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**Sir Stanley Peart FRS in interview with Dr Max Blythe  
Oxford, 6 May 1993, Interview I Part Two**

MB Sir Stanley, in the first part of today's interview we got to the beginning of your clinical course at St Mary's. Perhaps we could develop that, those years into a, into a deeper study now.

SP Hmm, surely. I suppose the two sort of major events... There's a lot, of course, of things telescoped, you know, because the war's going on outside the ... you've neatly concentrated attention on medicine. And there are lots of memories of that intermingled of course, being in London at the time. And I suppose two things, when I was doing my surgery, surgical dressing; you know it was junior and senior, and I came to doing senior surgery. And this was a very important time, because that's when I met my ... to be wife who was the charge nurse on what was then Lilian Holland Ward, with a very nice Welsh sister who was obviously very intent on making sure that our acquaintance prospered. You hear a lot about ogres – there were quite a few ogres about as sisters then, you know, because they sort of stayed around a long time and got a little sour – but she was really a tremendous outgoing woman. I still meet her occasionally. She's down in Wales now, but she's still...

MB And she is?

SP She's Sister Griffiths(?), actually. And she was tremendous. Anyway, my wife ... was a young, very pretty girl. And one of her characteristics was that she always seemed to be very happy. And the patients really thought, you know, a tremendous lot of her because she always seemed to cheer them up, and she always seemed to be very gentle with them. And this of course ... you know, as a young boy I'd not had a lot to do with girls actually, and I, this was quite an eye-opener for me, and I mean it was one of those cases of, you know, once seen never forgotten. And I never thought that I would get anywhere with her at all, so that it was a great surprise to me... You know, I didn't like to ask her to go out anywhere, and I eventually did summon up the courage and much to my surprise she sort of accepted this invitation. But I was, I can imagine I was absolutely the most angular sort of chap possible for her to meet, but that was the start of an acquaintance which went on for all the time that I was a student then, and...

MB You fell in love?

SP Yes indeed. Oh, absolutely. She was just the sort of person that really had the qualities that I ... I sort of wanted.

MB Massive important further dimension in your life.

SP Oh absolutely, yes, absolutely. Well, she's stood by me all this time, you know. And as it happened, you see, though I didn't know it of course at the time, her father was what was called a house governor for the hospital.

MB An important figure.

SP Yes. He was, he'd gone off into the army again for the second time. He'd had a very adventurous career in the First World War and lost one of his lungs through being shot through it. And he ... but he was a very military figure; he kept his title of Colonel and he was always known as Colonel Parkes, you see, in the hospital. But he ran it like you'd run a regiment, you know, and it was absolutely, it was meant to be clean. And when he came back from the war – he went in again, he went into the war again as a ... running a sort of support group of soldiers and he went away... He was tough. When he came back he put the hospital to right, you know, immediately after the war, and...

MB You could feel his presence?

SP Oh absolutely. Yes. I, when I first went to see, here ... see Peggy's parents, I sort of got the feeling I was rather like the chap come to read the gas meter! It was very like that, and he was very like that. But I eventually overcame this what I thought was resistance. But her mother was very sweet. And unfortunately she developed parkinsonism in her later years, but she was very sweet and she was quite supportive. So eventually that was, that went very well. So that was one very important engagement. We only became engaged after the war. To say, talk of engagements, whoever heard of these things these days, but nevertheless that was it. And the other important thing which is important in medicine for me was encountering George Pickering. Now George Pickering's an extremely important figure in British medicine. He's one of the few clinical scientists that is a descendant really of Thomas Lewis. Thomas Lewis was related to Mackenzie<sup>1</sup>. Mackenzie introduced the real study of cardiology ... in putting it into scientific terms. I mean taking an interest in what was making the noises when you put a stethoscope on the chest, looking at the way the venous pressure changed, the waves in the venous pressure, the shape of the pulse. Mackenzie was a very important figure. And he was, he did private practice as well actually. But he was just a remarkable man.

MB Where was Mackenzie based ... for his career?

SP He was in London.

MB Right. But not at St Mary's?

SP Oh no, no, not at all. But Lewis was a very different person. A slightly distant Welshman, his pictures show him to be as austere as everybody described him to be actually. There were many stories but nobody's ever written a biography of Lewis. His wife is still alive incidentally. I don't think anybody ever will. It's a great pity because Lewis was one of the people that was a true scientist in the sense that he

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<sup>1</sup> Sir James Mackenzie (1853-1925).

looked at a situation, tried to analyse it, and then used the experimental method to dissect it. His work on blood-flow through the skin and a variety of other topics were very important. But his importance went beyond that because he trained so many people in the same method. Now those that could survive him, and his ascerbic sort of tongue did very well... Now Pickering was a man who not only could survive this, but was actually liked by Tom Lewis, and there were very few that could be given that sort of confidence, you know.

MB So Pickering came from the UCH kind of stable?

SP He came from the UCH. Yes, that's right. So there's a direct line – Lewis to Pickering. Lots of other people of course, but that was a very very important connection. Now this is a great tribute to Moran, you see, because academic clinical medicine ... you see, Moran had seen that... You remember ... there was a report right about 1914, it was the Hallsbury Report on the state of British medicine, British academic pursuits.<sup>2</sup> And it was very critical of, you know, what you might call the Harley Street approach versus the rest, and that of course because of the war laid fallow... But after the war, there was great deal of emphasis on the need for research in medicine. I mean it came principally I guess, the pressures, from the United States actually. And London University saw ... who it was in London University saw the importance of this is not very clear to me at the moment, but nevertheless it was decided to start up academic clinical units, independent of private practice. And as you might imagine the first was University College, and Lewis. Now ... and strangely enough Moran. Now Moran's background was as, initially as a neurologist, as a physician neurologist, with a wide interest in medicine. And during the First World War, you know he'd gone as a regimental medical officer, he had written *The Anatomy of Courage*.<sup>3</sup> Now that's a book, if you haven't read it I would recommend it to you actually, because you see in it the transition of somebody who saw shell shock as being one of the, a real condition which had to have some organic component to it, within two years of experience he then saw the influence of the psyche on the soma. And he could then interpret, and to deal with the problem, because initially you see people were being, shell shock, you were moved out of the line and you were treated as, you know, not too well actually. But he recognised that this was something that really needed better treatment, and it was no good saying snap out of it, keep a stiff upper lip, it was essential to move these sorts of people out of that setting. And you find all that reflected in *The Anatomy of Courage*. It was brought up to date fairly recently, after the Second World War, with the addition of the experiences in the RAF medical service. And that makes a very interesting conjunction; you see the transition in views on these sort of syndromes, you see, because shell shock was not understood and then became understood gradually.

MB So an important volume.

SP It was ... it's very important.

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<sup>2</sup> Sir Stanley Peart must be referring to the 1913 Report of the Royal Commission on University Education in London, known as the Haldane Report. This report recommended that academic clinical units, led by full-time professors, should be developed in London medical schools.

<sup>3</sup> Charles Moran, *The Anatomy of Courage*, London: Constable, 1945.

MB Especially in it's revised version.

SP And though... Absolutely. But Moran, you see, had got that quality about him as well. You see, he could write well and he spoke very well too. Well, one of his...

MB A tremendous load of qualities.

SP Well, one of his, one ... Dickson Wright<sup>4</sup> who was a well known surgeon at St Mary's, one of the other well known surgeons, was... There were two people, you see, when he, they said to him one day 'You know the two really great orators in British Medicine, there's Moran and there's Lord Cohen of Birkenhead.' And Dickson Wright, he had this sort of nasty, very funny way of speaking, he said 'Well, of course, you know, they took lessons.' And he sort of got back at them that way! But ... Dickson Wright incidentally was the surgeon who operated on my father who unfortunately died of a cancer of the stomach at the age of fifty-eight. And I bumped into him one day outside St Mary's and he said – you know, he was always very interested in families, and in everything actually, an interesting man – he said 'Peart, how's your, how's your family getting on?' I said 'Well, my mother's doing very well, you know. She's going well, she's about eighty, and gives me a lot of encouragement.' He said 'Ah, but you might turn out like your father!' So that ... that was the sort of nice remark he was quite capable of making. But nevertheless...

MB While we're talking about Dickson Wright, did you see him operate?

SP Oh yes.

MB Did you see him in theatre?

SP Yes, I did. He actually had wonderful technical skills. He could, he started thoracic surgery in this country, he started neurosurgery in this country; you name it he was the first to take it on. Sometimes that led him into real difficulties, because technically speaking some of the stuff required, you know, equipment, more than that which was available post-war you see. But he was a pioneer, he could be absolutely, be absolutely brilliant, you see. He spent a lot of time in Singapore, training, and of course he operated, you know. Tremendous experience he had actually. But he had other quirks, I have to tell you, in that way. But that diverts me of course from the main, the main influence. You see, Pickering and Lewis – an absolute straight line. But Moran had picked Pickering, and you have to recognise that reflects on Moran's real judgement, a really important light; it tells you he could appreciate the need. He'd already, in 1920, decided that Mary's ought to have academic surgical and medical units. And they'd, despite the fact that Mary's wasn't in the line of the first three, he appointed directors of units ... just off his own bat. He decided he would start them. Very rapidly London University saw his initiative and supported it. So we got our first professor of medicine and first professor of surgery. And Langmead<sup>5</sup> was the first professor of medicine. In fact I've still got his Windsor chair that he used to

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<sup>4</sup> Arthur Dickson Wright.

<sup>5</sup> Frederick Samuel Langmead.

sit on. I discovered it actually, incidentally, in the gents' loo actually at St Mary's! I noticed this rather nice Windsor chair lying neglected in the corner. So I looked at it, I turned it up and I saw the name Langmead on the bottom, I expect, so I took it. It sits at home in my study now, you see.

MB A nice trophy.

SP Yes. Well I don't feel badly about stealing it, I have to tell you. But Langmead was not the, you know, he wasn't what we understood as a clinical scientist. He, what he did was ... he measured things. He was interested in paediatrics. And that was, you know paediatrics hadn't separated off from the main body of medicine in those days. He was interested in diabetes. And the old medical unit laboratory, which was in the original Mary's building, which was up some stairs which is where I first knew what the medical unit was about, was full of very old-style chemistry benches, you know, with those nice shelves, and made of teak of course, stained benches. And they used to measure – what was unusual in those days – they used to measure blood sugars and things like that, you see, because he was interested in diabetes. So that was the main activity.

MB One thing I'm trying to sum up here. Moran was quite interested very early in the twenties in having medical research going.

SP Absolutely.

MB When did the actual chairs, the medical professorships, come about? In the thirties?

SP Oh no, before that. In the twenties.

MB Before ... that was in the twenties?

SP Oh, in the twenties. He managed to achieve it, you see, so he was way before his time.

MB That's very interesting.

SP Now that initially didn't have much influence on what you might call the development of academic medicine at St Mary's. I mean, you know, they went on the same way; the consultants ran the place and they were doing their private practice as well as teaching the medical students and so on. I mean they were the sort of people that also taught me as well as a student, you see. But the real impact came when Pickering was appointed in 1938, you see. That was, that was Moran's appreciation, you see he picked somebody who ... you know, you would not have expected him to pick really. Because George was a small vital man who was very clear about what medicine should be about, and very clear about the importance of research, having been brought up by Lewis and imbibed his principles and, but done some extremely important work completely off his own bat. I mean he was from Newcastle, you see, and that was the other thing that I ought to point out actually! But he ... unlike me, very unlike me, because he made up his own mind at the age of fourteen. He went to

Newcastle Grammar School, and unlike me he made up his own mind. He lost his father at an early age and his mother was obviously a very important figure in his life. But he in fact decided at the age of about twelve that he wasn't getting a good enough education at Newcastle Grammar School. Be careful now, you'd better edit this out actually, but it's a long time ago! And he said to his mother 'I'd like to come down to London.' And, now quite why he picked Dulwich School I will never know actually. I don't think ... I'm not even sure his wife, who's still alive actually – a dear lady, Carola Pickering – I don't know, she might know why he did it. But at any rate he decided. Now he'd got a relative in London with whom he stayed, and he went to Dulwich. Then he went, then he did very well. I mean, he was a real original. I mean he thought for himself and he just got on with it. Very interested in all things biological. And he went to Cambridge and, you know, on a scholarship, and did terribly well there; you know, got a first and all that. Then came back ultimately to work with Lewis and ... you know, having qualified in medicine and so on. And so he had a real star career. And, so that for Moran to pick him out, was ... you know, you could imagine putting him into the groupings of the old style of consultants that were still there was quite an experiment. But George had got a pretty powerful personality. And he started to succeed and win over his colleagues, because he determined that he'd show that he was better than they were clinically, and at the same time he could do research, which they couldn't, you see. He was driven by that, you see, so he established a real new era in London, that's certain. And from that ... you see, that was why when I came into contact with him he had a tremendous influence on me. Because he always used to ask that vital question, you know, 'Why is this happening, how is it happening' on anything that appeared, you see. Tremendous. He, and he wouldn't, he always rather fancied his English actually, so if you wrote anything slightly slipshod in the notes, you know, he'd pick you up in front of all your fellows and, you know, dump you down rather hard actually! And if you made any statement which couldn't be supported by the evidence, you got it in the neck actually. Of course those influences are tremendous because you try obviously to pass those on to your students. And that's what is meant by real influence. You forget often what it was that people had said, but the manner and the actual principle behind what they're saying becomes of enormous importance.

MB And he did it well?

SP Oh, he did it terribly well.

MB And he made impact?

SP I mean, he had a tremendous impact on me. So I gave up all thoughts of surgery then, and medicine and the questions behind what we were looking at were all important, you see, and that's...

MB So here's a third great influence.

SP Oh, tremendous influence on me. But he's had an influence on a lot of people. Of course George is, was – he died in his middle seventies – he ... people were all black or white to him. If you, if you fell into the black category you never, you never could move over; you were beyond the wall! Fortunately I was in the white category,

you know, but it was hard actually for a lot of, a lot of people actually to deal with him. The students ... of course, as you can imagine, he only appealed to a few students. The others that were put into the position of really having to answer those difficult questions as to what do you think the reason behind this appearance is sort of didn't like it. Mind you he had, he had another interesting characteristic which relates to another story, which... He had a familial tremor, that is he had a tremor of his hand. I always remember ... well, he was standing at some reception and one of the sisters behind me said 'You know, he must drink!' Of course ... his sister also had the same thing, but it was, it ran in the family, it's a well-known neurological abnormality, it's got no meaning to it. But the basis of the story was this. There was a student who fell ill, and he needed a lumbar puncture. And all the junior staff tried very hard to get the lumbar puncture needle in to get the fluid out to see whether he'd got meningitis or had had a bleed into his cerebrospinal fluid, and they couldn't. So they called on George to come and do it, you see. And so he comes, you see, like this, and the chap's lying, you know, you lie on your side bent over, you see, and this chap's doing this... And eventually he sort of got it in, you see, because despite the tremor he could control his hands actually, ultimately, to the ... when he got to the final pitch the tremor stops and you get it, do it, you see. So ... it's a big disadvantage. But nevertheless, somebody asked the student, you see, afterwards 'Well, what was it like having a lumbar puncture by the professor?' And he said 'Like a bloody woodpecker up and down my spine!' But nevertheless, that was George. But George was a chap, he was Rabelaisian in many ways, I think, in his humour and his gusts of laughter. And he used to ... his clothes, he used to turn up in shirts with great tears in them actually. It embarrassed his wife, dear Carola, tremendously. But he was as you can see an all round influence. A real personality, known the world over, you see. And that's what of course turned my interest towards working subsequently on high blood pressure and all the other things, because he determined where I should go when I qualified and so on.

MB So you aligned with him very early in that clinical course?

SP Oh yes, well... I don't know, what, I'd come into contact with him earlier but he hadn't had the, as much influence on me then. That's when I was doing anatomy. Because this figure appeared in the anatomy department in the dissecting room, accompanied by the demonstrator who said 'Is anybody, you know, there's ... take an interest in...?', talking about a project with Professor Pickering. And I was sort of closest to the ... I said 'Yes, I'm very interested, what is it?' So that he then appeared ... he went round the corner and then appeared with a leg which had been amputated. And he said 'What's interesting about this leg is that it comes off a patient who had abnormal connections of the blood vessels in the leg, which led to a shunt of blood from the arterial to the venous side, and this was putting him into cardiac failure.' I mean, if you get enough shunts, you know, you shunt litres of blood through the leg and you ... you can't control that leak on the circulation. So to keep your blood pressure at a level for your brain to function, you've got to pump harder, and that puts your heart into failure ultimately. And the only way they could deal with it at that time was to amputate it, which cured the condition but lost him the leg. Now ... so that he said 'Well now what we will do, we'll do what, in actual fact you go back into injecting blood vessels. It goes back for about five centuries, actually, you know, injecting blood vessels. We'll inject this at the arterial pressure prevailing with this

mixture – which is usually barium paste with coloured dyes in the barium, the particles of barium were a particular size that they won't pass the capillaries – and if they do and come on the venous side you know there are holes bigger than the size of the barium particles.' And so he said 'Well, you do this, and then dissect it out and see if you can demonstrate the connections for me.' Because this is, this was way before things, techniques ... x-ray arteriography, you know, where you inject contrast material, you see, and show it on an x-ray... But, so I dissected away, you know, into the long evenings and kept dissecting carefully, and I kept coming down, down, down and I could never find the connections, you know, between the arteries and the veins. And of course I now know why not; because they're so small, you can, there're just so many of them you... But the, you know, they just, only have to be about three or four times normal capillary size, you see, and you've got a big shunt in the leg. So, but that was when I first came into contact with him. He brought me another leg after that, despite my failure! And that was ... then there was this gap of some years before I came into contact with him again in my medical course, you see, so that he then... Obviously, I mean, I'd obviously made some sort of impression on him, because he kept at me rather hard. And ... so that basically is the major influence, plus my ability to be doing things for patients, myself. Now that takes us really to the end of the war period, '45, which is when I qualified. And that really takes us into the start of clinical...

MB Clinical...

SP ...work.

MB Was there anything about the qualifying that was interesting?

SP No. Well, it...

MB It just happened, at that stage it just went through?

SP It just went, it just went through. I mean you, I took it all as one, you know you could, fell swoop. You know, you could take the whole lot, including pathology and things like that, you see, which led ... because I was interested in pathology as well – that was an interesting aspect of medicine which... It did attract me because there was in the pathology department one of those people that gives you faith in the fact that you don't need to do research to be a tremendous influence in terms of teaching. That's a very important message, you know, because a lot of people don't think ... you know, because one wishes to put teaching and research together, certainly research must have an influence on teaching. But there are those gifted people that can be very critical in their approach to phenomena, and can look at things and ask the right sort of questions. They don't do any research necessarily. Now, one such was Professor Newcomb<sup>6</sup> at St Mary's. Nobody will have ever heard of Newcomb, but in fact he was another man that had a considerable influence on me. Because in ... you know, in those days pathology demonstrations of what had gone wrong with the patient were the rule, so at 1:30 every day you rolled up for this demonstration. And he attracted a tremendous number of people because he would have the surgeons and

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<sup>6</sup> Professor Wilfrid Davis Newcomb.



the physicians there, and he just, you know, said ‘Well now, what was your diagnosis? Why was your diagnosis this?’ And then he would uncover gradually the pieces, and say ‘Well now this is what we found.’ And of course the great attraction for the students was to see the physicians and surgeons ... being shown up for getting it wrong! I mean it was the wrongness that appealed of course, but he did ask extremely good questions. He could have, you know, been extremely good at research if St... You know, pathology, the actual... There wasn’t a tradition of pathology at that time; it was all morbid anatomy and dissection. And of course piecing together what was going wrong or what had gone wrong with the patient is in itself a form of research, because you’re trying to interpret what you see in terms of the crude anatomy and then subsequently the microscopic anatomy. And he was very good at microscopic anatomy too, so he had a considerable influence.

MB A truly impressive pathologist.

SP Yes. Of course that was also the time when I first met Fleming<sup>7</sup>, because he used to lecture to the students. His lectures were largely avoided by students because, one, you couldn’t hear him, so even if you sat in the front row you still couldn’t hear him! So that ... they weren’t...

MB Was this a low voice or mumbling?

SP Low voice, just a low voice. You know, I can still sort of hear him: [whispers] ‘Microbiology.’

MB He was totally unaware...

SP He never talked about bacteriology, he always talked about [whispers] ‘microbiology.’

MB He was totally unaware that people were not hearing?

SP I don’t know. I mean he just didn’t ... he could never raise his voice. I never heard Alexander Fleming raise his voice ever. He just had that low rather monotonous delivery, which meant that however exciting what he was talking about was to him it didn’t come across to the students. So he was a remarkably bad lecturer. But having said that... When I qualified I did the usual sorts of house jobs, I ... and you must remember that you were very much thrown in at the deep end. You didn’t ... you know, you didn’t have this hierarchy of people. There were a few people who’d come back from the war as ... to really be rehabilitated in terms of medicine. But you were thrown in on your own, and the consultants did their rounds and, you know, you provided them with the information, so you really had to do a great deal.

MB And all this was still at Mary’s?

SP Yes, still at Mary’s actually. And I must say as I look back I’m sort of somewhat horrified by some of the things that happened. Of course medicine then

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<sup>7</sup> Alexander Fleming.

was completely and utterly different actually, I mean it really was. I mean, all the diseases were sort of different. You know, infection was still rife of course, you see. But the, having said that I mean I did a variety of jobs in the place, including paediatrics. And that was interesting. We were in the Lewis Carroll Ward. You know, one of my friends at Mary's was a chap called Peter Dodgson Collingwood, who eventually gave up medicine after he qualified. He was called Peter Dodgson Collingwood because his father<sup>8</sup>, who'd been professor of physiology before Huggett, was a great friend of Lewis Carroll, Dodgson<sup>9</sup>, so that he was named after, named for him. And the ward, the Lewis Carroll Ward in Mary's, has got the bas-reliefs – very fine, enormous tiles – bas-relief of Alice in Wonderland and so on.

MB How did that come about? Dodgson had a link with Mary's?

SP Well, not really. He was a friend of Collingwood's...

MB Right, so that's how...

SP That was, that's how it came about, and so that's what they did. Whether the children ever took much notice of the bas-reliefs on the wall I'll never know! Like a lot of things in, which you put in, they're more for the adults than they are for the children I think. But I was always attracted to that place; it's still there and it's quite an historic piece actually, but that's the background to it. His son, my friend and colleague, subsequently became one of the best weavers in Britain actually so that his talents in medicine were turned to other ends. But eventually I became what was called the penicillin registrar. Now that was the big move; after you'd done your ordinary residents jobs you got a chance of doing other things and so I became penicillin registrar. That's the most specialised post I've ever held in my life. Now what was this job? Well, it was a job to Alexander Fleming and to Almroth Wright. And, at that time, you may remember, penicillin which had been introduced into practice in the war and in fact had been used on Churchill if you remember. Moran had flown out with a supply to Morocco, I think, when Churchill fell ill with his chest and given him this. And the ... the penicillin registrar had the job of looking after everything clinical that came in to the wards which were in the care of Almroth Wright and Alexander Fleming. There's a bridge across from what was the inoculation department – I can show you subsequently a picture of this actually because it's quite interesting, the history of the bridge – but that bridge joins the inoculation department, which is now the Wright-Fleming Institute, across to the front of the Clarence Wing of the hospital. The Clarence Wing was finished ... it was started, it got one storey high along Praed Street, it was finished in 1910 and before the start of the war. The next five storeys were put on thanks to Almroth Wright's influence with his wealthy friends. You see Almroth Wright used to practice private medicine as well, and he got to know a wide circle of people, fortunately some of them very rich. And they built this and it was named after the Duke of Clarence<sup>10</sup>, who subsequently perished as a relatively early age. But it was finished because of Almroth Wright. Now partly...

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<sup>8</sup> Bertram James Collingwood.

<sup>9</sup> Charles Dodgson.

<sup>10</sup> Grandson of Queen Victoria.

MB Almroth Wright must have been a very impressive figure. And he was tied closely to Mary's...

SP Oh very.

MB ...despite army connections?

SP Oh well, he went from Netley, you see he was the army pathologist there, and Fleming worked with him in fact. But he came to Mary's at the turn of the, turn of the century, and he'd come as an army pathologist. He was very interested in vaccination of course – I mean that's what he made his reputation on – and particularly, ultimately, typhoid vaccination. And he came and established pathology, experimental pathology as it was called then, at Mary's. And he got around him a group of people. They all had to earn their keep by private practice.

MB Hmm. Different days.

SP Absolutely. There were no funds available to support them. So what he would say to them ... 'Well, you come, sure I'll give you some laboratory space and ... but you must go out and earn your keep.' The same applied to Fleming incidentally, initially. He had to do the same. But Fleming had joined, you know, about 1902, along with the chap who subsequently became professor of surgery and taught me, Pannett<sup>11</sup>. And he came, Fleming came to Mary's largely because he'd met somebody playing... He played water polo, you see; Fleming was very keen on water polo, he was also keen on small arms shooting. So he heard that Mary's had got a good shooting team and also was good at water polo, so he decided he'd come to Mary's. He'd come down to, if you remember he'd come down to London; he was born in Ayrshire. But he'd first done a job as a clerk in a shipping company. And he was sent down and he actually, thanks to the support of an uncle he was able to take a place at Mary's, and he joined Mary's purely on the reputation of water polo and shooting. So, but he was unusual. He took all the first prizes, you know, in any exam. He got all the Gold, he got the Gold Medal of London University subsequently and so on... And he joined Almroth Wright before the First World War, you see, he joined in. And then they went on to do their interesting work on wound sepsis, you see, because that's where they got the interest. You see Wright was tremendously interested in wound sepsis and what killed bacteria. They looked at ... phenolic washes were the things that were being used at that time you see to deal with wound sepsis. And of course as Almroth, as both Wright and Fleming pointed out, phenol kills tissues better than it kills bacteria actually. And of course Fleming ... you know, most bacteriologists at that time were very good at glassware, glasswork. They had to make their own pipettes. And I mean that was the thing that Fleming taught me how to do actually, was how to draw your pipettes and make, calibrate them with mercury, you know, weighed mercury – you calibrated your pipettes that way. That ... no bacteriologist was complete without his little tray of pipettes with cotton wool at the broad end. And they were very precious to them, you see, I mean that was their stock in trade. But he used to draw out wounds, you know, so he'd take a bit of glass, draw it out, and get a curly-Q end, put bacteria in the bottom, repeatedly wash it out with

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<sup>11</sup> Aubrey Pannett.

phenol and show that you could still grow the bacteria out of the tip. You know, he suggested that in wounds there were crevices like that protected from all these washings they were doing anyway. And furthermore, because they then introduced the slide technique, you know, where you looked at leucocytes under the microscope and saw that phenol killed off the polymorphs and...

MB Better than bacteria.

SP Yes, absolutely. So that was the background from which Fleming came into this relationship. But you see, to be penicillin registrar, I became aware of this background because of course all of these artificial wounds were about in cases, you know, you could see them. And this was rather nice.

MB Amazing. Are they still kept in St Mary's?

SP No, regrettably a lot of those things have disappeared, you know. It's tragic, it really is. A lot of that background history is sort of lost actually. The original Fleming plate, which is ... is in the British Museum anyway so... But penicillin registrar, with that sort of background, you see... And in the war it had only just been introduced for the troops. You remember there was that debate with Churchill; should it be used to treat gonorrhoea or should it be used to treat people that had got wounds inflicted by other means? And it wasn't, at that time. What we were presented with was vials of dark brown liquid which was, of course contained a lot of culture medium, and it was absolutely agonising to give. I mean, it was the time before they'd introduced ... they'd learned that you could block the pain with using procaine and the procaine penicillin mixture became the rule, but that was sometime after I'd been on the scene. What we used to do was to give the stuff, and people used to put ice packs on over the injection ... and a (?) rubber ice pack. You just put the ice on it, and that was it. And people used to be screaming with the pain of it. I mean it ... I could understand because I had a boil on my neck and Fleming injected this stuff into the base of that on my neck. I nearly collapsed actually! But that was, that was how it was. Now what that, being a penicillin registrar gave me was ... I was very lucky with that because it brought me into close contact with Fleming and also with all the people around Almroth Wright. There were a number of very interesting people around the Wright-Fleming Institute at the time. Wright, who of course was pretty elderly by this time, used to hold court in the library of the inoculation department over tea. He used to sit here, and what I regarded in youth as a whole group of sycophants would come in and tuck the rug round his, round his knees, and he used to sit there. And he was a tremendous conversationalist, you know. It's not for nothing that he was a friend of George Bernard Shaw, and it's why that very nice bust of George Bernard Shaw by a sculptor called Niemann(?) is in the Wright-Fleming library now. It's a very fine bust actually. But he debated with Bernard Shaw. He was in fact the figure in *Doctor's Dilemma*<sup>12</sup>; they used a bacteriologist, you know.

MB Stimulating the phagocytes.

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<sup>12</sup> George Bernard Shaw, *The Doctor's Dilemma. A Tragedy*, London: Constable & Company 1914.

SP Stimulating the phagocytes, that's it. Opsonins, you see, interestingly enough opsonins have come back into favour, haven't they now?

MB Absolutely.

SP But I think Wright's concept of them was a little different, but nevertheless...

MB But he was an impressive figure still in his...

SP Oh, he was a lion.

MB ...elderly state?

SP A lion, even as an elder. He was like an elderly lion, and he commanded all he surveyed, you see. I mean he didn't particularly like Fleming, you know, because as you can imagine somebody who doesn't speak much, confronted by a conversationalist used to really debating, who's also a misogynist, raises a few other questions about... He was surrounded by males actually, Almoth Wright. His secretary was a male, and in that time that was unusual ... I would have said. But I used to talk to that secretary; that was part of the thing one got out of being penicillin registrar. Because Wright fancied himself as a philosopher as well, you know. I mean I don't think any of his works on philosophy have ever been read or are read at any time now. But he was a very complex character. Irish in his origins.

MB And he had a wonderful Irish voice?

SP No, he didn't actually. He didn't have any particular accent in that way, not that impressed me. But he just ... and what was impressive to me was the way nobody every argued with him. He sat there, you see, and even these what I thought at that time were fairly eminent people didn't argue. There were some unusual people. Freeman<sup>13</sup>, who started in the allergy department at Mary's. In fact there weren't many allergists about in the world at the time Freeman started his activities of course. But Mary's became ... the inoculation department ... and the allergy clinic became a very big money earner for the inoculation department, because it was independent of the medical school then, you understand. And the money to support it did come from these sort of sources. But there used to be queues of people with hay fever, I mean, and it's not for nothing that the pollen count was taken on the roof of St Mary's you see for many years. And that was, that was thought to be an important aspect. But it led to some very peculiar goings on in terms of inoculation against various hay fever or allergies, you know. I have to tell you there was a thing called the 'public school vaccine' which was extant when I was there. It was given to public school boys, and I was never quite sure what it was to protect you against actually! But nevertheless, that was it. I mean they used to come in their, you know, dozens to get this.

MB They were bussed in. They came up on trips, they came to be inoculated?

SP They came to be inoculated, the public school vaccine.

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<sup>13</sup> John Freeman.

MB But you're not sure what it was for?

SP Well, it was against a wide ... you know, it killed bacteria against a wide range of supposed causes of infection. Well of course they were busy trying to produce an influenza vaccine on the top floor of the inoculation department, and that was never ... year by year that rolled on. Of course influenza vaccines have never been tremendously successful even in the present day because of the variability of the influenza virus, but...

MB What a progression from kind of Lewis Carroll Ward almost to this bizarre centre...

SP Oh well, it had a tremendous influence on me. Because you see the thing that I did learn there, and that again was tremendous, was from Fleming. Because I viewed this scene, as you can imagine, in the library. I mean, you know, I was twenty-two or so, I looked at this and I thought ... I was absolutely disgusted by it really! Because I thought here's this old man, you know, no matter what he's done in the past, you know, there he is, they're all bowing down cow-towing and there's no reasonable discussion going on at all. I was really quite offended by it I remember.

MB So you didn't really join Wright's corps?

SP Oh no, no. That would... But, I mean, you're on the periphery you see.

MB But you came close to Fleming?

SP Fleming, yes, because Fleming took it upon himself to teach me some bacteriology, you see. And that's when he taught me to, how to draw pipettes, how to do bacterial counts, how to [draw] blood... Because we were getting the sort of cases where ... puerperal sepsis, you see, which was very common, and very common at Mary's because abortion rate was very high around places like St Mary's. You know, because the back-street abortions with ... it's awful to contemplate, but back street abortions, tremendous infections. And you'd have women being admitted, you know, with tremendous fevers and just about dead. And you'd draw the blood off, you'd then mix it with an appropriate amount of culture medium, let it incubate, and then count the bacteria, you know, dilution and count the bacteria. And you were getting, you know, into thousands of bacteria per cubic millilitre, that sort of thing, in the bloodstream, you know, so...

MB Colossal infection.

SP Colossal infection. And of course the great beauty was, you see, that you could give this crude penicillin, and some of these women who'd got the right sort of infection, they were absolutely cured. It was quite miraculous to somebody, you know, who was used to seeing people die of pneumonia previously, and that sort of thing. You'd see...

MB A revolution in medicine.

SP It was a complete revolution. Of course you got, because of being a peni-, a centre for treatment, you got every conceivable infective condition you can ever imagine. You see, I mean, infection on the heart valves – tremendous number of those – all sorts of sepsis. All sorts of disorders I've not seen since of course, you know, and you're not likely to. Things, infections with queer organisms like Actinomyces; you see there were things, you know, you just read about in books, you never thought you'd ever see. But of course all those sorts of things you saw and treated, and you treated everything in sight. And, you know...

MB Was there recognition that this was Fleming's work, this was from Fleming, I mean, this came from this man?

SP Oh well, oh yes.

MB There was recognition this miracle had come from Fleming?

SP Yes, yes.

MB And the Oxford story didn't contaminate it at all?

SP Well, as you can imagine in St Mary's it wouldn't have been allowed to contaminate it at the time. I mean it was recognised what Florey and Chain<sup>14</sup> had done of course. The actual controversy which has boiled up year by year really in a way didn't affect, it didn't affect me particularly of course, you know, or people around me at St Mary's, because there was Fleming, you know, and I mean...

MB Did you feel you were in the presence of a giant of medical history?

SP No, no, he wouldn't ever give that impression, you see. He was a quiet, small man. He would sit ... and there's a picture, which I will show you subsequently which is much more typical of Fleming than the one you usually see, but he's sitting looking down the microscope with a cigarette drooped from one corner of his mouth, looking down at it. And that was what he did, he just used, he loved microbiology. Yes, here's ... I'll tell you how that was expressed in a way, and it gives you another sidelight on his character. He used to love coloured bacteria, you know, chromogenic bacteria he loved. And he used to draw pictures with them, you know, on agar so that he'd just grow them up so he'd have a Union Jack.

MB Great artist(?) Wonderful.

SP You know, he'd just. Artist... You know, you have to think of the clubs he fitted into, you see. When you, when you look at Fleming you have to say well here's a chap who liked billiards too, you see. Now, you know, that doesn't accord with the sort of picture you get sometimes of Fleming. But he actually liked in his private moments to be with a different group of extrovert sort of people, you see, that's what he liked. His contribution was never ... to any conversation was minimal. But you

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<sup>14</sup> Howard Florey and Ernst Chain.

just hung onto his words, you know, because he'd say [whispers] 'What do you think of that?' 'No, it's this.' You know, looking down the microscope at a particular odd bacillus or something like that or at a plate.

MB So the occasional words were potent.

SP Oh yes, you had to listen very carefully. But, you know, I always remember being so embarrassed. You see ... a qualified young doctor, you know, feeling I could diagnose a lot of things. So he took somebody's shirt off their back and said 'What do you think of that?' And I said 'Looks like acne.' 'Chickenpox.' And that was that! So that was all right, you remember these things, you see.

MB At that moment we're going to draw this first interview to a close because of our time schedule, but we'll, we've arrived at the Wright-Fleming Institute at a rather interesting time. From there we'll move on in our next meeting.

SP Sure.

MB It's been good talking to you.