



UMIP®
SPIN-OUT

MANCHESTER
1824

The University of Manchester
Intellectual Property UMIP®



CASE STUDY

COMPANY FACTFILE

- > Established in 2010
- > Spin-out company from Imaging Sciences Research Group
- > Founded by Professor Geoff Parker
- > Medical imaging
- > IP – Patents, know-how
- > Funded by UMIP Proof-of-Principle Funding (PoP), UMIP Premier Fund (UPF)
- > Awards: 2011: Professor Geoff Parker named by the Institute of Public Policy Research as one of 50 'Northern Lights'
2010: Bionow - Biomedical Start-Up Company of the Year
2008: Bionow - Emerging Technology of the Year

www.bioxydyn.com



“Taking research findings into a commercial setting so that they can have an impact on the UK economy is increasingly viewed as an important part of an academic’s activities”

Professor Geoff Parker, founder

BiOxyDyn is a company specialising in the development and application of new diagnostic imaging tools and imaging services. BiOxyDyn's technology centres on a unique and powerful non-invasive magnetic imaging (MRI) tool that has the potential to considerably improve the diagnosis and monitoring of lung conditions such as chronic obstructive pulmonary disease (COPD), asthma and cystic fibrosis. BiOxyDyn's lung scans are an enhanced form of magnetic resonance imaging (MRI) which exposes the patient to zero radiation dose compared to a CT or nuclear medicine scan.

BiOxyDyn is also developing MRI based oncology tools for quantifying tumour oxygenation and oxygen metabolism. By providing unique non-invasive characterisation of the oxygenation status of tumours, its technologies will aid therapeutic decision making and provide additional information for assessing the response of tumours to intervention. The company has additional IP and capability in the use of MRI cancer, inflammatory conditions and neuroscience.

We met up with Professor Geoff Parker, founder of BiOxyDyn, to find out more about the company's journey and his 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?

Discussions with another University of Manchester company alerted me to the commercial potential of our lung imaging approach. It was these early interactions that convinced me that there was an opportunity that could be exploited and that the associated IP should be protected. I then linked up with Dr Stephen France, UMIP Venture Manager, who helped enormously in the early stages.

How did you find the process of setting up a spin-out?

As is the case with many academics, I knew nothing of the practical aspects of setting up a new company. The help received from Stephen France and colleagues was vital; it is fair to say that I would not have proceeded without this input.

What would you say was the greatest challenge?

Taking research findings into a commercial setting so that they can have an impact on the UK economy is increasingly viewed as an important part of an academic's activities. However, in order to have a decent chance of success an academic needs to be able to dedicate a substantial amount of time over a prolonged period to the process. This inevitably means reducing the amount of time dedicated to University teaching, administration and research. Finding a sustainable way to do this has been a challenge.

Did you receive any funding to develop the technology?

Yes, we were fortunate to receive UMIP Proof-of-Principle (PoP) funding and then more substantial investment from The UMIP Premier Fund (UPF), enabling the company to get off the ground.

How did you find dealing with investors?

The hardest part of the investment process is inevitably getting good value investment in a time of global financial constraint. All investors are cautious and this affects how ambitious we can be in developing the company. Having said that, we have found UPF to be supportive of the development of BiOxyDyn. This goes beyond the investment itself and is shown in the real and positive involvement of the fund's Investment Manager, Dr Mark Rahn, in the company's affairs.

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

It is important to me that my research activities receive the validation and recognition that commercial success brings. Being able to succeed commercially is a different challenge to the process of academic research. If BiOxyDyn continues to be successful then I will feel that my research has had a real impact.

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

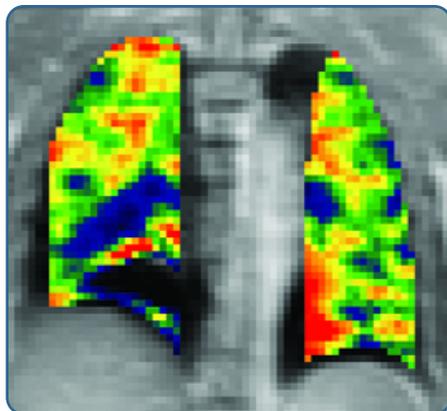
The exposure to a different work culture has been very refreshing and positive. We have delayed publications a little to ensure IP protection but this has not had a noticeable negative impact on academic research. As mentioned already, the biggest challenge was, and still is, balancing the expectations of an academic research role and running a company.

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

Investment, time to dedicate, business mentoring, good board members, good staff. If any of these are missing then the chances of success are substantially reduced.

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

There is a degree of credibility provided by commercial success for the University. The core benefits of the University system are obviously that it trains the next generation of skilled workers and national leaders, and generates innovation in an enormous range of fields via academic research. However, sometimes both of these important facets are overlooked as being too long term. Being able to demonstrate that a University is benefiting the UK economy in the near term by launching companies that create new technology and skilled employment is therefore of great importance.



An example of how BiOxyDyn's novel lung imaging technology allows lung health to be evaluated in chronic obstructive pulmonary disease (COPD)

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

If someone has a good idea that has commercial potential and is willing to dedicate time to a spin-out then I would definitely recommend it.

What's next for BiOxyDyn?

We are continuing to work with the pharmaceutical industry to provide imaging biomarkers in clinical trials across a range of disease areas, with lung imaging being particularly important. We are also developing diagnostic imaging technologies that we plan to launch for clinical use.

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