

## **Biopharma - Regional Initiatives**

### Durham and Newcastle Universities

Together with the regional Health Authority, the universities have jointly formed the North-East England Stem Cell Institute (NESCI) to pool their stem cell expertise and move the science into the clinic. This involves developing novel bioprocesses and running these in the Newcastle Bio-Manufacturing Facility based at the International Centre for Life.

### Biopharmaceutical Bioprocessing Technology Centre (BBTC)

The focus of Newcastle University's BBTC is on biosystems engineering, an area in which the team has unique expertise and international recognition. The goal is to understand underlying biological complexity and as a consequence manipulate biological behaviour and realise improved whole process design. Biological understanding of cellular processes relevant to bioprocessing is far from complete, especially the impact of scale-up and mass culture on performance. The BBTC approach is based on biological scientists, physical scientists and engineering scientists working together to enhance understanding of the process and the development chain, thereby generating expertise which can interface with the business knowledge base and lead to improved opportunities for exploitation.

### CoEBio3

This national industrial biotechnology initiative has its scale up facility at Wilton, Teesside. Although this is not a purely biopharmaceutical facility, it is anticipated that it will be used for bioprocess training and scale up research purposes.