

Case Study Follow-on Fund

DR RYAN DONNELLY

Dr Donnelly and his team in the School of Pharmacy at Queen's University Belfast have used BBSRC funding to develop a novel vaccine delivery system with great industrial potential. The group have created novel polymers for microneedles that dissolve in the skin, making them safer than traditional metal needles. When the microneedles enter the skin, they absorb skin interstitial fluid and swell, which allows controlled administration of the drug from an attached transdermal patch. This facilitates administration of greater doses of drug over a longer period of time. The team has demonstrated the capabilities of the hydrogel microneedles to deliver a wide range of therapeutically-useful drugs. As well as investigating peptide and protein delivery using their polymer systems, they also used the BBSRC follow-on funding to perform in vitro and in vivo safety evaluations with a view to taking the technology forward to commercialisation. Donnelly said "Success with the BBSRC funding has allowed us to protect our work through an international patent application.[...] We also have two industrial development contracts running to develop the microneedles as a commercial product. All of this was made possible by the work we did during the tenure of the BBSRC grants." Thanks to the BBSRC follow-on funding, the team moved onto securing further funding from other agencies to develop the medical application of the technology.



Case Study Enterprise Fellowship

DR ANDREW ALMOND – C4X DISCOVERY LIMITED (PREVIOUSLY CONFORMETRIX)

Dr Almond's unique technology, to determine the dynamic 3D shapes of drug molecules, is the culmination of a large body of work produced during a BBSRC David Phillips Fellowship. Within the space of 3 years, Dr Almond's research has gone from laboratory concept to the edge of commercial reality, which promises to have a substantial contribution to drug discovery and, ultimately, patient health.

His research group's discovery of the flexible 3D molecular shape of hyaluronan quickly led to a UK patent and the all-important 'proof of concept' that their new methodology could be generalised to any small flexible molecules, such as antibiotics and hormones. With the support of two Follow on Fund awards and a BBSRC/RSE Enterprise Fellowship, Dr Almond has made rapid progress towards commercialisation and, with his colleague Dr Charles Blundell, formed the spin out company Conformetrix to exploit the technology. They went on to raise seed funding from Aquarius Equity Partners.

Most recently Conformetrix and AstraZeneca have signed a research collaboration agreement under which Conformetrix's proprietary NMR-based technology will be applied across AstraZeneca's pre-clinical therapeutic pipeline to enhance lead discovery and hit identification



Release the potential of your research



BBSRC has a range of schemes bridging the gap between fundamental research and its commercialisation. BBSRC's programmes provide skills, networks and time to enable a new idea to reach its highest potential.

BBSRC's Follow-on Fund (FoF) scheme is designed to support the translation of fundamental research funded by the Council into practical application, including commercialisation. The aim of the programme is to help researchers maximise the societal and economic benefits of their research.

Types of FoF award

- **Pathfinder**

- o Funding to carry out activities which will help researchers understand the potential route to application of their research outcomes and assist with the development of a full FoF application
- o Maximum duration of 6 months
- o Funding ~£8-10k

- **Standard and Super Follow-on Fund**

Intended to enable researchers who have a sound understanding of the market opportunity and of their intellectual assets to execute a defined programme of work that has a clearly defined complementary technical and business plan development objectives

Standard:

- o 12 months in duration
- o Funding >£250k

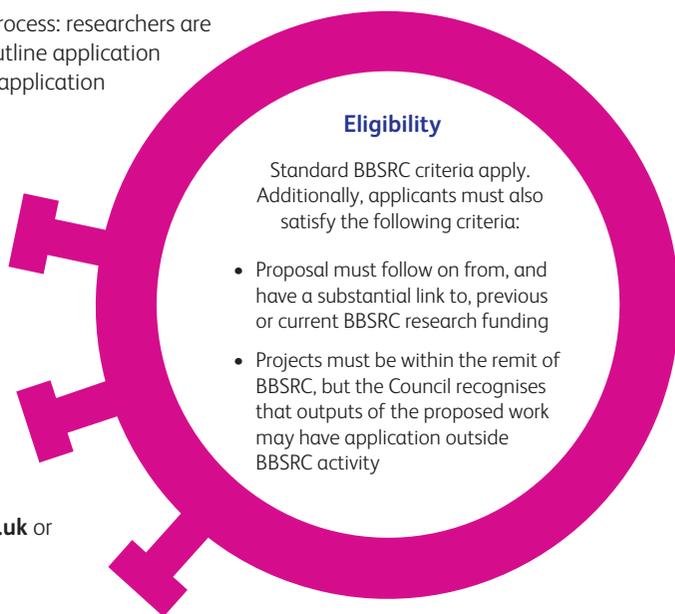
Super:

- o Two stage application process: researchers are required to submit an outline application before submitting a full application
- o 24 months in duration
- o Funding >£2M
- o Access to a mentor

Further information

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 Visit the website:
<http://www.bbsrc.ac.uk/funding/filter/follow-on/>

For examples of using the schemes see overleaf



Enterprise Fellowships

Funded by BBSRC and delivered by the Royal Society of Edinburgh, Enterprise Fellowships are designed to encourage the development of a new business, building on previously funded BBSRC research, around a technological idea developed by the Fellow (either individually or with others) and within which the Fellow would be expected to play an important role. This award is of particular relevance to individuals and ideas who previously received commercial and technical Proof of Concept awards including BBSRC Follow on Funding.

Fellowships are awarded competitively. The primary criteria for assessing an application are:

- The effectiveness of the technology
- The commercial potential
- The strength of the proposed route to commercialisation, and
- The entrepreneurial potential of the applicant

The application process and the administration of the scheme are managed by the Royal Society of Edinburgh.

Information:

- o A year's salary to provide time to develop a full business plan and seek investment
- o Access to mentors, business experts and professional advisors
- o Business training to help develop the required skills

Further information

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 Visit the website:
<http://www.bbsrc.ac.uk/innovation/maximising-impact/enterprise-fellowships/>

For examples of using the scheme see overleaf

