

BRIDGING BUSINESS AND SCIENCE NEWSLETTER, JULY 2006



THE STUDY TOUR AT THE UNIVERSITY OF SURREY, GUILDFORD 26-27 JUNE 2006

The first Study Tour of the Bridging Business and Science GROW project took place in Guildford. The meeting brought together three groups of professionals engaged in scientific research and innovation activities: university researchers, representatives of the business community and Knowledge Transfer (KT) Professionals. The members of these 'Pathfinder Groups' (PFG) came from five different European Regions (South East England, Malopolska (Poland), Andalusia (Spain), Noord Braabant (Netherlands) and Emilia Romagna (Italy)), and three different market areas: IT/New Materials and Technologies, Health/Biotechnology and Environment. For a day and a half more than 40 participants discussed two specific topics of great importance for the economic development and innovation activities in their Regions: the management of Intellectual Property (IP) resulting from collaborative industry-university research and UK government schemes as examples of funding directed at stimulating KT.

The guest speakers, from both industry and academe, introduced topics for discussion representing both perspectives of the business-science interaction. This was followed by Round Table discussion groups which focused on providing suggestions for best practice in IP management and KT funding schemes.

It was generally agreed that universities represent a very different organisational culture to industries and that this represents the largest stumbling block for trouble-free cooperation. IP issues were also identified as an obstacle.

THE UNIVERSITY VIEW

There is an increasing pressure on universities to bring-in as much external funding as possible. The IP resulting from collaborative research can have an important monetary value to the university, although there is a new realism regarding its exact value. Disputes were identified between partners in European funded projects relating to this issue during contract negotiations.

Industry-university collaboration remains largely based on the research agenda driven by academics, not the universities' management strategy or the market pull. This situation can create a conflict between the need for funds and the academic mission.

All EU countries participating in the project appeared to agree with the workshop conclusions. For example, there was complete agreement between the speakers representing business that the industry-university research collaboration has to be market driven rather than technology pushed, although applied rather than pure research is a culture change for some academic research groups.

It was remarked that multinational companies in certain sectors are not particularly interested in innovation, that they might find it hard to generate the same momentum as SMEs (Small and Medium Enterprise) involved in change, and in some cases are using mainly spin-in activity within the company to generate innovations. Therefore it was proposed that the best partners for universities should be SMEs. However, it was suggested that SMEs may have little knowledge of universities and might feel intimidated by them and find it difficult to engage them due to cost, as universities may be competing in the same market. In the countries where the government has invested in KT professionals working at the universities, who can provide a contact point for SMEs the situation seems to be improving, while there are also regional funding sources geared towards providing financial assistance to SMEs to contact universities for development work. There was a common agreement amongst all speakers that there is a definite need for a professional cadre of people familiar with both cultures to provide the link between business and academe.

It was suggested that the KT office financed by a university might not be the best solution for regional economic development. The way forward may lie in separate business services supporting a number of universities and companies. The KT experts in these organisations should have experience of working with SMEs and autonomy for signing deals and contracts. This model has not been tested as yet.

THE INDUSTRY VIEW

A crucial point raised by the speakers representing industry is the different time scales of research activities in these two cultures. Industry very often needs quick and timely solutions which often cannot be provided by the academics, not because of the lack of scientific ability, but because research at the universities is a part-time activity shared with teaching and writing scientific papers.

For industry the main drivers are: profit, cash flow, competitive edge and maintaining flexibility and responsiveness to market changes. IP resulting from research gives a company a competitive edge.

Some University academics ask themselves if at all they should engage with IP. If so, a whole new set of questions are raised, for example: where the patent should be sought (national, EU, international?) and can their university afford it? It seems that even from the university perspective the optimum route for patents may be with an industrial partner. In this situation the company could bear the cost of a patent with the academic retaining inventorship. However, in this case the IP has to be realistically valued and there has to be both an unambiguous royalty agreement and an understanding about the link between the IP and future company products.

Considering the above, it needs to be emphasised that the three fundamental activities at the universities, namely teaching, research and KT are all related and feed back into each other.

BEST PRACTICE IN IP MANAGEMENT, CONCLUSIONS:

- The topics for collaborative research should be market-driven but Universities should be better at marketing their scientific expertise and the facilities available.
- To avoid problems with IP ownership collaborative research standard agreements should be used (for example, the UK 'Lambert' agreement)
- Exploitation of innovation has to be fast
- The big companies could provide a pivotal role in KT and be a link between universities and SMEs, but this theory needs to be tested in case studies
- KT offices should be independent from their universities, but royalties resulting from IP should be paid to the universities. This point has not been accepted by all participants and it has been suggested that test cases are needed.
- University students and academics should learn about the importance of IP and knowledge flow on a regular and formalised basis
- University professors should be involved in decisions concerning the value of IP in speciality research projects
- There is a need for government research funding that is aligned with the market and the requirements of SMEs
- The professional management of expectations of both industry and universities regarding the benefit of collaboration is essential
- Different countries have different models of IP management. For example: in Poland and Netherlands the IP is negotiated on case by case basis, in the UK joint ownership is generally avoided while the university invariably owns the IP and not the academic; one party owns, the other has freedom to use. In Andalusia negotiations are undertaken mainly by the administration of Universities. Evaluation of these different models should be undertaken.

CONCLUSIONS ON VARIOUS SCHEMES OF KNOWLEDGE TRANSFER SCHEMES

- The International Relay Centres are a good tool for introducing cross-European collaboration, but they need to be better marketed – they don't work well as a part time function
- The UK Knowledge Transfer Partnership has been assessed as an excellent scheme and was suggested as a very good way forward for the Polish KT needs.
- In Netherlands there is an organisation for Applied Technology (TNO) identified as a good example of satisfying short term industry requirements for innovation.
- In Andalusia there are public and public/private bodies fostering technological innovation (Innovation and Technology Transfer Centres).
- The London Technology Network was seen as needing a specific assessment for its application in other countries

For more information about the discussions and for to see the speaker's presentations please go to the BBaS Website: www.growbbas.com and click on 'Downloads.'

REGIONAL BBAS DISSEMINATION AND DISCUSSION WORKSHOP – 8 SEPTEMBER 2006 RESEARCH PARK, UNIVERSITY OF SURREY IN GUILDFORD

The next event planned for the BBaS project in the South East of England will be an informal lunchtime workshop on the 8th of September where we would like to hear from our regional SMEs R&D representatives how in their view this EU funded international networking activity can help them to establish sustainable research collaboration with the science centres in the five participating regions of Europe.

Please e-mail Dr. Sophie Stos (s.stos@surrey.ac.uk) if you are interested in participating in this event.

THE NEXT STUDY TOUR OF BBAS

The second Study Tour of the Bridging Business and Science GROW project will take place in Cordoba on the 15th-18th of October. We will be shortly selecting the members of Path Finder Groups from the industry and academia. If you would like to participate please contact:

Biotechnology - Dr. Helen Nelson (h.nelson@surrey.ac.uk)

Environment: Jonathan Hodrien (j.hodrien@surrey.ac.uk)

IT/ New Materials and Nanotechnology: Dr. Phil Costen (p.costen@surrey.ac.uk)

All expenses of participation in this event will be paid by the funds from the GROW project.

*The UniSdirect BBaS Team
28 July 2006*