

Submission to the Lambert Review of Business-University Collaboration

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This submission is presented by
Barry Stickings, Chairman, BioCity Nottingham Ltd

Introduction

1. BioCity Nottingham Ltd is a unique example of strong collaboration between a Regional Development Agency (East Midlands Development Agency), two universities (The Nottingham Trent University and the University of Nottingham) and a major international science-based company (BASF plc) to create a major Bioscience and Healthcare Innovation Centre.
2. The objective is to grow a strong cluster of Bioscience and Healthcare companies in Nottingham and the East Midlands through close collaboration between Businesses and Universities.
3. I am pleased to present a submission from BioCity Nottingham addressing each of the four questions for consultation.

BioCity Nottingham: An example of best practice and excellence in business-university collaboration

4. BioCity Nottingham was made possible by the donation of pharmaceutical R&D facilities by BASF to Nottingham Trent University. The premises consisting of over 100,000 sq ft of laboratories would cost close to £50 million to build and equip at today's prices. The gift is believed to be the largest-ever corporate donation to a new university.
5. The Nottingham Trent University wisely decided that it needed to work with partners in order to ensure the success of BioCity Nottingham. The crucial partners in addition to BASF were University of Nottingham with its strong Bioscience and Healthcare research base and East Midlands Development Agency, which had already identified Bioscience and Healthcare as a sector of particular importance to the region. The objective of the partners is to create an "engine" for regional economic development that has a value in excess of £50 million to the regional economy.
6. A careful process has been undertaken to ensure that the four organisations involved could all share common goals in the development of BioCity and the way in which it would seek to achieve maximum regional economic development effect in the area of Bioscience and Healthcare.
7. There were many crucial steps in the successful establishment of BioCity Nottingham Ltd, including: BASF's willingness to underwrite running costs until the other partners had the opportunity to develop a robust business plan and

- secure necessary funding; a well designed and developed regional economic strategy from EMDA that ensured that public funding could be made available to help BioCity Nottingham to get established; the willingness of the two universities to work together for common goals; and, selection of specialist consultants, Oxford Innovation Ltd, who were capable of facilitating the partners to reach shared goals and to help to secure available funding to turn the ambitious goals into reality.
8. The result is an initiative that has already attracted 7 Bioscience and Healthcare companies employing about 50 people to establish themselves in BioCity Nottingham (since opening in November 2002), with another 12 companies expressing serious interest in taking space in BioCity over the next few months. Many more Bioscience and Healthcare companies will be assisted by BioCity Nottingham over the next few years.
 9. BioCity provides an ideal environment for the establishment and growth of spinout companies. One of the companies currently located in BioCity is a spinout from Nottingham Trent University, another is a spinout from Imperial College, while two spinouts from University of Nottingham are expected to move into BioCity shortly.
 10. BioCity is currently applying for support from the DTI BioScience Unit to enable a high level of specialist professional business support to be made available to companies in BioCity and to other bioscience and healthcare companies in the East Midlands region.
 11. The ultimate objective is for BioCity Nottingham to create more than 5,000 jobs in the regional economy.
 12. Because of its location in the middle of the East Side regeneration area of the City of Nottingham, BioCity represents a highly cost effective means of stimulating regeneration of a less prosperous area of Nottingham.
 13. From the BioCity perspective, it was essential that EMDA had a regional economic strategy that fully recognised the importance of the emerging cluster of Bioscience and Healthcare companies. EMDA has developed Medilink East Midlands to be a leading cluster activity in promoting the Bioscience and Healthcare sector in a manner complimentary to BioCity Nottingham.
 14. It is vital that location specific initiatives such as BioCity Nottingham should be able to collaborate closely with regional cluster promotion activities such as Medilink East Midlands to ensure that economic benefits can be spread throughout a region. This is an issue of particular importance in all regions because of the danger that locations without a nearby university may miss out on the huge economic potential of the knowledge-based economy.
 15. In the future BioCity intends to provide laboratories and facilities to a wide range of Business-University collaborative projects.

Barriers to stronger Business-University Collaboration

16. BioCity is at an early stage of its development and has so far encountered many challenges, but few serious barriers. Potentially serious barriers, such as fund raising, were successfully negotiated by having a strong partnership and by having a close alignment between the objectives of BioCity and the Regional Economic Strategy.
17. A more relevant question in BioCity's case is what opportunities it sees to further strengthen Business-University Collaboration. BioCity would like to encourage stronger interaction including:
 - a) BioCity companies making more use of a wider range of University facilities
 - b) More university spinouts moving into BioCity
 - c) Establishment of a joint University-Industry Research and Development Facility at BioCity
 - d) Establishment of a joint BioCity – East Midlands Universities project to encourage technology transfer and the commercialisation of research in Bioscience and Healthcare.
18. Lack of proximity can be a barrier to technology transfer. BioCity plans to address this by becoming a venue for events and activities aimed at the Bioscience and Healthcare sector and of interest to both academia and business.

How can business attract the best graduates and postgraduates?

19. We anticipate an emerging gap in supply of graduate recruits for laboratory R&D work within BioCity. BioCity will work with local Universities and with The People's College, Nottingham, an Associate College of The Nottingham Trent University, to address this gap.
20. As BioCity develops, it will gain a critical mass of companies and will be able to communicate the needs of those companies directly to the Universities that should be able to produce the graduates that are required.
21. Part of the rationale for BioCity is to have a strong cluster of Bioscience and Healthcare companies that will offer attractive career opportunities to scientists and technologists. Graduates can no longer expect a whole career within one large (or small) organisation. Instead, graduates should be anticipating "careers within a cluster" that may involve several changes of employer within the cluster.
22. Bioscience and Healthcare companies will wish to start and grow at BioCity because it is an attractive location for graduates and postgraduates who are seeking employment. BioCity will act to promote its cluster of companies and to help them attract and retain the best talent.

Financial Considerations

23. Most of the companies within BioCity have, or will have, relationships with Universities. Many of these relationships will be on a commercial basis of payment for contract research, access to facilities and consultancy. R&D tax credits can be helpful in this respect and the recent reduction in the lower limit for R&D tax credits will help some of the smaller companies within BioCity.
24. However, the overriding financial problem at present for R&D intensive bioscience and healthcare companies is the unprecedentedly severe shortage of venture capital investment. The very companies most likely to work with Universities are finding it most difficult to finance their research, development and growth plans.
25. BioCity is already starting to address the severe shortage of venture capital by helping companies to access alternative sources including SMART awards, business angel finance and the newly announced University Translation Awards from the Wellcome Trust. In addition, BioCity will work with the Regional Venture Fund for the East Midlands and with the Lachesis University Challenge Seed Fund recently established to invest in spinouts from the five Universities in Nottingham, Leicester and Loughborough.
26. We note, and broadly welcome, changes to SMART grant funding arrangements recently announced by the Small Business Service. The increased grant of up to £75,000 for feasibility studies is important, though it is disappointing to see the grant contribution as a proportion of total project costs falling from 75% to 60%.
27. BioCity could consider establishing its own seed fund in future. The Small Business Investment Company programme announced in the recent budget may be a suitable means to achieve this
28. It was particularly important for BioCity's own finances that both universities in Nottingham should be involved in the establishment of BioCity. EMDA has been particularly effective in ensuring that BioCity Nottingham can take full advantage of all available funds (including EU funds) in implementing its programme of activities.
29. Crucially, EMDA and the two Universities had to support BioCity Nottingham without attempting to control it. While the Universities share many of the goals of the Regional Development Agency, all parties felt that it was vital to establish a well funded separate legal entity with a majority of independent directors from Business and with the shared goals encapsulated at the outset.
30. The result has been securing of funding from many sources to back the BioCity Nottingham project, including £400,000 from each of the two universities, £1.2 million of capital grant from EMDA, £1.6 million of capital grant from Government Office East Midlands (European Regional Development funding) and £666,000 from EMDA through their regional Action Plan utilising ERDF funds. HEFCE has contributed £700,000 to enable the two universities to work closely with BioCity Nottingham. In addition, the DTI Bioscience Unit has

indicated the potential availability of £500,000 through the "Harnessing Genomics" programme to encourage provision of mentoring and incubation services to Bioscience companies in BioCity Nottingham and the East Midlands.

31. This funding mix has enabled BioCity to be established on a firm footing and to set off with broad objectives, including encouraging Business – University collaboration, rather than needing to focus exclusively on lettings of business premises.

Lessons from the experience of establishing BioCity Nottingham

32. The lessons from BioCity Nottingham's recent experience in encouraging Business-University Collaboration are:
 - a) To be prepared to use scientific research and development assets, even if those assets may require significant reinvestment in order to maximise their regional economic effect.
 - b) The recognition that assets no longer required by large science-based companies may be useful to the next generation of small science-based companies and that Universities may have a crucial role to play in this transition.
 - c) The need to build a resilient partnership that can maintain consistency of purpose and rise above any local rivalries.
 - d) The need to build on the scientific strengths of the region, inviting in outside expertise where specifically necessary.

Conclusion

33. In conclusion, I am delighted to present a submission based on a ground breaking project, BioCity Nottingham, which may act as an exemplar for encouraging Business-University Collaboration by building on strengths in science and technology.
34. The active support of The Nottingham Trent University and the University of Nottingham have been essential in enabling a major donation from BASF plc to be transformed into a major Bioscience and Healthcare Innovation Centre. Surely this is Business-University Collaboration at its very best.
35. I am pleased to acknowledge that the policy framework and funding streams established by EMDA, and EMDA's ability to facilitate partnerships in the regional economy, have been crucial to the success of this project so far.
36. EMDA's job is, however, not yet fully done. Business is always prepared to build further on success and strengths. The challenge now for EMDA is to further support and encourage BioCity Nottingham so that it achieves even more than its original, ambitious, objectives.

Barry Stickings
Chairman, BioCity Nottingham Ltd

Contact Details: Barry Stickings
 Chairman
 BASF plc
 33 St James's Square
 London SW1Y 4JS
 Tel: 0207 661 9982
 Fax: 0207 661 9875
 E-Mail: barry.stickings@basf-plc.co.uk