IOP Business Forum:  
The UK’s innovation landscape : the impact on the North West.  
Discussion notes

3 June 2012  
Daresbury Science and Innovation Campus.

Chaired by Dr Norman Apsley, CEO Northern Ireland Science Park

Speakers:

Peter Nears, Peel Holdings  
Jonathan Smith, Tech-X UK Ltd  
Louise Butcher, Institute of Physics

The meeting was opened by Norman Apsley, who noted that since the last meeting at Daresbury on the theme of STEM skills, the Institute had taken on many of the suggestions made, and had instigated programmes to bring university students and physics-based companies closer together.

The first speaker was Peter Nears who gave an overview of Peel Holdings, a company with a diverse portfolio reaching across international ports and domestic infrastructure to support for innovative small- and medium-sized businesses. The company is a board member of the Local Enterprise Partnership (LEP) that covers the Daresbury campus, the Merseyside Partnership. The LEP has recently produced a strategy for the area with the aims of increasing growth and rebalancing the economy, and is currently seeking to source appropriate funding to implement its programme.

Jonathan Smith described the activities of Tech-X UK, a fully-owned subsidiary of the US-based Tech-X Corp. The company employs 65 PhD-level scientists and mathematicians who device innovative solutions of problems in companies, government and industries. The US company has achieved significant success from SBIR (small business innovation research) contracts in the US, but has run into obstacles when attempting to repeat this success in the UK. The UK subsidiary’s international ownership and small size means that it is often ineligible for funding and support programmes. Additionally the model of knowledge transfer in the UK is still seen very much as university-to-business rather than an exchange of knowledge. As such, many of the programmes do not allow Tech-X UK to support and contribute to university research, the same way that its US parent works with national labs.

Louise Butcher spoke of the work that the Institute or Physics has done in the region to support engagement between physics-based businesses and physics training. Initiatives such as the Summer Work Placement Bursaries allow penultimate-year undergraduate physics students to spend time with physics-based businesses, gain a greater understanding of the career paths open to physics graduates, and the different cultures that can exist outside academia. Louise also gave an update on the Lab in a Lorry programme : mobile laboratory that visit schools and festivals and allows young people the chance to undertake “real” experiments outside of the classroom environment. The Lab is sponsored in the North West by the STFC, and relies on volunteers form local business to be able to inspire the next generation of physics-trained workers.
Discussion

The merits of physics graduates leaving science and joining other areas of the economy, such as the financial sector, were discussed in the context of an unmet demand within technology-based business. It was felt that any ‘loss’ to the field was balanced by the benefits of bringing ‘physics thinking’ into other sectors, and the broader message of emphasising the employability of physics graduates and their value to the economy.

The ability of current UK funding schemes to support companies in all sectors and stages of development, and whether physics was losing out in the biotechnology sectors was also discussed. It was noted that physics is often integral to products developed in the biotechnology sector. The success of the SBRI scheme was questioned, both in terms of its rollout across government departments, and also the number of ‘calls’ that have been issued that are suitable for smaller physics-based businesses. It was suggested that more research could be done in this area.

The discussion also covered the notion of an ‘entrepreneurial spirit’ amongst graduates and in the UK as a whole, and how this might be encouraged. UK universities were compared with those the USA, where it was suggested that there is more of a culture of ‘making money’, with innovation and inventions moving quickly from the labs to the marketplace in a process actively encouraged by both the universities and the researchers themselves. The role of larger UK public bodies in supporting innovation was also discussed. It was noted that hospitals spend around half a million pounds on research and development, but there is limited scope for the products of spinouts from this research. The NHS particularly could be more open with its intellectual property, allowing businesses to grow from the results of physics funding.

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