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SPIN-OUT

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STRATASTEM

CASE STUDY

### COMPANY FACTFILE

- > Established in 2012, spun out in 2015
- > Spin-out company from the School of Dentistry, Faculty of Medical & Human Sciences
- > Founded by Dr Chris Ward and Dr Lisa Mohamet
- > Proprietary patented method for manufacture of human stem cell-derived neurons for Alzheimer's disease diagnostic and next generation therapeutic development
- > IP: Patents
- > Funded by: The University, The UMIP Premier Fund (with support from UMIP and MTI Partners) and the Biotechnology and Biological Sciences Research Council (BBSRC)

[www.stratastem.com](http://www.stratastem.com)



**Very early on in the project I realised our research had a significant translational and commercial potential**

Dr Lisa Mohamet

## ABOUT STRATASTEM LTD

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**StrataStem is an innovation-led company emerging from pioneering research carried out at the University. The company has a suite of later-stage product opportunities that places it at the cutting edge of Alzheimer's disease diagnosis and in supporting the development of next generation therapeutics.**

Led by Drs Christopher Ward and Lisa Mohamet, the company has built up a compelling body of novel scientific evidence. Their patented technology permits cost-effective manufacture of stem-cell derived neurons (from both healthy donors and patients affected with Alzheimer's disease) at an unprecedented volume and purity, offering a significant commercial opportunity to the business. StrataStem have also recently developed a number of highly accurate and sensitive assays to detect early changes in neuronal pathology, allowing us to explore 'Alzheimer's disease in a dish'. Currently, there are no tests for Alzheimer's disease available, placing StrataStem at the forefront of dementia research and development. The company is now entering an exciting growth phase and is seeking strategic investment to expedite its commercial activities.

We met up with Lisa, to find out more about the company's journey and her personal experiences of setting up a spin-out...

**At what point during your research did you realise that there could be commercial potential for your discovery?**

It was very early on in the project that I realised our research had significant translational and commercial potential. I have always been driven towards the application of science and being part of a relatively new field of pluripotent human stem cell research meant there were significant opportunities in regenerative medicine applications. Chris had previous commercialisation experience in an earlier project and had worked closely with UMIP, so it was relatively straightforward to develop the commercial ideas with support from Drs Arnaud Garcon and Stephen France.

**How did you find the process of setting up a spin-out and what did you especially value from the University during this process?**

I am not going to lie, the process of taking an idea from bench to biotech has been slow, and can be hard to manage alongside your academic commitments. However, I was lucky enough to secure a BBSRC/Royal Society of Edinburgh-funded enterprise fellowship for a year, which allowed me to focus on the development of the research into a commercial proposition as well as providing essential entrepreneurial business training. This, along with the support of our business manager, Dr Stephen France and the established contacts that UMIP has (such as accountants, lawyers and consultants) helped us navigate the legalities and paperwork!

**What would you say was the greatest challenge?**

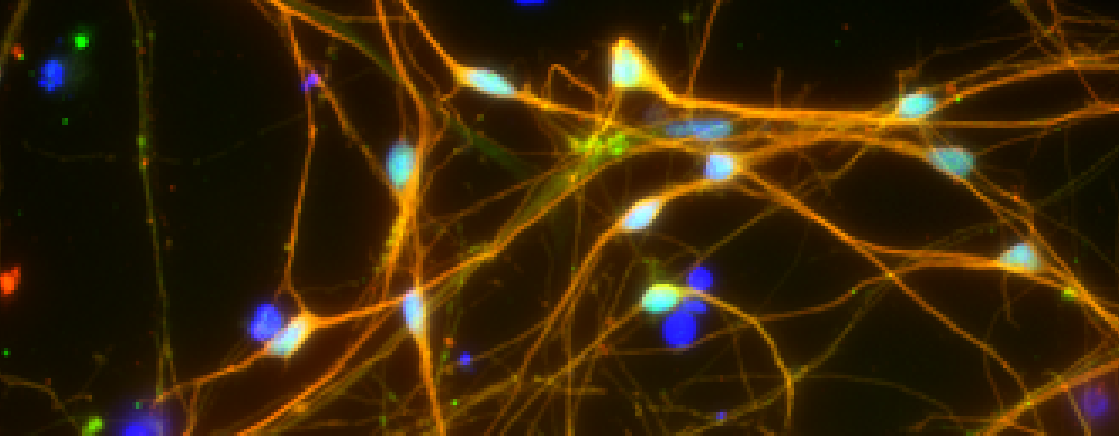
Investment, specifically at the later-stages. There are several funding streams available to researchers in the early stages of the commercialisation process and UMIP is very supportive at these crucial stages. However, in our experience, as you develop your technology and attempt to translate the technology into a company with products, the investment becomes more restricted and harder to secure.

**Did you receive any funding? What was it for?**

Yes, we received funding from the University, The UMIP Premier Fund (with support from UMIP and MTI Partners) and the Biotechnology and Biological Sciences Research Council (BBSRC) to help develop and extend our initial novel research and apply it to a wider range of human cell types and provide sufficient data for patent filing.

**How did you find dealing with investors?**

We have so far only dealt with The UMIP Premier Fund (with MTI Partners as fund managers) as investors in our company



in the early stages and since this was managed through UMIP, we found the process to be simple and MTI also provided us with informative feedback of the commercialisation routes and which parts of the technology offering to focus on for future development from an investor viewpoint.

**What were your aspirations for getting involved in the commercialisation process and being involved in a spin-out?**

I have been enthusiastic about the application of science since I finished my PhD and realised there were missed opportunities to 'use' your science outside of publishing. As an early post-doc, I specifically worked on a project that had a commercial slant, and since then, been fortunate enough to develop my career in the commercialisation of stem-cell based research. Of course, if I happen to make some money then that is a bonus!

**How did you find the transition from the academic to the commercial world?**

There is a great deal of support nowadays for scientists who want to explore or apply their knowledge/technology in a commercial setting and would encourage anyone with an interest to do so. The BBSRC and EPSRC have provided both Chris and I with a significant amount of funding to develop our research into StrataStem, and UMIP has provided us both with a great deal of financial and managerial support through, the sometimes arduous, processes and paperwork.

**What factors do you feel are essential in starting and nurturing a spin-out company?**

There really are two things that are of upmost importance; a novel platform technology and the right team. Surrounding yourself with a good team of people that are committed to making your spin-out work is fundamental to investors.

**What do you feel are the benefits to the University in engaging in spin-outs?**

The University has a responsibility to help nurture and support enterprise in this country and therefore help to generate wealth for the economy. Funding world-class research and the subsequent early product development are central to this.

**Do you have any advice for other Manchester academics thinking of going down this route?**

I would encourage any academic that has an interest, or rather a potential technology to explore the possibilities the University can offer through UMIP. It can be demanding, but has proved very exciting.

**What's next for Stratastem Ltd?**

We are currently looking to generate further investment of £250k to become fully operational and deliver our first products to market. The company is also seeking an individual to work as part of the management team in supporting the acceleration of its commercial activities.



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Dr Lisa Mohamet

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