



UMIP®
SPIN-OUT

MANCHESTER
1824

The University of Manchester
Intellectual Property UMIP®



Gelexir Healthcare® Ltd

CASE STUDY

COMPANY FACTFILE

- > Established in 2012
- > Spin-out company from The Medical School and The Manchester School of Materials.
- > Founded by Professors Tony Freemont and Brian Saunders
- > Polymer microgel technology for Degenerative Disc Disease
- > IP – Patents
- > Funded by The University of Manchester, The North West Fund for Biomedical (NWF4B) managed by SPARK Impact, Central Manchester Foundation Trust (CMFT) and Business Angels.

www.gelexir-healthcare.com



This minimally invasive approach slows the degenerative process and contributes to relieving the pain of disc loss and degradation

Professor Brian Saunders, co-founder

ABOUT GELEXIR HEALTHCARE LTD

Gelexir provides an innovative and cost-effective treatment for Chronic Lower Back Pain caused by Degenerative Disc Disease. The process addresses the condition at an early stage and involves the injection of polymer microgels that restore the disc's shock absorptive properties and replicate the bio-mechanical properties of a healthy intervertebral disc.

Proprietary doubly cross linked polymer microgels ("DXM") are injected through a double barrel syringe into the degenerated disc, by interventional radiologists, spinal surgeons or rheumatologists. This minimally-invasive approach slows the degenerative process, both mechanically and through supporting the natural cells of the intervertebral disc and consequently contribute to relieving the pain associated with disc loss and degradation.

Gelexir's approach fills an unmet gap in the treatment continuum between conservative and surgical methods that has the potential to provide significant pain relief for patients, slow the progression of the disease and also reduce the need for invasive surgical intervention.

CEO, Dr Philippe Jenny comments: "Translating academic research findings into a business that can help a large part of the population suffering from Back Pain, is exciting and the progress made so far are rewarding. A synergetic bridge between different cultures has been created to come up with a product with a strong commercial potential."

We met up with co-founder, Professor Brian Saunders, 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?

When it was shown that microgel particles could be linked together covalently. That

result proved that a fluid (injectable) could be transformed into a load supporting gel using methods that were suitable for use in the body.

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

The process was reasonably straightforward and there was good support from UMIP. Key people in UMIP were Drs Edward Maughfling and Stephen France, both of who were very supportive. Dr Rich Ferrie, UMIP's director of operations, has also been invaluable.

What would you say was the greatest challenge?

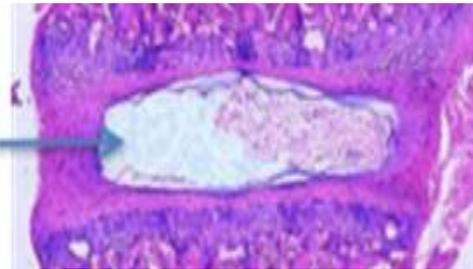
Obtaining private investment has been the greatest challenge. Philippe Jenny, CEO, and Hans von Celsing, executive director business development, have done a splendid job in achieving this.

How did you find dealing with investors?

Working with investors has taught me that there are many highly intelligent people outside of academia. It has also shown me that there is a lot of money available for good ideas (backed by a patent). Further, the government has some very well-designed tax incentives to encourage private investment in spin-outs, which are crucial to their success.

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

My aspirations were to try to give the UK taxpayer something back for the money they had invested in my research through both the EPSRC and University. Also, I wanted to take the promise of the research through to a clinical application because it could alleviate pain. My core belief is that research should be for the benefit of



society and a commercial application of a successful medical device is a great way to help people.

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

I did not have to make that transition. My role in the company is a scientific director and I do not run the business. We have a CEO and business manager for that. I do attend the board meetings and am responsible as a board member for the businesses operation and I take that responsibility seriously. The support provided by the Gelexir board and UMIP has been invaluable in my being able to maintain my research focus.

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

The key one is a good idea coupled to a viable technology that everyone likes. Our technology is like that. Whoever I discuss it with thinks it is interesting and are positive. Investors have formed the same opinion.

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

Universities are under pressure to demonstrate translational research outcomes. This is the key benefit and is one of the key reasons that I hope that our spin-out succeeds.

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

Don't let the spin-out take too much time away from your core academic activity and also try to exit as early as possible. The best academics in the world, who have many spin-outs, use an early exit model.

What's next for Gelexir?

Success hopefully!

**The commercial
application of a
successful medical
device is a great way
to help people**

Professor Brian Saunders, co-founder

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