

CENTRES of EXCELLENCE

Five Centres of Excellence have been established in specific fields designed to make sure the north east is at the forefront of global economic trend and help knowledge and technology driven businesses.

Centre of Excellence in Life Sciences (CELS)

The key objectives of the Centre for Excellence for Life Sciences (CELS) are:

- to identify the key areas of regional scientific excellence and the parallel platform technologies synergistic to their development
- to assess the current gaps and constraints hindering the exploitation of bioscientific R&D
- to develop the facilities and services necessary to achieve effective transfer technology

The region has considerable academic and industrial strengths in Life Science, CELS will build on research and technology strengths found in the region's universities, NHS and industry in the following areas:

- Cancer and ageing
- Human genetics
- Informatics and predictive biology
- Clinical medicines and devices
- Stem cell therapies
- Plant biotechnology
- Bio-process engineering

In 2004, the centre for Life became the first institution in Europe – and only the second in the world – to acquire a licence for stem cell research on human embryos.

The Life Knowledge Park houses biotech researchers and companies to benefit from being the leading player in this field.

Centre for Process Innovations (CPI)

The key objectives of the CPI are:

- to develop a self-sustaining capability in technology and management necessary for the regeneration, diversification and growth of the process industry
- to provide demand-led management process that will enhance and enlarge the contribution of the universities through improved focus and effectiveness of programmes in both applied research and education
- to effect a major improvement in the commercialisation of relevant technologies and to support emergent businesses through to full-scale manufacture

The centre will initially prove excellence in two related areas:

- Advanced manufacturing and process design
- New product development in material properties

The New and Renewable Energy Centre (NaREC)

NaREC is involved in fast-tracking concept evaluation, feasibility studies and prototype evaluation and testing through to early commercialisation, thereby enabling the creation of a new and vibrant industry in renewables.

NaREC staff have extensive experience covering a range of engineering applications to support wind, biomass, wave, tidal and solar PV applications.

These include mechanical and electrical engineering and systems engineering and integration, together with commercial know-how relating to the development of renewable projects.

World-class testing facilities are also being brought on-line.

NaREC also provides investment to develop and condition research based on local technological and scientific expertise.

A partnership comprising of leading universities and industry representatives provides support through NaREC.

Centre of Excellence for Nanotechnology, Micro and Photonic Systems (Cenamps)

Cenamps both facilitates and invests in projects and partnerships which will generate new business for the region and the UK through the application of nanotechnology, micro and photonic systems.

The Centre of Excellence bridges the gap between technology push and market pull, working with commercial companies and academia to stimulate business-driven R&D.

Cenamp aims to provide:

- the global promotion of regional facilities and skills to attract inward investment
- the identification and management of investment opportunities for market-driven research, development and production
- the facilitation and management of partnerships for research, proof of concept manufacturing and go to market
- the provision of facilities, services and investment to support SMEs
- the provision of a centre for business intelligence contacts

Digital Centre of Excellence (Codeworks)

Codeworks has three major activities:

- build and exploit new technologies in software and digital media
- invest in promising regional digital technologies and companies as an early-stage venture capitalist
- ensure the growth of a thriving regional digital cluster

Specific programmes include:

- the establishment of a fast-track system through which businesses can interact with relevant university R&D expertise
- identification of key collaborative projects that deliver a reputation for world-class excellence
- marketing the region's capabilities and technology
- providing the necessary facilities and services to enable rapid innovation and support the growth of these activities in the region

Key Points

- Five world renowned Centres of Excellence located in the region
- Gateshead Council is working in partnership with:
 - universities
 - businesses
 - research organisations