Alan Johnston

Personal Details

Name	Alan Johnston
Dates	1928
Place of Birth	UK (Manchester)
Main work places	Aberdeen
Principal field of work	Clinical genetics
Short biography	See below

Interview

Recorded interview made	Yes
Interviewer	Peter Harper
Date of Interview	24/09/2008
Edited transcript available	See below

Personal Scientific Records

Significant Record set exists
Records catalogued
Permanent place of archive
Summary of archive

Biography

Alan Johnston was born 8.1.1928 in Manchester, educated at Manchester Grammar School and studied medicine at Cambridge and UCH qualifying in 1951. He later spent a year at Johns Hopkins Hospital. He became Consultant Physician in the Aberdeen Teaching Hospitals in 1966 and subsequently Clinical Senior Lecturer in medicine and genetics. Fellowship of the three Colleges of Physicians followed.

With Eric McKay, he initiated the clinical genetics service for N.E.Scotland. With David Pyke, he played a crucial role in the setting up of the Clinical Genetics Committee of the College of Physicians and was its first Hon. Sec. He also served in various capacities on other committees and working parties concerned in the recognition of the specialty and its training programme, including the Scottish Molecular Genetics Consortium.

In addition to lectures to the Royal Colleges, he published around one hundred papers.

His outside interests include eldership of the Church of Scotland, active membership of the Christian Medical Fellowship, travel, gardening, archaeology and three grandchildren.

INTERVIEW WITH DR ALAN JOHNSTON, 24th SEPTEMBER, 2008

PSH. It's 24th September 2008 and I'm talking with Dr Alan Johnston from Aberdeen and the recording is being made in London. Alan can I go right back to the beginning and ask when and where were you brought up?

AJ: Manchester and then Cambridge.

PSH: And when precisely were you born?

AJ: 8th January 1928, which means I am 80 plus

PSH: Congratulations. So you were born in Manchester….

AJ: Yes

PSH: ….and did your family move around at all during your early years?

AJ: No, so I went to Manchester Grammar School and then on to Cambridge.

PSH: Right. Was there any medical or scientific tradition in your family at all?

AJ: No, none at all.

PSH: What about your parents. Was there any particular area they were in, in terms of profession?

AJ: Well that really just applies to my father. He was in the gas industry, not on the technical side but on the administrative side. But he died relatively young at the age of 53, probably the consequence of renal failure, having acquired trench foot during the First World War.

PSH: So you went to Manchester Grammar. Was there any particular factor at school that made you want to do medicine or science?

AJ: I always wanted to do medicine.

PSH: How far back does that go do you think?

AJ: Oh well, from the start of secondary school, but certainly by the start of 6th year. The form master that I had was very keen that I should do classics and put quite a lot of pressure on me to do classics but I disappointed him.

PSH: And were there any teachers in the area of biology or other sciences that enthused you?

AJ: I wouldn't necessarily say enthused but certainly informed. When I went into the 6th form biology section we had a master who was a very able teacher. He was young enough to be called up and he went off to the war and

he was replaced by a very interesting chap who had a PhD in Drosophila genetics….

PSH: Good Heavens

AJ: Which for 1940/42 was pretty unusual. He was a terrible teacher of zoology unless he was on something genetically relevant and the enthusiasm that had gained him a Cambridge PhD came out. So that was how, in fact I came to read, the - I can't remember whether it was the Journal of Genetics or the Journal of Heredity - but a genetic journal long before I looked at the BMJ.

PSH: It's interesting, some people are put off genetics by Drosophila and you must be probably one of the few medical people who have been switched on by it.

AJ: Well I am not sure that I was switched on because there was no place for genetics in the curriculum and then of course I went up to Cambridge. At this time the human chromosome number was thought to be 48.

PSH: So when you went to Cambridge, now, what subjects were you doing for the two parts of your degree there? Was it medicine entirely or you must have done a degree.

AJ: Oh no, there was no real medicine at all. We had anatomy, physiology, biochemistry and pathology, just the standard subjects…

PSH: Pre-clinical sciences.

AJ: …the pre-clinical sciences. And if you got a second or better you were excused from, I think the second professional examination, not quite sure that I've got that term straight after this length of time. But, we did natural science tripos and then went off to London to UCH. I qualified in 1951 and two years later I got my membership without too much difficulty.

PSH: That's quite something in those days.

AJ: Yes, and I was then a medical registrar at UCH. They had just started a rotation out to the Whittington and on New Years Day, it would have been [1949],1959 I was doing emergency receiving, when we had admitted a woman with a haematemesis who clearly had Turner Syndrome. I wrote to Paul Polani and of course they were just overwhelmed with requests to do chromosome studies; at the same time I was looking around for senior registrar jobs in general medicine. and Max Rosenheim, who was my boss and mentor and so on, he said 'Well you're due to go to the States now, where do you want to go?' and he gave me three choices, one of which was Victor McKusick.

PSH: Before we get to that can I just ask during your undergraduate time at UCH did you have any contact with either The Galton or any other parts of London Human Genetics?

AJ: No, not at all.

PSH: So, the fact that Penrose and his unit were sort of along, well not along the corridor, but next door…..

AJ: Just across the road.

PSH: ..wasn't something that clinical students at UCH really registered?

AJ: No, not at all.

PSH: And how about Paul Polani's unit in Guys; had you any kind of awareness that was existing?

AJ: No, not in the early years.

PSH: So, when would you say you became conscious of genetics as something which might be a part of or relevant to medicine?

AJ: Well, this opportunity of going to work with Victor.

PSH: Was it a link that Max Rosenheim or anyone else had already established?

AJ: Max had established a connection with Victor and I think I was the first to go from UCH to Victor, but I certainly wasn't the first Briton to go.

PSH: But do you know at all how that link came about? Because I hadn't been aware that Max Rosenheim was interested in genetics. Was it in Victor's cardiology days? Or, I've forgotten what Max Rosenheim's speciality was.

AJ: Hypertension and renal disease, but, he was very aware that the genetics was up and coming. So he gave me three choices as to whom to go and I opted for Victor in view of my inability to get chromosomes done on this 67 year old woman with Turner's. I did subsequently get blood from her and she was a straightforward 45X.

PSH: What year was it then that you went over to Baltimore? When you said 1949 earlier I think you must have meant 1959. [Yes]

AJ: Probably

PSH: Because I think that was when chromosomes were sort of just coming…

AJ: 1959 to 1960 I was in Baltimore and I was there 15 months and I had come back and was more or less expecting that they would make a job for me, but the only one they could get funding for was as a laboratory worker and I'm a clinician.

PSH: Tell me about your time in Baltimore?

AJ: Well Malcolm got there I think about six or nine months beforehand, he was well entrenched.

PSH: That's Malcolm Ferguson-Smith?

AJ: Yes. I wrote my MD thesis, doing it on chromosome studies in man and I thoroughly enjoyed doing the laboratory work, but I was quite clear that this was not a career prospect for me, and I came back to UCH and I reckoned if Max Rosenheim couldn't find funding there wasn't much hope of getting it and I think that in fact was right because eventually Martin Crawfurd was given the job, as I had turned it down. I had long talks with, not only with Max but with Lionel and with Harry Harris. I had one very long session with Harry Harris at his home in North London one lovely summer evening and there was this stumbling block of no funds.

PSH: So you had become conscious then of the Galton and the people there.

AJ: Oh yes, when I came back from Baltimore I linked up and I did a lot of clinical work based in The Galton. Did you know Barbara Warland?

PSH: No I didn't.

AJ: She was, sort of what do you call it, a genetic counsellor, something like that. Fabry's Disease, we did that very big pedigree that appears in the Annals and that was all based in the Galton but the things that I did were mainly outside the college but using the college for basic facilities, and as I said I was told that I really had to carry on just in general medicine. And in fact if you look at my list of publications you'll see that in fact there are several genetic papers based on Hopkins work.

PSH: Before we go any further, just a little about your Hopkins time because am I right that your first publication, your first publications were on chromosomal topics and that they originated from Hopkins?

AJ: No, my first papers were General Medicine.

PSH: Right, but your first genetics papers.

AJ: Yes, they were from work done at Hopkins.

PSH: And so thinking again in terms of what you spent your time doing at Hopkins, apart from the chromosome work with Malcolm, were you involved in any of Victor's other clinical work.
AJ: Yes

PSH: …..like connective tissue diseases or Amish? Which parts did you meet up with?

AJ: I took mainly the apparently X-linked clinical conditions. There's an X-linked form of Parkinson's Disease that Victor and I wrote up. We wrote several papers on interesting families that Victor had acquired over the previous few years, I wrote them up and I had a reasonable amount of

neurology, I mean enough for me to be approached by Queen's Square to see if I would take a senior registrar job there, but I said thank you, no. Queen's Square didn't strike me as being right for me.

PSH: So with Victor's unit then, because you were one of the first people there, was it structured in the same way as a bit later, there was a Thursday clinic and everybody joined in, or was it different in those days?

AJ: My recollection is that it was just on an ad hoc basis. There was a regular weekly meeting that had been established, a clinical meeting and of course there was the weekly meeting on references that led eventually of course to MIM [Mendelian Inheritance in Man].

PSH: I'm interested by that, because, am I right then that the first edition of Mendelian Inheritance in Man hadn't yet appeared.

AJ: No, oh no, it was being done as we went along. There is an acknowledgment in one of the early issues saying how this started. We met in Victor's home.

PSH: I think you're right, I think especially in clinical terms, Victor valued the British people because they had a broad and good clinical training. Can I ask, before Mendelian Inheritance in Man Victor published his book on the X chromosome of man. Would the work you had been doing on different X-linked disorders have fed into that?

AJ: Yes, I don't remember exactly but I think that that's the case.

PSH: Coming back then to this country, you'd seen that there wasn't really anything in the way of funding for a clinical geneticist at that time.

AJ: Yes

PSH: And that's I suppose 1962, so what did you do next?

AJ: I had to go back into general medicine. I got a senior registrar post at UCH and was attached to Max Rosenheim and that was at times quite alarming because Max was the doctors' physician in North London. And from time to time when Max was away it fell on my shoulders and I remember one Easter, one Sunday morning, being rung up by the wife of one of the more popular cardiologists to say that he thought he'd had a coronary, would I come and see him. So I ended up taking responsibility for this chap who actually did very well, I don't know whether he's alive now but he'd be well and truly retired. So I was doing general medicine and I joined in things like the Galton. The Galton did run a series of lectures, which I attended where I could and I made my contacts with Lionel Penrose and of course with Shirley too, a lot younger in those days.

PSH: Shirley must have been a child at school in those days.

AJ: Well she was a teenager, yes.

PSH: Was that then when you came across this big Fabry family? Because that's really a landmark publication in some ways. I mean how did that study get off the ground?

AJ: Well this is where Barbara Warland came in because she did a lot of the donkey work looking up records and so on. No, what happened was a patient was admitted to one of the medical wards at UCH and he had got a funny rash and the only person who had any ideas to what it was a New Zealand physician who was working on the unit and said 'has anyone thought of ….' and he was absolutely right and that's where we started off because after taking a brief history it was obvious that there were a lot of individuals involved.

PSH: Because really not much was known about Fabry's disease then.

AJ: Nothing at all, we didn't even know the mode of inheritance; it was thought to be X-linked but there was no proof of it, but we had one or two nice little bits of family history like my embarrassing conversation with a GP of one branch of the family, who when I said we really wanted to get some blood off, and there was a sort of pause at the other end and the GP eventually said to me 'did you know that that child was illegitimate?'. So I said no. But in fact of course it proved the X-linkage.

PSH: Yes. Was this the time when the Xg blood group was being discovered?

AJ: Yes. There was a lot of work being done on blood group genetics at the time; that's why we were taking the blood. There was no question of identifying an enzyme or anything like that.

PSH: So would you have had contact with Ruth Sanger and Robert Race?

AJ: Yes, one of my better and shorter papers was written with Ruth.

PSH: I'm trying to remember, did that original paper actually show linkage with Xg or did that come later?

AJ: That came later.

PSH: So apart from the Fabry's family did you get any exposure to other genetic diseases at all when you were back in London, or did that have to wait?

AJ: There was something going on, not a massive involvement but they were coming up, there was a steady trickle, I suppose you might say, of genetic cases and we did discuss them with Lionel, but by and large we were left to get on and just provided with facilities. Did you know Helen Lang-Brown?

PSH: Yes, I met her.

AJ: Yes, I met Julia…

PSH: Bell?

AJ: …Bell, yes, at that stage.

PSH: Give me an idea of what The Galton was like from your perspective, going in perhaps as a bit of an outsider.

AJ: I was, because I was based in the hospital. I could probably have got a desk in The Galton, but most people just went off and did their own thing.

PSH: Were you there at the time when Penrose retired and Harry Harris took over?

AJ: Yes.

PSH: Did that make an immediate change in The Galton or was it rather gradual?

AJ: Well I was still working in UCH and I know, as I have already said, I had many long chats with Harry Harris and, but fairly soon after Harry was appointed I moved up to Aberdeen. In retrospect it's quite crazy that nobody had the foresight to pick me up and give me a job.

PSH: A number of people could say just the same in different places. But it was early wasn't it?

AJ: Oh yes.

PSH: So how come that you ended up in Aberdeen?

AJ: Well as I said, I was looking for a consultant post and I was advised to go for a teaching hospital physician post and there was one advertised in Aberdeen and I had no objection to moving out of London and I was fortunate enough to be appointed. There were two local candidates either of whom might well have expected to be appointed. But the important factor probably was that about a month or maybe two months before the time of my interview, the university had appointed John Evans as the first occupant of the chair of genetics.

PSH: Right

AJ: And there was a retired professor of obstetrics who was very interested in genetics and his wife was on the health board at the time, I think that was how it worked out.

PSH: Would it be fair to say that Aberdeen, perhaps unlike Edinburgh and Glasgow, has always had a tradition of looking outside as well as just inwards. I always had that impression.

AJ: Well it's not true. Until about 1960 Aberdeen was incredibly inward looking, and then there were changes in the health board and I don't know

that it was ever formal, but there became a tradition that at least half of new appointees should be from outwith Aberdeen. In fact, that the early 60's quite a number of very important appointments were made. Does the name of David Short mean anything to you?

PSH: Yes

AJ: Yes. Well he was I think the first and I was about three of four from outwith Aberdeen.

PSH: At the time you went up to Aberdeen were you married with a family?

AJ: No, no family, but we were married. Just by about 18 months.

PSH: So how did Aberdeen seem. I mean very different from London…

AJ: Oh yes

PSH: …as a place to live and work.

AJ: You may not realise this but my family is in fact Scottish.

PSH: That's always a very big factor.

AJ: That sort of question is the easiest to answer.

PSH: So when you got established as a physician in Aberdeen, at what point were you able to make contact with people like John Evans and…

AJ: It was only after I was appointed as physician in Aberdeen that I approached John Evans. He was still at Harwell and we met in London. I do not know whether he knew of my interest in genetics prior to my appointment. This initial contact enabled an early start to the Mental Retardation Survey published by SHHD

PSH: So was he aware that you were actually interested in applying?

AJ: No

PSH: What happened next ?

AJ: Oh yes and that's how we started off doing the survey on mental retardation and that was published by the Scottish Home and Health Dept. and I think that was a mistake because it hasn't been widely appreciated that all this work was done. The other thing that made it less valuable was the fact that within the year [of getting on with it,] banding came in. If we'd done it all with banding I think it would have been more appreciated but I think it was a worthwhile bit of work. The next problem [that happened next] was of course that Court-Brown died, and the MRC picked on John Evans and said look, come and head up this unit, and he hadn't been all that long in the chair and it was really quite an awkward position, I had nothing whatsoever to do with the appointment, but there were two candidates for the job originally, John Evans

and Forbes Robertson. John Evans got the job; when he was translated to Edinburgh Forbes Robertson got the job and he was a somewhat odd individual. If he was seen to have done something, then it got his support but if someone *else* had done something he didn't like it particularly - this was the impression given.

PSH: Am I right that his main interest and area was lipids and cholesterol?

AJ: Yes but it never came to anything very much and in fact there was one Clinical Genetics Society meeting that Cyril Clarke came up to me and said have you seen this paper from Forbes Robertson? I hadn't seen it in detail but I had seen what was going on. Cyril said to me 'I don't understand a word of it, what about you?' so I had to say I hadn't understood a word of it either, so he said 'oh what a relief', as you can imagine him saying..

PSH: During these first years did you have contact with people like Pat Jacobs in Edinburgh and Malcolm Ferguson-Smith in Glasgow?

AJ: Yes I did have contacts but it was partly because of lack of contact of course there was support for the CGS at that time. I think it was Alan Emery yesterday said that the first meeting was in Edinburgh; there were three centres in Scotland waiting for something like that.

PSH: Yes, and was there a specific medical chromosome unit established in Aberdeen either by John Evans or anyone else?

AJ Yes, by John Evans and the cytogeneticist Bob Speed who went to Edinburgh with him.

PSH Coming back to what you might call UK national genetics matters, the CGS got going about 1970 or so; were you very involved in its organisation at the beginning? Tell me a bit about that, because I was out of the country when it actually started, at Baltimore. I know that Sarah Bundey and Cedric Carter were moving spirits initially, but there must have been quite a few other people like yourself who were involved.

AJ: Yes

PSH: Was there anything particular you remember from those very beginnings of the society?

AJ: I think it probably is fair to say that it was quite exciting because here we were on the edge of an entirely new area of medicine and as somebody said yesterday there was a lot of, what was the phrase, collegiality, I don't like the word but the concept, yes.

PSH: And when did you get involved with the Royal College of Physicians in terms of genetics?

AJ: Well, yes in a sense that is slightly back to front. I got involved with the training, because of course I was wandering around half my time with senior medical registrars and registrars floating around and there were, there were a

whole series of reports. and I hope they are going to be included in the results of yesterday's conversation because there were, over the period 1973 -to 1976 that sort of, the early 70's, there were a whole number of reports on training and since I had a senior medical registrar slot on my unit, which was an odd situation, I got landed because I knew my way around the blue book etc. and various other situations. We were discussing at the end of one of the meetings and I can't quite remember where the meeting was, and we were saying 'where do we go from here?' We said we've got this report which had been initiated by Cyril Clarke of which I have a copy. Cyril Clarke had written to the Clinical Genetics Society asking can you give me some guidance because at this time I think he had just become President of the College. and as we talked I said at one of these meetings, I said well what are we going to do about the SAC? and AJ said well, in about three weeks time I'm meeting Sir John Crofton who was then Chairman of the JCHMT and Paul Polani picked me up immediately and said can you approach him about our SAC.

So that's how I got into the SAC situation. And Sir John was very helpful in so far as he would/could go and we then suddenly came up against a wall, and he said I don't think there's any point in going any further down this road, the JCHMT, the whole committee has decided there should be fewer SACs and smaller SACs. And I think they took that decision without understanding the implications. Because as far as we were concerned they wouldn't let us as clinical geneticists have an our own SAC and we were put under the paediatric SAC with Professor Ross Mitchell as our paediatrician. Now Ross Mitchell did a lot of good work and he was all on our side. He thought it was crazy that they should be supervising us but those were the rules and he obliged and bent them as appropriate.

PSH: Do you remember when it was that actually, clinical genetics actually got its own training committee?

AJ: I don't because it was after my time, it was after I'd retired. The one meeting that I mentioned yesterday was this one at the Royal College where the draft report was looked at by all sorts of people including somebody from the Welsh Office, St Andrew's House as well as Ian Lister-Cheese. And they looked at the report which I had written, and the revised paper resulting from that meeting and we ended up with our obtaining support for all the CGS working parties, which I think was really quite a major step and I don't think was covered as well as it might have been yesterday. But they went in, in terms of numbers, for the 42 consultant clinical geneticists and 6 senior registrars and they were validated by that meeting at the college.

PSH: Coming back to your own practice in Aberdeen. How did you find combining a full time medical, general medicine job with trying to do genetics as well? How did it work out?

AJ: Well it did work out, partly of course because I had very good junior medical staff. My general practice was that Monday was sacrosanct for general medicine. On Monday morning everyone went on a big round, we had a big round, I we saw every patient, we said that this is the plan for each patient, this is the plan for that patient and then at the end of the week we reviewed all the decisions and planned until the following Monday, and it

seemed to work reasonably well, I mean the lab was only across the road. I was always available at either end. I didn't have to cross Birmingham or anything like that.

PSH: So what existed then in terms of your involvement in genetics? Were you actually responsible for the lab at any point at all or did it run itself under scientists?

AJ: Well this was one of the things that areas where Forbes-Robertson was quite difficult over, did not see eye to eye because when Brenda Page came I had looked at more karyotypes than she had, I had far more experience, but Forbes-Robertson insisted that she was his appointee, that she took charge of it and more or less excluded me. And so it was at that point that I was willing to take on some of the administrative side here because I could do that. It was in my time and I was responsible and I could do more or less what I felt was appropriate.

PSH: How about clinical genetics. When did you first have a trainee in Aberdeen?

AJ: A trainee at what sort of level?

PSH: I was thinking one of the registrar or senior registrars.

AJ: I think the answer to your question was 1988. But in the early 80s, John Dean had been appointed as medical registrar to come and work on my unit so he spent half his time doing general medicine and half his time doing genetics., now that would be the early 1980's.
[Over the same period, Sheila Simpson had begun to work on the research side, but not yet at that level]

AJ: The first SR [in Scotland] was the late Heather May, remember Heather?

PSH: I do. In Glasgow.

AJ: In Glasgow, yes and then I got the second SR who was John Dean and of course they've continued that.

PSH: Was there a second consultant appointed while you were still in post? In Aberdeen?

AJ: Yes, John Dean was appointed whilst I was, before I retired, I suppose about the best part of a year before I retired. He took over running the genetic unit, and at about the same sort of time I said to the then professor of medicine Stewart Douglas, we want somebody academic, and he said we've got just the person, Neva Haites and Neva came about that time but she was on limited money. Eventually Stewart did manage to find some money for Neva and after she'd been in post a few months it was quite clear that she was an asset in post and needed fostering.

PSH: Yes Indeed. Alan there are two questions that I am asking everyone that I have been doing an interview with and the first one is, is there any one person that you can single out as either a teacher or mentor who has particularly influenced your career in genetics?

AJ: I don't know that I could answer one. I mean, Victor obviously was an enormous influence and continued all down the years. Cyril Clarke in fact hasn't had quite as good a press as I would have hoped. I think that's because he came down very firmly on the clinical side, but Cyril did a lot.

PSH: I would absolutely agree with that. And I'm interested that being up in Aberdeen, how did you interact with Cyril, was it through the College of Physicians mainly?

AJ: Yes, and the Clinical Genetics Society and the Association of Physicians. Max Rosenheim opened the way to joining Victor.

PSH: The other question that I've been asking everyone is, is there a particular piece of work that you are most proud of or identify, that you could pick out, from that you could take with you, so to speak., you'd single out from others? You're allowed to choose two if it's difficult!

AJ: If it's two then that renders it easier. The angiokeratoma family I think is one of course. At the time we set out on that work very little was known about the inheritance and the one thing the Galton did have was they had a superb cartographer, I will use the word, and he redrew our rough pedigrees into the beautiful ones that appeared in the Annals.
Another paper that I really quite happy with was in fact a controlled trial of hypertensive drugs and the work that we did with Max Rosenheim and Brian Pritchard has served as a model for many other hypertensive drug trials and maybe others as well. Nobody had attempted anything like that, we had, what was his name, Hill I think, a statistician…

PSH: Austin Hill, A V. Hill?

AJ: Yes. But he was a great help in helping us to design a trial. I don't know, if you ask me that in three month's time I'd probably give you a totally different answer!

PSH: And then just finally. You and I must be I think the only people who have managed to combine practicing medical genetics and general medicine for most their career. Have you found it a worthwhile thing to combine the two?

AJ: Yes, well yes, you get all sorts of oddities happening. We were receiving one night and a woman with hereditary haemorrhagic telangiectasia with a haematemesis and I got the gastroenterologist to see her as she obviously needed scoping. While that was going on another of my colleagues came to see somebody totally different, we had a large blackboard with all the names and diagnoses written up on it and they turned to me and said 'hello I didn't know you were doing genetic emergencies'. It actually was a constant refrain from the junior staff registrars and senior registrars too, but certainly

from the SHO and registrar was the fact of 'where do you get all these general genetic cases from' and I said I don't get them from anywhere, we are just aware of them and we pick them up and they are there in your ward but you fail to identify them. I think people after a while got rather fed up of my saying that, but that in fact was the case.

PSH: Alan we must draw this to a close but are there any things that you want to bring up or mention that I haven't covered at all, that you think are important?

AJ: Well, one thing I did want to ask you about, well there were several things but one thing in particular. What story have you heard about the formation of the Scottish Molecular Genetics Consortium.

PSH: That's a very good point and it ought to have come up in yesterday's meeting.

AJ: I was waiting for it.

PSH: Although that was very lab oriented.

AJ: Yes, but not originally.

PSH: I'd like to hear your story because it is an important story and needs to be documented.

AJ: Well, yes, in 1984 we and I think also Malcolm and David Brock applied for research funds, it may just have been somebody else in Edinburgh., I'm not certain about David Brock there, We all applied for funds under the New Developments in Health Care to take the DNA work into the clinical scene, and we were turned down flat. One of the senior folk in Home and Health told me it's premature. However, either what I we said or the fact that they got several different applications, made the New Developments in Health Care Committee set up a clinical working party to determine the resources that would be needed. That had as it's chairman the late John Knox from Inverness who was a physician, very well read and very able physician and he was in the chair. I effectively was deputy. He had close relatives in Aberdeen so quite often we spent a journey in one or other direction and we'd almost completed our report on what were the clinical needs when John was told that Home and Health were looking at a consortium pattern of funding. So we had to rewrite the last section of this the report and the health boards, The four teaching health boards were asked to submit a common application for funding, and that was acceptable to Home and Health and to the four health boards .

PSH: Was it Nabil Afara?

AJ: Dundee Consortium was brought in because knowing Scottish politics you couldn't leave out one of the four units, David Brock never really understood this, he said you know, if there was only one person he could do the whole lot. Well of course he could do the whole lot but that wasn't the point! It had to be the four teaching units and that was all it there was to it. I

would like to think, in fact it's still going strong well as far as I am aware, it did a very good job and the ramifications in clinical terms we got, clinical staff which they'd originally refused and they realised after we had been running a year that there was no way we could on without more clinical staff, and that was when we got ourselves reasonably well staffed, at a clinical level.

PSH: I think that's an important story because it's a strong counterpart to what was happening south of the border where we had had this special medical development, three centres, Cardiff, London and Manchester, funded on a trial basis which I think started a little before the Scottish development but then got sunk at the end, which, I was involved with this, when we came to setting up, trying to set up a consortium this was precisely the time when the internal market came in and it was politically unacceptable for different units to be co-operating with each other. So that it got knocked on the head just as it was about to get going and it would probably be another nearly 10 years before it really got going as the UK Genetic Testing Network; there's no doubt that in terms of providing an effective consortium of delivering molecular services in a clinical context Scotland was ahead of the rest of the UK and I think it is very important that that doesn't get forgotten.

PSH: Alan I think we'll finish there. Thank you very much for talking with me and going over things because yours has been a very important contribution. I've been waiting for the chance to put it on record for a good few years. So thank you.