

**BC-UK Life Sciences Mission Part II December 7<sup>th</sup>-11<sup>th</sup>, 2015****Summary:**

The BC-UK Life Sciences Mission Part II built on an earlier mission to the UK that took place earlier in the year. It was timed around the Genesis conference, to take advantage of the new collaboration LSBC has with One Nucleus, the organisers of the conference. In addition to Cambridge and London, it looked to engage more with Oxford. The BC delegation was much larger, consisting of academics, companies, health institutions and government (see Appendix 1). Led by Paul Drohan, President and CEO, Life Sciences BC, the mission objectives were as follows:

**Objectives:**

1. Engage with the world's leading universal healthcare system to explore possible initiatives that can be initiated/transferred into the BC healthcare system, e.g. "Test Beds in the NHS"
2. Explore and understand the benefits of the positive working relationship with between UK Government and Industry, e.g. Office of Life Sciences, CATAPULTS, BioCatalyst Fund, etc.
3. Understand the data availability to the private sector through an engagement with the Clinical Practice Research Datalink (CPRD)
4. Explore how BC companies can use the UK as their EU base through the development of relationships with potential collaborators, services providers and health regulators

Life Sciences BC are still collecting the feedback from the participants but early indications suggest the Life Sciences BC Mission Part II was a great success. TIR/High Commission organised a well-attended meet and greet reception, and over 20 meetings for the group in London, Oxford and Cambridge. TIR secured 3 speaking slots for delegates at the Genesis Conference and shared a stand with the High Commission, which was busy during the entire day. TIR also managed to get a speaking slot for Telus Health at the Bristows Personalised Medicine event and an interview with Pharma TV for Paul Drohan to talk about BC life sciences sector and opportunities. With the help of Rupert Potter, the British Consul in Vancouver, a meeting between George Freeman, MP and Minister Office of Life Sciences, and Heather Davidson, Assistant Deputy Minister, BC Ministry of Health, was arranged. The Minister provided useful insights around innovation in health. TIR is already seeing results coming out of the mission. For instance, an agreement has been reached between the departments of primary care at Oxford University and UBC to jointly run a pilot study of 200 patients having a pharmacogenetic test for 22 drugs that are used for a third of the problems seen in primary care.

**Report****1) Meet and Greet Reception 7 December, 2015**

The meet and greet reception at PA offices was organised and hosted by the TIR, in collaboration with Life Science BC and the High Commission of Canada. It was an opportunity to introduce the BC delegation and showcase the BC life sciences sector. TIR and LSBC said a few words of welcome and thanked the individuals in the room who had helped put together the program for the delegation. Greg Houlahan, Senior Trade Commissioner, was there to represent the High Commission. The reception was attended by about 50 people, consisting of a mix of life sciences companies, intermediaries, VC's, universities and government.

**2) Cambridge 7 December, 2015****Sanger Institute**

The day started with a meeting with the Wellcome Trust Sanger Institute, a charitably funded genomic research centre, with a mission to advance the understanding of human and animal health. We were given an update on Sanger activities. Quite a lot has changed since January, when part of the group was over, such as a project for a wider campus i.e. Ogilvie Sequencing Building and BioDate Innovation Centre (where Sanger can attract other companies including from abroad). Sanger has again been successful in receiving a £500 million grant from Wellcome Trust again linked to a host of deliverables.

The group was also given a tour of their facilities.

Main opportunities: Sanger has a private equity arm for companies in series A. Also, Sanger may be able to offer space to BC companies.

### **Taylor Wessing**

The delegation was invited to an information session over a buffet lunch with the law firm Taylor Wessing. We were hosted by Paul Callaghan, Head of Canada desk and Malcolm Bates, head of life sciences practice. Steven Wilson, Head of Innovation, Enterprise Partnership, Greater Cambridge and Peterborough, also joined the meeting. They are able to help with the regulatory aspect of doing business in Europe. Taylor Wessing work with University Investment funds so they can be useful there as well. Taylor Wessing gave a comparison between Canadian, UK and US universities in relation to IP. Canadian Universities usually own the IP (apart from some like Waterloo) whereas in the UK it is rare for originator to own the IP. In the US, much more about the community and how much it brings to the country, rather than the institute. They were also very knowledgeable about the difference between countries with regards to personal data.

We were given a very useful guide on setting up and doing business in the UK.

### **Cambridge Enterprise**

Shirley Jamieson, Head of Marketing and International Relations, gave the delegation an overview of the city of Cambridge to set the scene for how important the students are (125,000 inhabitants, 30,000 are students). She talked about Astra Zeneca and how there are 2,000 scientists and their families coming as a result of the new site. Cambridge Enterprise is the commercialisation arm of the University. It is 100% owned by the University and everything goes back to the inventors and colleges. They take the long term view i.e. CAMPAS took 40 years to be commercialised. Their IP is the most generous in the world. It was set up by community scholars. Academics can have it assigned back to them. The delegates learnt how unique Cambridge is and how it is the optimum partner for a start-up.

### **Cancer Research UK**

We met with Dr. Kenneth Seamon, Chief of Scientific Development, who described what the centre does and talked about the Astra Zeneca move to Cambridge, which is mainly based on the strength of science in the area. The integrated approach is of great interest to LSBC/BC as they continue to build the BC life sciences cluster.

## **3) Oxford 8 December, 2015**

This part of the trip allowed us to work more closely with Oxford based organisation OBN, a not-for-profit Membership organisation supporting and bringing together the UK's emerging life sciences companies, corporate partners and investors. We identified the organisations we wanted to meet with and they facilitated an introduction. We also worked together on an informal networking event at the end of the day, where they invited their members.

Two separate programs were organised for the delegation. One geared more towards the academics/government group and one for the commercial group.

## **Academic**

### **Academic Health Science Network**

The delegation had requested this meeting to learn more about the AHSN network in the UK as they seek to develop an AHSN network in BC.

Nick Scott-Ram, Director of Commercial Development, Oxford AHSN, and his colleagues gave an overview of the Oxford AHSN, which was funded 2 years ago. They went through a few case studies they are working on at the moment. Their biggest challenge is delivering on early gains. Their recommendation is to find a few gems that are out there and support these.

### **Oxford Biomedical Research Unit**

TIR unable attend due to a conflict. Paul Drohan to provide notes

### **The Manor Hospital**

This meeting gave the delegation an overview of what a private hospital looks like in the UK. We were given a tour of the hospital. This was an interesting model for the BC delegates to look at, even though Canada has no private hospital.

## **Commercial**

### **Saïd Business School**

In this meeting delegates learned about the business school and its function in training new talents for various sectors including life sciences. Discussions centred around MBA students spending some time in Vancouver and UBC students spending sometime in the UK learning about the business environment in the UK and Europe.

### **Pennington Manches**

Penningtons Manches LLP is a leading UK law firm which provides high quality legal advice tailored to both businesses and individuals. The delegates learned about setting up business in the UK and how to register a UK entity. Only 10% of those that open an office in the UK register as a branch. We also learned more about labour laws and how UK is a gateway to the rest of the EU.

### **Oxford Science Park**

Delegates were given a presentation about the park, its history and how it has been developed over the last few years. They exchanged best practices and talked about some of the mistakes made. Space is a premium in and around Oxford and particularly for companies looking to expand and move from an incubation mode to a growth one.

## **4) London meetings 9-11 December, 2015**

### **Imperial Academic Health Sciences**

In this meeting we learned how AHSN were set up with Imperial being one the first one. Delegates were very interested to learn more about this model and to bring the best parts to the BC and so there were extensive discussions on how hospitals interact with each other as well as universities and the larger networks, about incentives for doctors and specialists to conduct research and to translate this into the clinic. The meeting was supposed to be an hour but lasted about 2 hours.

### **NHS England**

The delegation met with Sir Malcolm Grant CBE, Chairman of NHS England. The delegation learnt what NHS England is doing to transform the NHS and notably "where to take the 100,000 human genome". Pieter Cullis of the BC Life Sciences Institute organised the meeting and has identified a few collaborative projects. TIR has offered support to BC Life Sciences Institute with regards to potential partnership with NHS England.

### **GSK**

TIR did not attend due to a conflict. Paul Drohan to provide notes

### **Medicine and Healthcare Product Regulatory Agency (MHRA)/CPRD**

Part of the delegation met with MHRA in January. This was an update meeting and a chance for those who weren't at the January meeting to find out more about what the Clinical Practice Research Datalink (CPRD) are doing. CPRD have a novel way of looking at patient data. BC have data but no real access to it. CPRD is a dedicated multi-disciplinary team based at the MHRA in London. CPRD is a joint venture between the MHRA and NHS National Institute of Health Research (NIHR). CPRD takes on all the original work of General Practice Research Database (GPRD) and the NIHR Research Capability Programme, Pilots. Their mission is "to maximise the health gain that can be achieved through the use of anonymised linked NHS data in research studies and help improve the way clinical trials of innovative medicines can be undertaken and to gain funding for research projects that increase the wealth of the UK as a whole". CPRD aggregate and anonymise data from the NHS. Currently it has contributions from about 680 practices, and a total of 12 million patient records. It makes the data readily accessible for a fee. CPRD is pulling in approximately £5 million per year for the data. Opportunities resulting from meeting: possibility of sharing data in the future. Also, CPRD is an example of how BC/Canada could set up their data, perhaps through Health Canada? UK get around data privacy issue because all managed by a regulator (MHRA) and because everything is anonymised.

### **5) Further information / Useful Links**

[One Nucleus](#)

[OBN](#)

[Genesis Conference](#)

[Bristows Personalised Medicine event](#)

[Paul Drohan Interview with Pharma television](#)

