Commercialising exceptional ideas: an interview with Dr Anne Lane, CEO of UCLB

With the commercialisation route becoming ever more popular at universities, Maddyness spoke to the CEO of UCL Business, Dr Anne Lane, about commercialising intellectual property, having five Nasdaq listed companies in five years, and how the tech transfer world has changed over the past decade.

Temps de lecture : minute

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To start, what is UCLB?

Well that's an easy one to start with. So we're a wholly owned subsidiary of UCL. We are effectively the intellectual property commercialisation vehicle for the university. Every university in the UK does this slightly differently, some will have a department within the university that does this, some will have a consultancy outside that does this. It might be a hybrid arrangement, but we are a wholly owned subsidiary that focuses on the commercialisation of intellectual property developed by the academic faculty.

But that wasn't the case when I first started. I've been at UCL on and off a long time, doing my PhD and my postdoc in the early nineties, then I lived in North America and came back in 2000.

The reasoning behind having a subsidiary is because UCL is a charity, so there are certain risks it cannot take with its assets. We are the buffer between UCL and its priorities and then doing commercial business, which

is very different.

And in a university as big as UCL, which by its nature is bureaucratic, because it has to be, we can't afford to be like that. So we're all employed by the *UCLB company*, we're employed on company pay scales, not the university pay scales. And we're rewarded differently. We cover the whole research base, everything from fine art to AI to engineering. We return money to the university from ventures according to the university's revenue sharing policy. So we don't set that revenue sharing policy, we just administer it for them.

> *We're not just there for financial impact, we are there to make impact in all sorts of ways.*

That could be social enterprise, economic impact. And we are profitable. We spent quite a few years as a loss making entity because we'd been investing in some of the companies like *Autolus* or *Orchard*, which are now publicly listed gene therapy companies. But those years of investment have paid off and now we are heading towards being not just profitable this year, but hopefully sustainably profitable in the future.

Could you outline who is in the UCLB team?

I like to describe the UCLB team as a fully integrated tech transfer or commercialisation operation, because we've got our business managers who are our core capability, if you like. So they are the people with technical backgrounds who liaise with the academic base at UCL but also with business. They are the ones who've got the relationships with specific departments or institutes and they build relationships with those groups. They will help identify any new inventions that come out of those departments and then decide how to commercialise it with the

academics.

> *And that can either be through a spinout route or a licensing route, those are the two main ways to commercialise intellectual property.*

Supporting those teams are 17 business managers in total now covering biomedical, physical sciences, and engineering. We have a legal team, consisting of corporate lawyers, patent lawyers, and intellectual property lawyers. We have got a project management team that helps with projects that we fund and our investment fund supports as well. We have got a HR, IT, and operations team and we've got a finance team. So they deal with our own finances, but they can also help support spinouts with payroll and accounts.

And we have our own marketing team. So we have the whole company set up to support everything we do.

The Commercialisation Process

What does it mean to "commercialise the exceptional ideas of UCL researchers?"

Effectively what it is doing is identifying something that has technical merit in the first place. We ask about confidentiality: has it been disclosed, has it been published, has someone given a talk about it? That will determine how you protect the IP. The academic will often know a lot about the commercial route because they are usually aware of the markets anyway.

We will also talk to them about who funded it, who we will need to revenue share with, who we might need to get permission from to commercialise the IP, and how they want to take it forward.

Then we look at the best way of protecting the intellectual property. They'll need to work with patent attorneys to help get the patent filed. They'll need to work with our team to support the commercialisation and work with investors. They have to be able to give a robust defence of their technology to investors. Some are well aware of it if they've done it before, some are not.

So what is the IP, can we protect it, and how do we take it to the market.

The other route is via a social enterprise, if it's something that might be better developed that way. For instance, from the Slade School of Fine Art we've got a range of paints that have been *developed from coal mining waste products*, which is a great story and that is going down the social enterprise route as a company and also down the licensing route to Windsor and Newton, who are the artist paints company.

It the route to commercialisation a long process?

It can be quite short sometimes, it depends what the underlying technology is. Something like *Senceive*, which was an engineering and remote monitoring company, we sold that last year. That's been going for 15 years, and we've been supporting it all the way through with small amounts of money.

A company like Autolous listed four years ago, but that was set up in 2015. So it really varies.

What can be done to simplify the process of bringing new ideas to market?

I think one of the things that we found is having proof of concept funds within the university. If you go out for series A or B funding, there is usually plenty of money around, especially in the biomedical space. There is a defined regulatory pathway for therapeutics which is well understood. Everyone knows what is involved in funding. And I think that was really helped by the MRC and the Wellcome Trust at the time having particular translational grants that at the time could go up to £4M, which was huge then for one grant to get therapeutics into the clinic.

> *When you have different disciplines, like AI, where you're not sure what the market application is going to be, the process, from achieving significant investment to putting a company structure around the technology, is harder.*

So we've set up a proof of concept fund and a seed fund for that. We've now got a £7.5M fund over the next three years, created from returns we've made from exits from our companies. That helps because it means we can take more risks. It means we can build relationships with parts of the universities that we didn't have before. University awareness and sharing best practices is the other area that could simplify it,

One of the things that 6U is doing, with the backup of 10U, is trying to get template guidelines for how you would negotiate a spinout company, how you negotiate the terms, and a template term sheet so that if it's something you've never done before, then you've got a starting point.

I think that also helps the investors because they don’t always know how universities work. Universities are complicated places and trying to navigate your way through them can be really difficult. So raising investor awareness is really useful. And we’ve had a series of roundtables where we’ve had some of the key investors in the UK with some of the UK’s leading commercialising universities to talk about what the problems are and what can be done to simplify the process.

That can make a huge difference. Apollo is a good example for how universities and industries can work together.

During the pandemic, UCL worked with Mercedes-Benz on the UCL Ventura CPAP device, and that agreement was put in place in a month. And then we used one of our licensing platforms to make sure that device was available globally free of charge.

So I think it’s having a range of ways to get your research out into the market, and then having the funding to get it from A to B. There is always a gap where the grant funding will stop and investment won’t want to put in funding yet, and you need to fill that gap. And I think universities are starting to do that. Governments are more aware of it. Innovate UK, for instance, has been great at getting these companies to the next stage.

UCLB as business partner and collaborator

How would you define the relationship between UCLB and these spinouts?

We try to have an arms-length relationship with them eventually. To start with, they need our help and input and very often they like to have the UCL brand to help with fundraising. We will sometimes ask for a board seat right at the beginning, but generally we tend not to do that as it can put you in a conflict situation.

We try not to have a shareholding above 25%. If we have it above 25% then we can have a much more influential role and that isn't our purpose. Our role is to get the company set up and in the hands of people who do this thing all the time.

When you have a company that is going through an IPO, that’s a whole different skill set needed. We can do it, but it’s not what we should be doing.

Is the collaboration with Albion-VC and the UCL Tech Fund proof that collaborative

relationships can work in practice?

I think we've been very successful with our relationship with *Albion*. We co-manage that fund; they do the regulated activities and we do the project origination. And the returns will come back to the university which is great. And at a university as big as UCL, externals often know more about the fund than the internals. The academic base is constantly changing, and making sure that they know where we are and what we do is very important.

> *And the onus is on us to make it as easy as possible for academics to know what we do.*

The Apollo Therapeutics Fund is proof of collaboration between universities and pharmaceutical companies. But is there collaboration between UCLB and governmental bodies?

So the 10U group is funded by a grant from UKRI, Research England. They fund that. We have a lot of dialogue with the government. We have a close relationship with George Freeman (Parliamentary Under-Secretary of State for Science, Research, and Innovation until his resignation on the morning of this interview in early July 2022). So we've had a couple of meetings with him. There is close collaboration with those departments that are looking at science and innovation.

There is now the Government Office for Technology Transfer, and Dr Alison Campbell OBE, the new CEO there, came from a tech transfer background, and has been in the industry for years. So there is a lot of collaboration going on there.

It seems like startups operating in the academic life sciences and healthcare sciences are major UK exports at the moment.

Completely. What's interesting is all of our cell and gene therapy companies that have listed publicly are all on Nasdaq, they're not on LSE. Which in a way is a shame, but I think it shows the global reach of UK research, that US investors are happy to put in large sums of money.

I think the other thing is the investment landscape. The foundation of our

cell and gene therapies came from *Syncona*. They put a Series A funding into Autolus, and kick started that investment, and followed through with some of our other companies. So I think without those knowledgeable investors on our doorstep, I don't think we would've had the reach that we've had.

It's good from UCL's point of view, because its brand is as a global university and this is one way to show their global impact.

Commercialisation as a defined path, and looking forward

How has the technology transfer world changed over the past 10/15 years?

Oh, I think it's changed completely. When I started in 2000, I would have academics who wouldn't even speak to me because to commercialise research was wrong. Some academics still think that, and that's just a different view, and they're entitled to that opinion. But now we get people coming to us much more frequently.

Some academics want to do half and half. We have one academic who's behind one of our publicly listed companies, one of our biggest licence deals, and will probably be CEO of a second company. He is a world leading clinician in blood borne diseases. And he has a 50/50 role at UCL and with his commercial activities.

So I think universities, and especially UCL, are now more flexible about that sort of thing. They put a framework in place to accommodate it. So I think the whole ecosystem has changed from where it was in 2000 to where it is now.

We need to come up with a better name than technology transfer. The technology transfer, the IP commercialisation, or knowledge exchange.

> *The whole area has become much more of a defined career path. It's a much more sophisticated industry.*

There are groups like *Praxis Auril*, which run accreditation for people in the space. They exchange best practice. We've got the 6U group, with Oxford, Cambridge, Imperial, and Manchester, and Edinburgh. We've got the 10U group with MIT, Colombia, Stanford, and Durban.

And I think it's really important that we keep those links with Europe because that's a really important area for us. And so I think it's changed dramatically, and in the last ten years even more. Governments are more aware of what we're doing. Investors are more aware of what we're doing. So I think it's great because we get a lot more coverage now than we used to.

I wanted to get your opinion on a Sifted article published mid June. Titled, 'UCL and Oxford are Europe's "worst universities for spinouts"'. This was based on a survey of 150 spinouts by UK VC firm Airstreet Capital.

We're pretty much all scientists at UCLB, and so we look at the data. The data *they used* wasn't very robust and it was self-selecting. A lot of it was quite out of date, and you always want the most recent data.

I would also look at Airstreet Capital and ask how many deals have they

done with universities, have they got any direct experience? They might have, I don't know. But that is a question I would ask. Where is their primary data source, and do they have one?

And we work with our peers, so we know what the figures are like between us and MIT. And if you look at pounds spent on patents for IP income, we do better than MIT. So that is the hard data.

We listen when people say these things. We do regular customer surveys when we ask our academics what they think and how they think we're doing. We want to constantly improve. And anyone who says they have no improvement to make is wrong.

But I look at data that I would think is robust, and up to date, well researched, and primary data is always the best way to look at it. There will be more articles like that. So it's not the first, it won't be the last.

What are you most proud of about UCLB?

Well during COVID, I'm proud of how we moved seamlessly into carrying on operations as usual. And everybody worked harder than I think they've ever done, it didn't matter what part of the office they worked in. And now that we're back in the office, we haven't got any problems with people not coming in or not wanting to come in.

And yes, our success is shown in having five Nasdaq listed companies in five years. But doing the project that we did with the Slade School of Fine Art is something that you wouldn't necessarily equate with a company like UCLB. It is a social enterprise that is a fantastic example of the diversity and range of tech transfer offices and what they can do.

Article by Jamie Walker