EGFSN sets out the skills needs of the Medical Devices sector

Ireland is one of the leading global medical devices centres, with a strong reputation for excellence in manufacturing and research driven activities. The sector currently employs almost 24,000 people in Ireland with sales of almost €6 billion annually. Building on this success, utilising the specialist skills and knowledge of our people, offers Ireland the opportunity to strengthen its reputation as a leading location for high value, innovation driven medical devices companies. Future Skills Needs of the Irish Medical Devices Sector, published (Tuesday, 5 February) by the Expert Group on Future Skills Needs, examines the trends and drivers of change in the industry, and assesses the skills requirements at all levels to 2013 to ensure continued success.

The sector has grown rapidly over the last decade, particularly from inward investment, with foreign owned companies accounting for 90% of employment. The indigenous sector, however, is also growing strongly with employment in Irish owned companies rising faster than that in foreign owned companies. Companies are engaged in relatively high growth and high value manufacturing activities, with many also involved in significant R&D projects.

Anne Heraty, Chairperson, EGFSN, said, “the ‘Made in Ireland’ brand is highly valued by the medical devices industry. In the face of a changing global environment the industry in Ireland is undergoing a period of change, focusing on knowledge intensive activities and making a greater use of R&D leading to greater product and process innovation. This, coupled with a rapid convergence of technologies in the industry worldwide, presents an opportunity to differentiate Ireland on the basis of skills as a location for highly skilled, innovative activities. To ensure we are equipped to keep pace with the changes it is important that we prepare now to meet the needs of a rapidly developing industry.”

The research found that the requirement for people with engineering, scientific, technician, sales and purchasing skills will continue to rise and the demand for those qualified to Masters and PhD level will also increase. The industry is likely to see a move towards greater numbers of engineers, scientists, analysts and technicians. Relatively modest numbers of new operators, assemblers and quality control staff will be required.
The EGFSN recommends a number of actions to ensure that the sector is equipped with the right level of skills and expertise to meet the challenges of a changing industry.

The main recommendations are:

- There is a need to improve manufacturing excellence which could be achieved through the establishment of a Centre for Medical Device Manufacturing Excellence in the higher education system to assist industry in developing the skills required for innovation driven activities.
- There is a requirement to upskill operators, assemblers and technicians, currently working in the sector, over the next three years through industry led training initiatives supported by the State.
- Higher education institutions involved in graduate studies in biomedical engineering should work towards the development of a fourth level Graduate Education Institute specialising in medical devices innovation.
- In collaboration with the industry a Masters Course in regulatory affairs should be introduced. Consideration should also be given to the introduction of a Graduate Diploma or Masters qualification in the design, management and conduct of clinical trials.
- Increase involvement by clinicians in medical device innovation. Medical and engineering schools should jointly create more opportunities for clinicians to undertake further studies and research in medical technology and biomedical engineering.
- Support should also be given to the development of professional and specialist skills in specific sectors such as regulatory affairs and clinical trials management.
- As technological convergence in the medical devices industry progresses, introduce programmes which bring together mechanical, electronic and biosciences technologies.
- Entrepreneurial and intraprenurial activity should be encouraged through provision of education and training programmes based on best practice Irish and US models.
- The Irish Medical Technologies Council should actively promote communication and networking between entrepreneurs, professionals, academics and the development agencies.

A copy of the report can be downloaded from www.skillsireland.com