

## **Herb Askew - Isis Innovation and University Spin-offs**

### **Background and experience**

"I started with a first degree in chemistry from Battersea College of Advanced Technology (now University of Surrey, Guildford) and a PhD from Royal Holloway College, taken part-time while I was at Castrol, the oil company."

"Working for Castrol on research in Bracknell, I ended as Chief Research Chemist. Then, big issues arose between the Government and Burmah Oil plc (Castrol's owner) in the early 1970s, the accountants took over and I moved to Burmah's Strategic Planning Unit at Swindon. Most people in the Swindon office were accountants, so Burmah arranged for and taught me accountancy, taking me to degree level quickly. I did Merger and Acquisition (M&A) transactions as well as providing central advice on the chemical operations in the Group. Then Burmah went into a divesting mode, which was unpleasant, so I joined Alcan to help develop their new chemicals operation."

"That again meant working on technology transfer and on M&A in both the US and Europe, so I picked up more useful knowledge of accountancy, law and business. When the aluminium price dropped, Alcan did the usual thing and divested the business development activities along with me."

### **Isis Innovation and Oxford**

"After leaving Alcan I applied for various jobs – it was a slow game. Then I saw an advert was for what Isis Innovation called an administrator. I didn't know what that meant, but my wife encouraged me. 'you've nothing to lose', she said 'just apply'. I didn't get the administrator job but, by good fortune, Dr Tim Cook was searching for a project manager among people with scientific PhDs and heavy tech transfer experience from industry. I guess I fitted the job well, so I joined Isis in 1998, six months after Tim, and did a number of the Isis spin outs – certainly most of the big ones."

"I think that Tim saw me as providing Isis with three things. One, I'm a chemist, and can talk both chemistry and science, and Oxford academics understand that I have some sort of insight into how scientists think. Two, I've done accountancy to a reasonably high level, and a lot of M&A transactions – often in the USA. Third, I can provide what is often necessary for establishing a spin-out - an interface between professionals, none of whom understand each other. It's a question of talking to professionals in a language they understand."

"I was an Isis Project Manager attending company board meetings, nominated by the University as their Director. The reality is a start up company requires a lot of nurturing. People thought I could provide some business advice and help nurture the operation through its early stages. Tim agreed that I could help them and I simply loved being a Project Manager in Isis for six or seven years. I was lucky to be in the right place at the right time with Tim providing me the space in which to operate."

And he was much appreciated. Professor Jeff Errington of Prolysis puts it this way. "Herb was put on the site of Prolysis, by Isis, on Day One. We'd just arrived. It was quite strange, because Herb came from a chemical background, whereas we are more biological, but his perspective has always been good. I think he knows more about this stuff than anybody."

"More recently I went part time at Isis and added a job at Oxford Biosensors Ltd. Now I have left Isis altogether and act over here for a US company, East Hill Management, based in Boston. They are funders who financed some of my spinouts and are now interested in funding other spin-offs in Oxford and other UK Universities. So I have two jobs, two days a week each, plus a non-executive directorship."

I (Douglas Hague) asked Herb how was it being a University representative on an Oxford spin-off Board? Was the University always breathing down his neck?

Herb replied: "No that wasn't a problem with the University. First, the two people who were most interested in the performance of Oxford spin-offs were Tim Cook and John Clements, Director of Finance, with both of whom I had good relationships. I told them what was going on, and they were kind enough to trust my judgement, and support the companies in what they were doing. There was nothing incompatible. If they wanted information they asked for it. Tim would then say, 'get on and do it,' and I knew that while doing it, Tim would not second-guess you. That was great and it worked very well. The information flow was such that both sides knew exactly where the other side was coming from, which was very helpful."

"I was very lucky at that stage to have Tim as a boss. He trusted me to do things, and I did them. That took an enormous amount of courage on his part, and hopefully I haven't let him down. During my period we ended up with fifteen or so companies, which have been highly successful."

## **East Hill**

"My view of the UK venture capital community is fairly low, not least because of what happened in 2003, when three Isis spin-offs between them raised around £15 million - but largely from outside the UK. I suppose I still hanker after doing something for UK plc rather than letting the benefits go abroad."

I got to know East Hill as an Isis Project Manager when we were looking for finance for the big Isis spin-outs, and East Hill was then one company that could fund the large spinouts. I believe you can't spin out any company with much less than £1 million so the attraction of East Hill for me was their ability and desire to fund at an early stage and at that level. Very few funders can provide that sort of money, but East Hill funded a number of the Isis spin-outs that I did from 2000 onwards. Eventually they wanted someone in the UK, rather than trying to operate across 3000 miles of water, and appointed me. We (East Hill) rent accommodation at Begbroke from the University as it happens to be a convenient location close to Oxford but without the travel difficulties of the centre."

"I'm now talking to the big UK universities. It's question of getting around - of my own capacity and of the size of East Hill's funds. Where other UK universities are interested in forming spin-outs East Hill are happy to look at funding them, if they meet our criteria."

"East Hill doesn't operate conventionally; they want an even playing field and accept the risks involved in spin-out funding so do not require the usual heavy protection of their investment. Currently, they've got about \$400 million under management, about \$100 million of it in spin-offs. The rest is in main markets and hedge funds. And all East Hill's funding of spin-offs is in Europe as they think opportunities in Europe are better."

## **The funding problem of the moment**

Herb then homes in on "a much bigger problem" -getting money for spin-offs and start-ups, especially for their later funding requirements. "It's one we're wrestling with in some spinouts" he says "and that's why I am cynical about most venture capitalists. Despite the name they are extremely risk-averse, which is why at Isis we recently ended up getting spin-off finance from abroad. And I suspect it is no better elsewhere in Europe."

"The problem is, once you start a spin-out company it runs out of money roughly every year or 18 months. You never get in enough to fund it for much longer: otherwise there would be too much capital dilution. So it's a constant battle. A key point about many Oxford University physical science spin-offs is that they're heavy weight companies: they've got a lot of IP and technology. You want them to get products into the market place but, by the time you've got an MD and they start doing and making things, you need significant capital. If you have a company like a biotech company, it may initially put a research grant out to the university to do research prior to selling products. That generally requires a few £100,000s, which may be readily fundable, but it may not be a viable option to do much else, such as clinical trials prior to marketing, without additional and probably significant capital."

"Who in the UK is going to fund these later rounds of spin-out funding? VCTs and only going to put in £250,000 and I've already said it takes £1 million to capitalise a company properly. And if you do go to the big operations, and want one to lead a later venture capital round for, let's say, £10 million then there are only a limited number of UK firms can do that before you start running out of names."

"Locally, 3i were important at the beginning but 3i is now so big and it costs so much to set up a spin-out deal that it doesn't matter to them whether they put in £10 million, £15 million, or £100 million. Indeed, cost wise they'd rather put £100 million in but Oxford spin-offs do not need £100 million at the start or indeed in their first few rounds."

"In any such fund raising it is important to get a lead investor. Indeed, once you've got a UK venture capital lead, everyone else will just pile in. Until then, how do you get a lead? You can't lead from the States - it's too far away. Some European VCs tend not to want to lead in the UK although some will occasionally lead in the UK. At the moment you can't get new money at all readily because the VCs are tending to keep all their money for their existing operations. They know they're going to have to fund them further, so they're not doing new ones at present."

"Moreover, even apparent solutions may not work. Suppose you fund a new university company on, say, £1 million with a valuation of, say, £3 or £4 million. Then a company like East Hill would be helpful, but would have acquired a large stake in that company - 40% or so. That's fine. But then when you come to the next stage, and want to raise, say, £5 million, what do you do? When the markets were very bad, a couple of years ago - and I don't think they're much better yet - then the venture capitalist who did the initial funding had to put in all the new money, otherwise the company would die. And if East Hill does that, then it has a larger stake in the company, than it wants, and I actually think that's not necessarily good for the company either. But if there is no other option, what choice do you have?"

"So we now go on to the next round, and we're in exactly the same situation and companies are forced to take money at low valuations so you end up with the company so devalued that, first of all, there's no return for the university, for the academics, or for the initial funders. But whoever the VC is, it has just got to keep funding the company or lose its value. That becomes an impossible situation. So because there isn't ready access to funds at these levels there is a big obstacle to growing these companies. There's no point in saying: you can do it on £250,000 - that's the Smart Award, or was, it's changed now - it's quite nice, but it doesn't get you very far. Tax credits, yes, very nice, but it's a couple of hundred thousand a year and these companies' burn rate is that much a month. Now the question is: do you want to grow the companies or not? It would be quite nice to have some sort of scheme to enable them to grow."

## **Bio-tech**

"Even in bio-tech, venture capitalists currently will fund little unless one or more of the company's products is in the clinic. And there you have a gap - before you get to the clinic - and I don't know how to bridge that gap which will take, perhaps, £20 million. And then everyone says yes, but even if you go ahead you start with a high risk venture. Of course a lot of non-biotech companies, say in physical science, do not have the very long time-line of regulatory trials but you've still got as much difficulty funding them."

"With biotech companies there is at least one clear exit - usually to be bought out by a very big company as Oxford Asymmetry and Powderject were. Other spin-offs need to have an exit strategy but if they can't float, because the market's poor, then the venture capitalists have limited exit routes and then they have little additional money for new investment."

## **A role for Government?**

"Where is this problem in Government thinking, I have no idea. I'm not quite sure how best to enable funding at this sort of level to exist. Part of the issue, of course, is regulatory - it's very difficult to set up a fund today and even more difficult to run it. But it's not solely a regulatory issue; or a venture capital issue. It's all very well to say just leave it to market forces but then

you're going to lose a lot of companies. If you get a very small organisation which is going to put in £100,000, then that is too small to fund adequately most operations of the type we are considering. Additionally the question is how do you fund the later rounds? With Isis, and probably other big universities, it's not too difficult to get the money to start with - to get £1 million, or £1.5 million, but that will only last a year or eighteen months."

"So I do think a major issue is getting capital for later rounds and Tim Cook really has set out how to do the initial spin-out funding. That's finished for now at least. It's the next stage that is now the really difficult one, because of the sums of money involved and the issues I have outlined."

"One option may be to put the company on AIM or NASDAQ, prior to the main market, and be done with it, although each of those markets has its own particular challenge. But we really should try and find more creative ways of funding companies than only using venture capitalists or angels. From the spin-out/start-up company's point of view, the big issue is what to do at the later stage of funding? Who can provide the £5 to £10 million? That's where the real problem lies, and that's the bit I'm not quite sure about."

*Douglas Hague and Christine Holmes, December 2004*