

Oral History: Alan Sawyer / 2017/11/04

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File name: 2017_11_04_Alansawyer_transcript**Key**

AFL: = Interviewer, Anne-Flore Laloë

AS: = Participant, Alan Sawyer

[??? at XX:XX] = inaudible word or section at this time

AFL: We are here today, it's the 4th of November 2017, and we're in Gloucester, Massachusetts. This interview is part of the Oral Histories Programme of the EMBL Archive. My name is Anne-Flore Laloë and I'm the archivist at the European Molecular Biology Laboratory. Now please would you introduce yourself?

AS: Yeah, my name's Alan Sawyer.

AFL: So we're here today to talk about your relationship with EMBL, so would you please describe to us what you were doing before you knew about EMBL; what is the path that led you to -

AS: So I started my scientific career when I was in my early twenties and I was working in a histology lab in the National Health Service in the UK, and at some stage I decided that I really wanted to get off the National Health Service pay scale because the university pay scale was slightly higher, so the rungs on the ladder were around 15% higher than they were in ... and I found a position at Southampton University and it was a one-year soft money grant and I basically took a gamble because once that was over it was over, and so I went for this position, it was making a single set of monoclonal antibodies. I had no idea how to make monoclonal antibodies at the time and I was studying at what was Paddington College, now Westminster University, I was studying there on a what they call a day release course, which is you get released for one day a week and you go up and then there's a lot of other study as well for a qualification, a BTEC HNC in Medical Laboratory Science, and I remember going back up to my tutor up there and asking her what ... I'm going for this job, what the hell's a monoclonal antibody, how do you make them? And she basically just downloaded the whole thing onto me and so I went into the Southampton University job and I got it. And so I was there for a year and we made one set of monoclonal antibodies against granulated metrial gland cells, and the paper for that was actually released about ... this is how slowly that university was working, it was the Department of Human Morphology, the anatomy department, and that paper got released about four years after I started at EMBL!

<Laughter>

But towards the end of that, so we made one set of monoclonal antibodies in that year and that's really where I learnt how to do all that cell culture and stuff that I needed. And it was getting towards the end of the year and I was starting to panic because of course I would have to leave and I'd have no job and it was the eighties and unemployment was bad ... and then I saw this advertisement in New Scientists for the EMBL and the job description was actually pretty cool. It said something like, 'We need a technician to make monoclonal antibodies, shared between two groups,' which was the groups of Eric Karsenti and Thomas Kreis, 'a practical mind is more important than qualifications'. So I thought OK, that's fine, 'cause I didn't go to university, so I just went – I'd had some level of tertiary education with the HNC, so interestingly, I applied for the job and I didn't hear a thing until about three days beforehand, and they lost – HR had lost my application, and Maryka Kimmins actually managed to get in touch with me and say, 'Are you coming to this? We haven't had a response from you.' And of course they hadn't 'cause they knew they'd lost my application and they didn't send out the invitation, and they suddenly realised that I was going to be missing. <Laughs> So they called me up and I was able to arrange a last-minute ticket and I flew out to Frankfurt and I went for the interview. I was a bit overawed actually, beside, one of the things ... I'd always wanted to go into physics in fact, and one of the, I thought CERN was just this incredible idea, and then I realised pretty quickly afterwards that as I was ... actually as I was going through Boxberg on the way to the hotel, I was under the misapprehension that the whole of Boxberg was basically the village that served EMBL!

<Laughter>

And I thought, even then I thought it was the biological equivalent of CERN, and so I went for the interview and I think I made them laugh. I think that's what got me the job. Thomas Kreis actually said, 'Well, have you got a practical mind?' <5:00> And I said, 'Well, I run British motorcycles and they break down a lot so you really have to have a practical mind!' So they gave me the job and I turned up and I arrived on December 31st 1989 and I bumped into Maryka Kimmins in the airport and she asked me, 'What are you doing for New Year's Eve?' And I said, 'Well I haven't got any plans. I'm just going to go and stay in the ISG.' And she invited me up to some friends of hers in Weinheim where we had pizza for the evening and then threw fireworks under cars and things, which was a very novel German thing for ... I don't know, the whole idea of them and fireworks is kind of frightening because they're not as responsible as the Brits! <Laughs> It's pretty dangerous!

And we went back and so she asked me a question in German and I didn't understand and she said, 'My god, everybody here speaks English. Why didn't you say something?'

And so that's where I started. I started I think on the second of January or the third, I can't remember, but I think it was the 2nd in fact, and I arrived at 8:30 in the

morning on the shuttle from the ISG and basically I was scared to death because this was one of the best places in the world and I just ... in order to stem the anxiety I just worked like hell! So for the first six months, it was a six-month probationary period, I probably worked from 8:30 in the morning till 11:30 at night every day, except the weekends, which was ... it was a fantastic time. The whole thing was really good.

AFL: So what did a typical day look like – ‘cause you were sharing your time between two labs?

AS: Yeah, that’s right, so a typical day ... we spent a lot of time casting gels, ‘cause there were no precast gels, so we used to cast our own gels and run them for western blots, so we did a lot of westerns obviously, and I was doing the antibody stuff. Also did a lot of microscopy so the thing that Eric and Thomas had in common is they were both pretty much working on cell cycle mitosis, and they were very interested in microtubule-associated proteins, so most of the stuff that I did in the first ... well for most of the time I was there in fact, was to do with microtubule-associated proteins, and they wanted me ... and I had to make monoclonals again, so they made a lot of polyclonals as well. The other thing I did with Thomas as well, which was phenomenal actually, we made, we had a peptide synthesis department which was being run by a French guy who later became I think a Trappist monk. He was, what was his name? Dominique something – and he was a fantastic baritone. I mean the guy was an incredible singer, semi-professional, and so we got 28 peptides synthesised against beta COP and we made 28 sets of polyclonal antibodies and purified them, which Rainer Pepperkok then microinjected into cells and those antibodies blocked retrograde transport I think. You’ll have to check with Rainer, but I think they blocked retrograde transport in the Golgi. So Thomas was really a Golgi guy who was working on Golgi and Eric was working on mitosis. And so a typical day, I’d go in, I’d cast some gels, I’d probably make up some emulsions for injection into either rabbits or mice, I remember doing ... I had to do an awful lot of microscopy, fluorescence microscopy, because out of one set of fusions, we were plating out fusions then into ten 24-well plates, and so we were getting around about ten clones per well, and what we would do is we’d test the supernatant against the cells, and we had this neat little way of getting 24 supes onto a single large coverslip with healer cells on, and then I’d spend hours and hours and hours with the fluorescence microscope looking for mitotic figures and seeing if they fluoresced, basically, so if they fluoresced we knew we’d probably had an antibody that recognised the microtubule-associated protein that we’d been injecting into the animal. And then we test those ... well the first thing we had to do, because we had ten clones per well, is sub-clone them out. So there was an awful lot of cell culture. So we might have 20 or 30 <10:00> positive clones and each one of those wells had to be sub-cloned really rapidly so that we wouldn’t lose a cell line out to monoclonals, so there was one cell in each of the 96 wells, there were 96 well plate ... and they would all be tested again by fluorescence to see whether we’d managed to isolate the antibody producing clone, and then each of those would then be subsequently tested by western blot, and then in those days we had to run prep gels and then slice 2 mm slices of nitrocellulose and put them into individual slot blotters so we could test up to 20 or 30, about 30 per gel, to see that we got a band of the right molecular weight as well. So we knew what

the molecular weight was supposed to be and we got the staining pattern from the immunofluorescence, so we kind of knew we had an antibody against what we were looking for.

I don't know ... it was a lot of cell culture, a lot of microscopy, a lot of western blotting, and that was pretty much it in think.

AFL: So who were you working most closely with?

AS: Well Thomas was my group leader and then some of the other people in Thomas's lab, so for the first, I guess year, it must have been, I was in Thomas's lab, and I mean physically situated in Thomas's lab with Brigitte Joggerst, Jochen Scheel, Rainer Duden, Janet Rickard ... most of whom went to Thomas's lab in Geneva when he moved out, but in fact even before Thomas moved out, he needed space in his lab, Eric had space, I moved into Eric's lab when Eric then started working on... I think the first set of antibodies I made for him were against Cyclin B1, so Xenopus Cyclin B1. I didn't do any of the egg extract stuff. That wasn't Xenopus egg extracts, which were a big part of his lab, so we made antibodies against a lot of the Cyclins and against CBK1 and CBC25, which were some of the cell cycle checkpoint proteins that Eric was working on.

I think that's right – in my memory. It's a long time ago. It's like '94 or something!
<Laughs>

And I think I did one of the first PCR reactions at EMBL as well. Michael Way arrived and he brought in one of those PerkinElmer devices and we started, so we started working on that. That was kind of interesting.

The other guy I was working a lot with was a guy called Angus King who was in Wieland Huttner's lab downstairs, and we shared an apartment together in *Gaisbergstraße* which was good. We had a bit of a reputation in the day that we ... the day that we got the apartment, which was March 1990, we sat down in the ... which one's the big one with the *Heiliggeistkirche*? What's it called, is that the *Kornmarkt*?

AFL: Ah, *Marktplatz*.

AS: *Marktplatz*! So we were down the *Marktplatz* and Café 7 was down there on one side, and the sun was tracking across and as a celebration we started drinking Dom Pérignon Champagne, I mean this was the thing about EMBL in those days, was the salary that you were given was just ridiculously high! I mean it was probably double or even triple what I was earning in the UK for doing pretty much the same job, and so we sat in there and we just drank bottle after bottle of Dom Pérignon and as the sun was moving, the shadow was moving, we actually moved the table further and further across the square and this poor waitress was running round trying to ... and in the end we ended up completely over the other side, and

we drank them out of Dom Pérignon – that was it, every bottle gone! And people from EMBL were coming past and joining us and having a glass or two before going on. It was a fantastic thing, it was great fun!

AFL: Fantastic!

<Laughter>

So how long did this iteration at EMBL work?

AS: I left in 1998. I met Nadia in 1996, Marina, who's actually one of the coordinators of the meeting we're at right now, had just moved into the apartment with her boyfriend, and this is a long time after Angus had left, there were several people in between – Sally Cudmore was there for a while, who was in Michael Way's lab. Michael Way actually taught me to juggle, and do fire breathing off my balcony at four in the morning once. Once we had this monumental party which ended up with people learning how to do fire breathing.

And so Marina and Mike Spiegel, her boyfriend at the time, moved in <15:00> and they said, 'OK, we want to invite downstairs up.' And Nadia was visiting Anne Ephrussi downstairs, who was in the apartment below us, and they came up and I got talking, and I knew that I was gonna have to find a job at some stage because it was getting to the end of the nine years, so I was in my seventh, and got talking to Nadia and she said, 'Oh, I work just upstairs from Ed Harlow,' who was the guy who wrote Harlow and Lane, which was the big manual for antibodies, and I said, 'OK, any chance you can get me a job in Ed Harlow's lab?' <Laughs> And she said, 'OK, I'll have a word with him.' And basically that happened in early 1998 and I moved over to Boston and worked in Ed Harlow's lab with Marc Vidal, Josh LaBaer and a couple of others.

AFL: But your relationship with EMBL did not end then?

AS: No it didn't!

<Laughter>

I'm a quadruple alumnus! So after three years away I had an idea for doing high-throughput mono – that's what I'd been trying to work on in fact, I knew Ed Harlow had a really good cytometer and we were looking at ways of doing high throughput monoclonal antibodies and I figured that cytometry might be a good way of doing it. It turned out to be a bit of a dead end, but through the work that I was doing, well I met Marc Vidal and he did a lot of high throughput stuff using Tecan robotics, and I talked to the Tecan guys and we came up with a system where we figured we might be able to do high throughput stuff. There was no way I was going to get it funded in the States because I actually moved from Ed Harlow's lab into a small company at that stage and they didn't have the budget for it, and I contacted an old

friend of mine from the first years that I was EMBL, a guy called Gábor Lamm, who's now running EMBL Enterprise Management, and said, 'Gábor, I've got this idea and I think we could make a lot of money with it and I think it's applicable to antibody discovery and we can do high throughput monoclonals,' and so he talked to Fotis, and Fotis said, 'OK, well come over and give me the pitch.' So I did and Fotis decided to run with it, and he said, 'Right, you'll form a new core facility, it will be the monoclonal antibody core facility and we want you to start as soon as possible.' So I moved from ... I'd married Nadia in 2000, January of 2000, and in March 2001 I moved to Heidelberg, to start, while Nadia was ... 'cause she'd then, in the interim, been offered the job of Director of the Mouse Biology Unit down in Monterotondo, but she couldn't move her lab until about October 2001, so I moved and we got started on setting up the robotics and stuff, and I actually moved into [??? at 17:58] lab on the fourth floor in cell biology, and then from there to one of the front labs where I think Carlos Dotti was in that lab for a while, and we got the system up and running and did a lot of the preliminary work with Fred de Masi, Federico de Masi was in Wilhelm Ansorge's lab and he was working on microarrays and he wanted to trace multiple signal transduction pathways using antibodies and stuff like that in microarrays. It was one of those typical conversations, it was in the EMBL canteen, we didn't know each other, we met up, and I was looking for a screening assay because the EMBL guys, sorry, the Tecan guys had dropped out, so we were going to do very high throughput ELISAs and they needed a special device for that, called, I think it was called a *Genservice* or something like that, where it would do a lot of plates and plate washes and all this sort of stuff, so very high throughput ELISAs. And they lost the key welder and they said, 'We can't actually deliver – at least not until we've found somebody to do this and we don't know how long it's going to take.' So I was stuck because I'd gone to EMBL with this idea, and now there was no way to follow through on it because one of the key bits was just about to fall out of it.

Anyway, completely surreptitious – not surreptitious, what's the word I'm looking for? Serendipitous conversation with Federico de Masi and I said, 'Tell me about these microarrays. How do they work?' And then I don't know what happened, I don't know who came up with the idea, I think it was pretty much a synthesis of the two of us, and we got the idea that what we would do is we would coat a slide with an antigen and then we would print the culture supernatants on top like a microELISA. And <20:00> see which ones stuck.

And then we had the other smart idea that if we mixed together a bunch of secondary antibodies each with a different fluorophore, we could tell which ones were going to be which isotype of antibody binding. So if you got a red dot you'd get IGMs, if you got a green dot it would be IGGs, and then you could do a second slide of the same target where you could have IGG1 versus 2a and then another one for 2a versus 2b and so on and so on, so you could isotype right from the very beginning.

So I was there until ... we did that work, Nadia moved in October of 2001 and June of 2002 when my technician at the time, her nine years was up, so I had the last 18 months of Heike Wilhelm's contract before she had to leave EMBL and she moved

to the DKFZ after that. But at that point I packed up and we moved the monoclonal core facility down to Rome, and set up in Rome and I was ... we tried to set up a company called [??? at 21:10]core which got seed funding from EMBL Ventures, and ... <laughs> well there's a story!

So at that stage, once I got the seed funding, I went off salary so I officially had left EMBL at that stage, so that was for the second time. And that didn't work out – the seed fund decided that once I'd written a business plan they decided they didn't like the model so they pulled funding and Fotis had said, 'If this does fail, 'cause it's risky, we'll take you back, and you can just run the core facility.' So I started working for EMBL again for the third time!

AFL: What was the time lapse between these?

AS: I think that was about a year, so I went off in 2003, came back on in 2004. And then we were showing Fotis around Australia in 2006 when Nadia was, I think it was 2006 when Nadia was thinking about starting EMBL Australia, on the West Coast of Australia, she had this thing about moving to Perth, or Freemantle, Perth. And so we, Fotis said, 'Well politically I can't just confine myself to the West Coast. I have to go to the East as well.' So we arranged a lecture tour for him around there as well, where he was able to talk about EMBL and one of the stops was Monash University and Monash decided – or I think the Deputy Vice Chancellor of Research, Edwina Cornish, decided that she wanted us both and so Monash was told to headhunt us. And so in 2007 I went on a part-time contract with EMBL, part-time with Monash, and in March 2008 I left EMBL and moved to Australia for 14 months, which wasn't particularly pleasant because there was a great deal of asynchrony and Nadia ... while she was trying to leave, there were no real plans to get anyone to replace here. The machinery for recruiting her replacement was extremely slow. And so it dragged out and dragged out and in the end I'd been down in Australia for about a year and a half on my own, the person that I'd left in charge went off on maternity leave and Christian Boulin called me up and said, 'We're looking for someone to take over the core facility at EMBL again now that Melanie Leuener, who was the person that took over, 'has gone off on maternity leave and she may not come back because she's said she wants to devote herself to becoming a mother.' And I was so miserable then in Australia I just put my hand up and just said, 'I'll come back, I'll do it!' And so I moved back in, must have been ...it was 14 months later so it was probably May, it was May of 2009, and it was a real relief to be back. I mean coming back to EMBL after being outside of EMBL is one of the best things you can possibly do <laughs> and not many people get to do it several times! So there I was now, my fourth official stint at EMBL, and I've had three years <25:00> and Nadia was, finally they'd found a replacement, Phil Avner, and Nadia was able to move down to Australia and EMBL offered for me to move to Heidelberg, and I was designing my lab, and everything, and in the end I figured, if I moved to Heidelberg I would never see Nadia again basically. There was no reason for her to come back at that stage. But she did have a part-time position in London so I took my EMBL pension and sank it into a company called Paratopes which I started myself in London, very close to the narrowboat that we had moored on the Grand Union Canal, where we were based when Nadia was at Imperial

College. And I lived there for two years basically for two years after I left EMBL, so that was the fourth time I left.

AFL: It's taken you quite a few places around!

AS: It has definitely, yeah.

AFL: So over I guess it's 1990 to 2010?

AS: 2014. No, 2012, sorry.

AFL: So that's what, 22 years?

AS: 22 years, yeah.

AFL: So how would you describe EMBL having changed during that time? What was the same, what was different?

AS: Well when I first arrived it was a bit more haphazard, and it was freer as well in a way and we had a lot more money. I mean I remember going into Thomas Kreis and saying, 'Look, I need to buy this ...' I don't know whether it was a kit or something from Pierce I think. And he said, 'Look, just don't bother me for anything under 1,000 deutschmarks, I'm not interested. Just write it and just go ahead and buy it, I don't care.' I know there were a lot of budget overruns at that stage and Lennart Philipson ... and I have to say that was one of the other things that the accessibility to senior management was much ... I mean it had a much flatter hierarchy. You could literally walk into Lennart's office, you could stick your head round the corner and say, 'Hi Lennart.' And there was no little anteroom or office or anything outside, it was just Lennart's office and you walked directly into it, and Lennart would always have lunch in the Canteen, so just lope in, huge tall guy, very statesman-like, spectacular guy actually. I mean I really liked him a lot. And because at that time I had a Swedish girlfriend, Maria Ericsson, and I learnt Swedish and I got roped into the Swedish Mafia and that was the age when we had these huge parties – I mean they were just, there was the Swedish party, the Burns Night party, the ... it was just party after party, and they were massive, huge parties. There was one guy who ... can't remember what his name was, who was a British guy and we'd had this huge party and I think it was the Swedish party, but I'm not sure, and they found him utterly dehydrated 'cause he'd spent the night sleeping in a 37 degree room.

<Laughter>

Yep ... and it was spectacular. Some of the stories I've got ... I mean ... Konrad Müller was just extraordinary man, I mean he had the wisdom of Solomon. I mean

one of the pre-docs had got one of the canteen staff pregnant, and so no names here ...

<Laughter>

AFL: No, no names!

AS: And he didn't want anything to do with it.

AFL: The pre-doc?

AS: The pre-doc. And Konrad called him down to his office and said, 'Right, you may not want to have something to do with this, but you're bloody well, while you're here, you're going to support that baby. So half your salary is going to that person from now on.' Just made this decision.

AFL: Wow.

AS: Yep. There was another time, Gareth Griffiths, everyone's got a Gareth Griffiths story, right, and you've probably heard this one I expect – Gareth had so many parking tickets in the *Stadt*, he used to be a complete scofflaw and the chief of police in Heidelberg got really fed up with this and so he sent somebody up to tow Gareth's car away, and Konrad phoned the Chief of Police and said, 'You've just been onto international territory. You've broken a whole bunch of conventions and treaties. You'll have that car back up here in an hour.' And the car was back in an hour. And then Konrad <30:00> called Gareth into his office and said, 'You will pay all of your parking tickets and I'm going to do it by taking it out of your salary, so you've got no choice about this. And then an equal amount of your salary I'm going to give to the Policemen's Charity.' <Laughs>

AFL: Brilliant!

AS: Yep, he was a great guy. A lot of people didn't like him. He was an Anglophile. He was president of the Morgan Owner's Club in Heidelberg and stuff. So he got on with the English very well.

AFL: So after Lennart you worked under Fotis also?

AS: I worked under Fotis, yeah.

AFL: And I guess there was the interim period, did you have much to do with John Tooze?

AS: John Tooze, I certainly did, yeah! <Laughs>

AFL: So he was interim DD for about 18 months?

AS: About 18 months, yeah. Had a couple of interactions with John that usually involved expletives, which was very funny. He used to love swearing at people, and if you swore back at him it was, he loved it! Angus King was doing tissue culture once and John walks in on him, he used to wander around randomly, smoking cigars the entire time, a chain smoker of cigars, and he'd walk into labs and actually there was loads of smoking in labs. Jean Gruenberg would ... they'd be doing DNA preps and stuff like that with ethanol floating around all over the place and they were all chain smoking, him and Bernard Hoflack shared a lab downstairs on the fourth floor and it was just constant cigarette smoke. Everybody in that lab smoked. Neil Emans was smoking, Olivia Steele-Mortimer was smoking, everybody was chain smoking in that lab. It was absolutely fog every time you walked in there.

And the lab changed a lot. Like I say, I was very loose at the beginning. I think John Kendrew said he wanted it to be like a gentleman's club, and the library still had green lampshades, you know, these old, British Library green lampshades, and it professionalised and it got a little bit more corporate and it was less clubby, it was a bit more formal and the whole of HR was essentially revamped and we just got regulated. There were a lot of regulations came in, or at least that's how it feels. It became more regulation bound.

AFL: But it sounds like it was quite a gradually change.

AS: Yeah, it wasn't a sudden thing. I mean to be honest, Fotis was the catalyst for most of that change. And he professionalised the lab in a way and it's difficult to see ... there was no transparency about how budgets worked and what have you, and it's difficult to see how the lab could have continued to grow and with the diminishing amount of funds available in real terms, the cost of things was going up but the funding wasn't, and EMBL was expanding as well, so the actual amount of free cash available was going down. So I think EMBL as an organisation had to be a lot more responsible with cash and I think Fotis did that, although I do remember some enormous loan – he called us in once and there was a general meeting, in the Operon, and he explained about this balloon loan that he was taking out, where we'd pay nothing off to start off with and there was this complicated formula and suddenly at the end after we'd had lots of money coming in for some reason, they would pay the loan off, and I just thought ... you know. But it's not necessarily ... you would not think of Fotis as being ... or his reputation amongst people at my level was that he was not particularly fiscally responsible, but looking at it, you would say that he ... got the lab, or at least his administrative directors and he got the lab running much more efficiently in terms of what they could achieve with the money that they had. And then ... Iain came in and I think he sort of was even tighter with the budget, much more strict. And I think that sense of restriction on some of the older people really didn't go down that well. 'cause we remember the days when everything was easy! <Laughs>

AFL: Another interesting perspective that I think you have is you were both at Heidelberg and at the site.

AS: At Monterotondo, yeah.

AFL: At Monterotondo.

And I know the relationship between the headquarters and sites is something that people describe quite a bit. How did you live that? Is that something that you saw, that ...

AS: Yeah. <35:00> Definitely. And also being Nadia's husband, I got a lot of the inside scoop. I think ... I actually think it worked reasonably well. One of the good things about EMBL was you were never really queried on your travel expenses – travel inside Europe is cheaper than travel inside the States, and so there was never a big problem. There was never a problem in fact. Nobody ever asked me to justify the travel that I was doing. If I wanted to go to a conference, I went to a conference. If I wanted to go up to Heidelberg I went to Heidelberg. Which I did a lot because we, the technology that Fred and I invented was out-licenced several times and we had trips up to EMBLEM for all the patent stuff and what have you, so we were doing a lot of travel so there were no real impingements on communication between the sites if you took the time. We had polycom systems installed so that you could videoconference together, have committee meetings together without actually having to be there. But there was definitely a feeling with Monterotondo that ... we were somehow slightly second-class citizens. But on the other hand the atmosphere that we had in the 2000s was very similar to the atmosphere that we had at EMBL in the nineties in Heidelberg, so it was ... there was a buzz about the place, it really fizzed, there was something ... intangible about that. But yeah. It was exiting. We were building something completely new, getting new researchers in. We went from I think two group leaders down there to six group leaders and two staff scientists, so it really did expand pretty quickly. And we had a pretty much unlimited budget when it came to seminar speakers coming through, and that's the way we kept the scientific buzz going, was just by pulling in fantastic speakers.

AFL: Having visitors and seminar programmes?

AS: Yep, it was ... yeah, very good.

AFL: So what piece of advice would you give to someone who's arriving at EMBL now?

AS: Well EMBL now is a different beast. I actually don't know! General advice is make use of it as a resource, it's a playground! I mean this is one of the only places in the world where you can do what you think of. If you think of an experiment, you can do it at EMBL in general. The resources will be there. If it's a massive experiment, takes a lot of money, there are European funding mechanisms for that,

but I would just say ... bury yourself in the culture, and use it, swim in it. It's a fantastic place to work! It really is.

AFL: That sounds really, really good. So what have you been doing since you left EMBL for the fourth time then?

<Laughter>

AS: So I ran Paratopes for a couple of years.

AFL: That was from London?

AS: From London. It didn't go very well. A few mistakes, I don't think we spent enough on marketing and what-have-you but for various reasons that didn't work and we soft closed the company and paid back all the investors, so at least nobody really lost out on that although I did lose my EMBL pension basically. So you know ... folly of youth! And from there I got a job at the Jackson Laboratory in Maine and Nadia joined me about eight months later, and she got the Scientific Director position there.

AFL: Fantastic. Congratulations.

AS: Yeah, it's wonderful.

AFL: Well thank you very much, Alan, for a great conversation.

AS: You're welcome.

AFL: Thank you so much.

<End of interview>