unique individual. He understood where I stood on those issues and we would discuss them well, I found him very fair.

SP: What sort of issues would you have to discuss?

BE: Principally financial ones. Clearly I was starting a rival clinical school under the control of the original department so, if there were the opportunity to have additional staff, I would have to try and ensure that we got our share of anything that was available. That included office staff, technical staff, and academic staff and buildings. Now we've succeeded better on the staff side than on the building side because the building put here has not been comparable with what's been able to be achieved at Royal Brisbane. That's been due to a whole number of factors.

SP: Is it going to continue when they move into the new Hospital?

BE: Well it should be much better accommodated. The University accommodation has been largely integrated with the Hospital so it is not separate. However, I think the enormous change that is visible within the Hospital over the 30-year period has been that, while patient care remains the prime responsibility, there is a general recognition of the importance of education throughout the whole Hospital and the recognition by all the staff that research is an integral activity of a Teaching Hospital. These differences have never been clearer than when the new PAH building did not allow for Research and Development space and the people who worked the hardest to have that corrected were the hospital full time staff. Thus the idea of the three legs (patient care, teaching and research) on which to hang the status and quality of the Hospital has been accepted and the reputation of the Hospital has become very good, both at a National and an International level. There's little doubt that gradually these have been recognised throughout the Hospital and they've been integrated and accepted by all the Hospital Staff. So it is very nice to have seen that change in emphasis.

SP: What input would you have had into the development of other specialties here?

BE: Well, it was clear that medicine in a major teaching hospital had to be of the highest standard that one could possibly achieve. Thus you would need appointees who had the greatest knowledge in each area within the Hospital and that clearly meant the development of full time medical specialty staff. Regarding the surgical specialties, everyone was used to having an Orthopedic Surgeon rather than a General Surgeon for an orthopedic problem. The Surgical Specialties had developed early. But the medical specialties hadn't really developed because there was then nothing very distinctive about the medical specialty areas. However, as activity developed as, for instance, in nephrology, dialysis and transplantation became available, one needed special facilities to develop and special medical staff to do so and the degree of care required was such that we needed someone to organize that activity full time. Thus respiratory medicine needed the back up of a respiratory function laboratory. Gastroenterology developed endoscopies, and a variety of functional studies. Neurology developed a whole lot of measuring abilities. Radiology (which is not a medical specialty) expanded and was able to do investigations which had never been dreamt of previously. As a Medical Registrar, I would have done air encephalograms, which involved putting air through a lumbar puncture, which outlined the cerebral ventricles. Nowadays, with MRI, the patient is just lying quietly and providing much better results without any of the possible associated problems. All of these technological and clinical developments meant that each bodily system (of which there were eight) developed very well. I saw the particular role of the University Unit as developing cross-speciality areas – you know, not just the heart or the lungs or the kidneys but things like clinical pharmacology (where you've got drugs which will affect all systems of the body). Thus the cross-system specialties I supported principally were clinical pharmacology, clinical immunology and clinical infectious diseases. We obtained financial support from several drug companies, particularly Merck, Sharp & Dohme, who funded a Research Fellow in Clinical Pharmacology. This Hospital was outstanding in its development in clinical pharmacology even to the extent of

having a Professor of Clinical Pharmacology (Professor Susan Pond). Although there is no Professor now, we do still have a very strong department.

Clinical Immunology was seen to be developing and was very important in a whole range of different medical conditions and almost basic to vigorous research. The Lions supported appointees in that area and there have been several very successful developments in that area, most notably of course Professor Ian Fraser who is the incumbent and also Australian of the Year. Of course clinical and genetic technology was basic to much of this research, but unfortunately with the implications for childhood disorders being obviously recognized by the Health Department. I don't think the Health Department realized the extent to which genetics had a major role in adult medicine as well. Because of this clinical genetics was largely developed in Queensland in relation to the Childrens' Hospital so that it developed permanently at the Children's Hospital, and was not developed here. This was our loss although we still co-operate with them. The other thing was that I've always had one foot in Royal Brisbane Hospital because it was necessary that I liaise very carefully with University Headquarters there. I was able to maintain good relationships with the University Department wherever they developed, as they did at Greenslopes, the Mater Hospital and Prince Charles Hospital. It was a multi campus department with Princess Alexandra Hospital as one Campus.

SP: And when you took over from John Tyrer were there any changes you made?

BE: There was not enormous scope for change at this time; one can change and expand best when one has expanding resources. I guess the major change I made in this Hospital after I was appointed Professor here in 1974 was the joint funding of academic staff between the University and the Hospital. That was after I'd been here 10 years and Alan Whittaker was the only other academic. When I was promoted to Professor, the main need was to expand the University presence within the Hospital and University staffing was clearly going to be an important part of that. Now clearly I was competing with other sections of the Department in aiming to increase the staff here. There was a need for an appointment at the Mater and another at Greenslopes Hospital as well. I could

still retain one academic appointment released through my promotion. I thought that, if we could combine that with a Hospital appointment, then the appointees could contribute to the Hospital clinical work and this would be some way towards a recognition of the clinical commitment of the University Staff. Thus the proposal came up to have two jointly funded academic appointees. There were differences in the conditions of appointment of academic staff from fulltime Hospital staff. However, if they could be overcome, we would have two jointly funded academic physicians in place of one University appointee. Ultimately we succeeded in Medicine and initially had a joint appointment in Respiratory Medicine and Cardiology and later on, Medical Education. By and large this has been an important contribution to this Hospital. Despite the somewhat different nature of the conditions of appointment of those particular people, I think that it has worked well. We also developed a number of appointments that were funded from non-University sources and some of these have been with the Lions Club Research Foundation. Some of them have been with companies who unselfishly have given us money to have research fellow appointments and also more recently we had appointments in Clinical Rheumatology and Clinical Immunology.

SP: So basically when you took over there was quite a big expansion here?

BE: Well we certainly tried. We simply couldn't have much impact on a big Hospital if there were only two academic staff. On the other hand, the new appointees in the Hospital had been very appropriately advanced in their attitudes so it's been an expansion, which has consolidated the teaching and research activities of all the staff within the Hospital as well.

SP: What sort of issues would you have had to discuss with people like Dr. Powell and Dr. Golledge?

BE: I guess funding resources are always going to be the key. These people were the previous Superintendents (equivalent to the CEO or your current District Manager). On the other hand, both were limited by the very close Health Departmental control at that particular time. Almost everything ultimately needed the approval of the Health Department. Thus, first of all you had to persuade them of the need and you had then to compete against other areas of the Hospital because the University was only one area of the Hospital. The Laundry

would need things or the Gardener would need things and these all had to be balanced out by Dr Powell or Dr John Golledge. I think both of them did a good job insofar as the competing needs arose and were met according to the Hospital Board's priorities. I think both of them had long-term visions for the Hospital and they both very much contributed to the institution that it has now become.

SP: How did you relate to the other Physicians who were on staff here?

BE: Well it's very hard for me to say – most of them were my personal friends, which certainly helped a lot. On the other hand, in the very early days, as most of the Hospital was staffed by visiting staff, there was concern that their dominant position when making decisions within the Hospital would be eroded by full time staff. So I was really seen as equivalent to a full time staff member. Then there was almost a third group because, as the full time Hospital staff grew, they became a force in themselves. The University Staff who had the right of private practice had a foot in both camps because they could feel they were on salary and could feel for both, the full time and visiting staff. They could also appreciate the situation of the visiting staff who were certainly very busy with their private practices as well. On the other hand, some of them made quite remarkable contributions to the Hospital. I like to feel the University section here was an influential group and that this has been appreciated increasingly by the Hospital. I mean there is now a Hospital Staff Association, which did not exist previously. For many years this comprised only visiting staff members with full time staff added later. Now they've combined this with the University Staff Association as well. This is recognition that there are three important groups in the Hospital and that there are mutual interests, which are the same in the long term, although there may be differences in the way they could organize matters in the short term.

SP: Can you comment on the change that occurred between when the Hospital was entirely the doctor's world to when they are now almost unemployed?

BE: I don't believe the changes have been necessarily due to the staffing changes. Many have been due to technological changes. The basic practice of medicine hasn't changed so greatly although the investigational capacity is quite

different. What we can achieve in a shorter time is so different. The role of the Registrar is different, training of the Registrar is different, I think all of these things have been the major reason why there's been differences between and emphasis upon full time and visiting staff in the Hospital. I firmly believe that there is an important role for both within the Hospital – they both have a major contribution – I don't think it's ever been a major area of conflict for me, although others may have perceived it as that.

SP: Other people have commented on the changes.

BE: I don't think it's something that has happened only within this Hospital. It's a change in the practice of medicine throughout the country and throughout the world.

SP: Can you tell me, in your period here, who do you think made the outstanding contributions?

BE: Initially, the Superintendent was the dominant figure and gradually the importance of the Division of Medicine developed and built up to make it a contribution from the executive of the divisions who were appointed for one or two years – people like Peter Landy, Geoff Hocker and Owen Harris who were all Chairmen. I was also Chairman for a time and that was a major change to have someone who wasn't a member of the visiting staff as a Chairman. The role of the Division steadily increased with the fact that the Hospital started to listen more to the Divisions and their potential contribution. Ultimately of course the Hospital is now run as a group of Divisions and the Division is given its own budget and runs the clinical activities within that. Of course there has been a reduction in decision making by the Hospital Administration and the gradual passing of Management of Physicians interests over to the Division itself. It certainly has been a major change in emphasis from the Superintendent having major decisive power and the decisions by the Hospital to pass management to a Chairman who is appointed by the Hospital but with the general support of the Division.

SP: Can you comment on the nursing styles here and the nursing staff with whom you came in contact?

BE: Well certainly all the things that you said about the changes in nursing have impacted greatly on the Hospital – I have the greatest admiration for all of them. On the other hand I find it much more difficult to find out what's happening with patients with the current nursing arrangements – I mentioned it earlier that we had the one Sister who ran the Ward with a Staff Nurse and this was of course 30 years ago and she knew everything about all patients. It's now much harder to find out details of a particular patient. The close liaison that existed between the medical and nursing staff previously has changed so that each group tends to go their own way. This sort of thing is happening in the USA where nursing and medical staff hardly talk. They write something down on a board and put it back in its place and then someone comes along and picks it up later. I guess the changes are to some degree essential, I mean the increase of specific skills has made the change necessary. The specific contributions of nursing into new areas are quite incomparably greater than what they used to be. On the other hand there are certain losses, often seeming to be in personal inter-relationships area and I guess the sensitivity in appreciating the difficulties of some patients. This is a change throughout the whole of the country and throughout private and public hospitals and I am sure there are still many people in nursing strongly committed to patient care.

SP: Indeed. Did you have anything to do with the big changes coming with regards to nursing education in that they are now University Students?

BE: Yes, sometimes. My perspective is going to be a regressive one. I don't know that it has necessarily improved their ability to handle the sensitivity components of nursing. It certainly has helped them enormously in understanding the technological aspects. Nursing has changed and the changes have been necessary. I must say they have always done a remarkable job.

SP: Well now, you were in a position for over 40 years when you've been in touch with Hospitals. You will have seen the change in the formality of the hierarchy and the way this is reflected in the change in the dress codes of hospital staff.

BE: Well, it's been a change of authority as well. When I was a medical student, I was called "Emmerson" not "Mr. Emmerson" but just "Emmerson". Now

if I am introduced, I'm called "Bryan". The use of the Christian name was restricted to your closest friends 30 years ago. Now someone who only talks to me on the phone and whom I have never seen calls me by my Christian name. Thus, it's got to be taken in that particular perspective.

Don Cameron and I, I think, are the only two doctors in the Hospital who still wear white coats, but that is a very much debatable approach. Initially there'd be pediatricians who took off their white coats because they thought it might frighten a patient. It then extended and then of course was reinforced by the need of white coats to be laundered. They are worn more extensively in the USA now than they are here. I think too, that one needs to keep a certain professional distance from a patient if you are to help them.

I still feel uncomfortable when a patient calls me by my Christian name. I can tolerate it and ignore it but I don't feel comfortable because I think one still has to keep our objectivity about that patient. I concentrate on ensuring that they get what is really going to help them most with their particular problem. I illustrate this by mentioning my mother-in-law who when she was in her 80's and in hospital was called by the nurses by her Christian name. This when I, and other members of her family would never call her by her Christian name. That sort of familiarity is a major social change and I think in Australia is part of the general egalitarianism of our society. I was very happy dealing with patients on a professional basis but the mode of dress I think is a social change. Many people feel that it is not a good development. These days, the patients must take over much of the care of themselves. Certainly in any chronic disease, the patients have an enormous responsibility for their own care. In fact I've written this book on gout which is called "Getting Rid of Gout" and it is written for patients so that they will know all about their disease so that they will know then how to manage it better. It still doesn't make it unnecessary for people to consult a physician. What I do is not just give them the appropriate treatment but explain it to them. Even though it's in the book, there is a certain emphasis effective in a personal conversation that you can't get across in a prescription in writing or by patient education I still think we need to develop professional skills very much with patient education.

SP: Well let's go back and talk about your personal research and how your specific area of interest developed?

BE: Well this was back in 1957 –within a few years of when I passed my Membership exam and I was in the University Department where there were research opportunities. I had no special area of expertise at that time and what was most difficult was that most potential researchers had attached themselves to another established researcher and developed their research along his lines. There was very little research going on within the Department of Medicine at that time and very little going on in Queensland. Some had gone on previously, with Garth McQueen when he was here, but it was not very prominent at that time. I therefore recognised that, if I were going to compete, I would have to develop some area of interest which was different and which would relate to Queensland and not relate to the USA. At that time, there were numbers of patients coming to hospital with very severe gout and I wondered why gout was developing in these people. Then I noticed that many of them suffered from chronic lead nephropathy. Lead poisoning had been common in Queensland in the 1890's up to 1920's and then their high mortality from kidney failure had come to our notice in the 1950's. However many of them were still alive in the 1960's so I thought that here was a problem, which was local and which interested me, viz. the reason for the high association between lead nephropathy and the subsequent development of gout. But first of all I had to be able to diagnose the lead nephropathy and that took me into the investigation of renal disease. I had to learn how one could study the handling of uric acid by the kidneys. We also had to diagnose lead nephropathy and many of them had not had a recognised episode of acute lead poisoning. We therefore used an infusion of EDTA or calcium versenate which brought the lead in the tissues out in the urine where it could be measured. We therefore developed a provocative test for lead storage which has become used right throughout the world. Subsequently we used it as a standard test for confirming excessive past lead absorption when there is no previous objective evidence of such. This needed to be standardized and correlated and that was one of my major early contributions. Then I needed to examine the patients with the lead nephropathy to determine whether their

handling of uric acid was different from other types of renal disease. Thus we had 2 groups of patients, one with lead nephropathy and one with other types of renal disease and we needed to determine how they handled their uric acid. That involved measuring uric acid clearances and the filtering capacity of the kidneys and comparing them. Thus, my effort went into that area particularly in the 1960's and it was the subject of my MD Thesis in 1963. This revealed that a subject with lead nephropathy had less ability to excrete uric acid than did those with other types of renal disease of comparable severity.

1963 was the year I spent in the U.K. I came back home in 1964, and became established here in 1965 until 1967 when I was awarded a U.S. Public Health Service Fellowship. With this fellowship I was going to look at uric acid metabolism and gout and I spent it with Jim Wyngaarden in the USA, firstly at the University of Pennsylvania and then at Duke University. I had a very good experience of research in both of those eminent institutions and also reaped the benefit of the US Public Health Service Fellowship. Now in that year (1967), the enzyme mutation was discovered which causes uric acid overproduction and gout. So I had a very exciting year in USA in which I learned all that was known about the disease. I learned to think extensively about it. I also developed a very good insight into laboratory research in these Institutions so I was in a position to take off when I came back here in 1968, I had support from NH and MRC at that particular time and I had a Biochemist come to work with me so that we built up quite a good research group looking at uric acid over-production and the genetic basis for this. I was also able to diagnose and define the genetic enzyme mutation in the DNA from eight families in Australia, the first of which was in Brisbane. We were able to look at what effect that would have. With my experience I could recognize the associated neurological clinical features whereas they hadn't been recognised well elsewhere in Australia. I also had a lot of contact with other researchers and that formed the basis of a study to determine what effect an excessive production of uric acid would have on the kidneys. Thus we came back to studying kidneys affected by uric acid. We studied gout and primary uric acid abnormalities and then we looked at the handling of the uric acid secondary to primary renal disease. Then the uric acid

field expanded. Once we didn't know what controlled the uric acid concentration in the blood. We thought it might be the diet and we didn't know much else. We didn't know whether or not alcohol would have much effect.

The interest in uric acid expanded throughout the world and now we realise the enormous numbers of both genetic and environmental factors which control the uric acid concentrated in the blood. If it's too high for too long, it comes out of solution as developing gout. However if you can control the high concentration of uric acid, the gout will go away. Thus we had a potentially preventable disease, provided we could get to the delivery to the patient. Thus to influence both the Medical Profession and the patients, we needed to publicize it's management. Of course, the other thing was availability, Allopurinol as a very effective treatment, became available here in 1967 as well. This was the year I was in the USA. There was enough going on in the uric acid area there to keep me busy and my reputation in that particular area developed. Now I guess the weakness of that situation is that it hadn't developed a long term research group which has been sustained following my retirement. However, that's not a bad thing – it did give a research group which was strong and visible within the Hospital. Each new Academic and Hospital appointee was then able to develop their own research skill and interest in the Hospital, as this has happened, so the Department of Medicine here has developed skills in other fields such as blood coagulation and thrombosis, with immunology and clinical pharmacology going on from there.

SP: Can you talk about the practical arrangement of doing that research in the Hospital here. You said you had a Biochemist appointed here?

BE: This perhaps goes back to John Tyrer's vision in that the original arrangement to set up the University Departments in the Hospital here also included the development of a Laboratory. This provided the physical conditions I needed to obtain competitive grants and these grants then provided the equipment to run that Laboratory and the appointees who were funded on research grants to come to work in it. I mentioned a Biochemist. This was the Dr Ross Gordon who was funded by an NH and MRC Grant. He did a superb job and we collaborated extensively on biochemical aspects of an enzyme deficiency. HPRT was an enzyme which when deficient, allowed excessive

amounts of uric acid to be produced. We looked particularly at the clinical and the laboratory aspects of this enzyme deficiency for over 20 years. This was funded by NH and MRC until his retirement.

SP: And you say he was provided with the equipment that he needed in the lab. How did that work out?

BE: Well his salary was the biggest item because one would get smaller items from other services. Obtaining research equipment is rarely as difficult to fund as an ongoing salary which usually can't be picked up in small amounts.

SP: Why is that, do you think?

BE: Well it is easier to have a supporter fund a tangible research laboratory. However they don't see anything tangible when they're funding a salary. I also think the public has to be educated about this and this is why one can assess people's research achievements largely by their publications. Research was a major component of my activities and a major interest. It was always on my mind so that every time I'd see a patient, I would have a thought about the nature of their diseases and the potential for learning something new. Eventually one's thoughts developed to a hypothesis which can then be tested by research projects.

SP: You'd have had a fairly close relationship then with the Renal Unit here.

BE: Yes, I was one of the Physicians in the early days of the Renal Unit. I was involved in the development of dialysis and transplantation and a co-author in their early publications. Kevin Murphy was also a major contributor and he was very much involved in the early part of the development of the artificial kidney in the Hospital. Once Gordon Clunie was appointed here as Director of the Dialysis Unit and Transplantation program. I was involved in that as well, and it rapidly expanded. On the other hand, having got it to a certain stage, the research component became less obvious because it was now becoming a routine practical procedure. The principles involved became very straightforward so that there was less of a need for someone to be involved on the research side there. I gradually became less involved in that, and as the uric acid metabolism became more important, kidney disease became less important. I later became involved in Rheumatology because gout was clinically a Rheumatological disorder. Thus,

I've had a foot in two of the medical specialty areas, although at all times I have remained a General Physician. This might seem a bit anomalous and certainly would rarely happen now because of the development of a distinctive training programme in each of the medical specialty areas.

SP: I've had a rather interesting description of that early dialysis process for which they bought a piece of agricultural equipment.

BE: Yes and even later the dialysis fluid was mixed in a large bath. The original artificial kidneys were developed at Royal Brisbane Hospital and they used an ordinary bath and placed a membrane containing the patient's blood around a wooden frame and circulated that. The dialysis system was mixed in a big agricultural vat and of course they still use commercial equipment to prepare the fluid for dialysis.

SP: Yes. I've had some wonderful little innovative things like Sam Mellick describes his wife sewing up Velcro on the machines to make it hold together.

BE: Yes, necessity is the mother of invention and we certainly had plenty of necessity.

SP: You don't think of a sewing machine sewing up things like that.

Now can we talk briefly about your private life? You've had a long-term interest in music, haven't you?

BE: Yes. I guess classical music was one of the finds of my life. Music barely existed in North Queensland when I was a boy. I remember one Good Friday hearing Bach's St. Matthew Passion for the first time and it moved me enormously.

SP: Where did you hear it?

Be: It was on the radio, there was no classical FM station at that stage as there is today. I had never heard music like that before and when I later came to Brisbane, I recognised how much music was a part of me. Thus I became involved in the ABC Orchestral concerts and I attended many of the performances. I was involved with the Youth Concerts Committee and became Chairman of the Subscribers Committee back in those times. I just enjoyed all musical activity – opera, ballet, chamber music and it's been one of the riches of my personal life. Of course added to this my second son is a musician and on the

staff of the Queensland Conservatorium where he is a pianist and musicologist. He has inherited his musicality from both parents. Whereas I've only been a good listener, my wife is also very musical and we have had great enjoyment in that particular area.

SP: Where did you meet your wife?

BE: I met her here in Brisbane first of all but our mothers had met previously when her mother was visiting another daughter in Townsville. My mother said "I have a son in Brisbane on his own", so Elva's mother invited me to visit them at the coast for a weekend. Thus I met Elva within my first year from Graduation and we were married in my second year.

SP: You don't think your mother and mother in law set you up?

BE: No, I don't think so. They may have arranged the original introduction but there were certainly plenty of introductions that didn't come to anything.

SP: And do you have other children as well?

BE: Our eldest son is a Psychiatrist and he enjoys that job. He's a bit of an organiser as well and is Director of Psych Services at the Royal Brisbane Hospital. He has trained both in Psychiatry and Medical administration and he enjoys both of those aspects of his job. He enjoys it just as I enjoyed having a combination of patient care, some medical administration with research and teaching. We are fortunate to have our sons and their families in Brisbane.

SP: Is there anything I haven't asked you that you want to talk about?

BE: I haven't thought much about it – it's been a fairly broad discussion.

SP: It may be that this interview will want to spark other people to ask you more questions.

BE: Well, I certainly enjoy enormously my contact with this Hospital – it's been pretty well constant from 1964 until my retirement in 1994 and even since then I have kept up a close association with the Hospital. I'm still involved in the Research Foundation and in my spare time I see patients half a day a week. I was involved in the formation of branches of the Arthritis Foundation and Kidney Foundation and am keeping up with medical literature.

SP: Let's talk about the Foundation a bit – the Medical Foundation. What part is it playing in the life of the Hospital at the moment?

BE: It's there to raise funds principally for things that cannot be funded otherwise, particularly for things in the research area. Thus they have a broad range of support programmes which call for applications once a year. They also have their fund raising arm, with a Board which is involved in this. I've been involved in their assessment of scientific merit. The foundation has been a major success and is funding many projects and many grants until they become established when they can compete for outside funding.

SP: Can you put your finger on any outside things that have succeeded?

BE: Well I think last year it would have given 30 or 40 grants of between $5,000 and $10,000. However, I think there are very few areas of research in the Hospital that haven't had some funding from the Foundation. I think the greatest development has been the expansion of doctorate qualifications within the Hospital – I obtained my PhD in 1973 for work on this abnormal enzyme which caused uric acid overproduction and it was pretty rare to be awarded a PhD at that time. I wouldn't be surprised if there were now 30 or 40 PhD students within the Hospital so that there has been an enormous expansion in research training over the last 30 years. This has been due to an expansion of the staffing of the Hospital by people with research expertise who can train others as well. The competition for Hospital posts has also meant that someone with a PhD has usually had a stronger background and training than someone without. By and large, physicians have recognised that research achievement not only helps them to get a job but also helps them in their appreciation and understanding of patient problems.

SP: Well thank you very much Professor.

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