

NEW GAME-PLAN CASE STUDY

DEVELOPING A ROADMAP FOR THE REGENERATIVE MEDICINE INDUSTRY

This case study summarises how we supported the Scottish Stem Cell Network (SSCN) in developing an industry-led collaborative Roadmap for the Regenerative Medicine Industry in Scotland.

Update: We are now supporting the SSCN, and its partners, in developing a 'Therapy Realisation Pathway Tool'. This will enable researchers and companies to plan the commercialisation of new regenerative medicine therapies. The project is being funded by the Technology Strategy Board, Scottish Enterprise and BioQuarter.

Background

We designed and facilitated a 'Roadmapping Workshop' for SSCN at the University of Edinburgh. The Workshop was attended by 20 senior figures from business, academia, universities, and health bodies. Most were SSCN members. The Workshop was held at an exciting stage. President Obama had recently affirmed his support for regenerative medicine. The successful transplantation of a windpipe, grown using the recipient's own stem cells, had also demonstrated its potential (see www.bristol.ac.uk/news/2008/6010.html).

Scotland is recognised as a country with an impressive and growing cluster of research bodies and businesses concerned with regenerative medicine. Scottish Enterprise has invested actively in this area and supported the creation of SSCN to 'bring together scientists, clinicians, business and society to enable advances in stem cell biology to be rapidly translated to deliver new treatments for degenerative diseases'.

SSCN had recognised that the lack of an agreed Roadmap risked holding-back the industry, and sponsored the Workshop to 'Develop a Roadmap for the Scottish Regenerative Medicine Industry to consolidate the sector's vision and strategic plan'. A specific aim was to develop guidance on how to realise new therapies.

The process and special challenges

This 'Brain-Pool' Workshop involved a mix of stimulus presentations, group discussions and individual working. Special technology was used to capture and share participants' individual contributions through the use of mini-laptops linked by a wireless network (for details see www.new-game-plan.co.uk/Services/Brain-Pool.htm). This approach facilitated the discussion, development and assessment of the ideas considered in the Workshop.

The nature of the network and the subject-matter posed several challenges to Workshop design and delivery:

- How to encompass, in a single Workshop, both 'big-picture' thinking to develop the strategic roadmap, with very detailed specification of Realisation Pathways for selected therapies?
- How to populate the Pathways in a comprehensive way, without getting bogged-down in one area?
- How to equip the Network to define Pathways for additional therapies after the Workshop?
- How to cover not only the scientific advances but also the development of viable business models for manufacturing, scaling-up, and marketing approved products for regenerative medicine?

We worked closely with the SSCN team prior to the Workshop to develop 'starter materials' which would help to overcome these challenges. Particular emphasis was placed on preparing materials which would enable the Workshop to develop, test and validate an initial Therapies Realisation Pathway Tool, so that this could be finalised and deployed by SSCN members, after the Workshop, in tackling specific therapies.

This exercise was not straightforward, as the Tool had to guide diverse organisations in realising new therapies through three stages (Discovery, Development and Delivery), and across five interlinked streams (Science & Technology, Manufacture & Scale-up, Regulatory & Governance, Business Models, and Funding & Investment). The work undertaken prior to the Workshop kick-started the process by enabling good progress to be made.

Workshop outcomes

Over two days, participants gave detailed and thorough attention to each of the Roadmap building blocks. From over 750 individual verbatim contributions, we distilled the following outputs:

- A single crisp statement of 'desired outcomes' relating to four clearly-articulated drivers.
- A 'Therapies Realisation Pathway Tool' (TRPT) with 59 distilled 'generic actions' as its basic building blocks. This has now been recognised as the basis on which to build a software application.
- A partly-populated 'test' Pathway for Red Blood Cells, ready for further development.
- 17 distilled capabilities which the industry needs to be able to access.
- 17 distilled promoters to overcome blockers to progress in the industry.
- 17 specific recommendations, developed from the contributions received during the Workshop (e.g. on how to make the TRPT a working tool and how to build the regenerative medicine industry).

The Workshop Synthesis Report brought together all the outputs for further development by SSCN. The Roadmap has been used as a communication tool and SSCN are finalising the Therapies Pathway Tool.

Feedback from participants

Participants commented that 'the structure enabled us to handle what would otherwise have been a very ill-defined topic'. They liked the 'interactivity', the 'collective discussion and input', and the 'opportunity for multiple inputs in real time such that no one individual or opinion could dominate'. It was 'a good use of resources as it brought together a huge pool of knowledge and experience that wouldn't have been accessible otherwise'.

Further information

New Game-Plan is a specialist company which catalyses strategic change for leading global companies, public bodies and cross-sector groups. Our approach is innovative and distinctive, fusing Knowledge, Facilitation Services, a Practical Toolkit, and Supporting Technology. Our expertise and experience is broad, across many sectors. We have particular strengths in research and innovation. For further information, contact Dr Ray Smith: Telephone: 01428 741726. E-mail: info@new-game-plan.co.uk. Web: www.new-game-plan.co.uk.