1. Why Biobanks Should Provide Biosamples to Industry

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This is the first in a series of mini-articles on ‘Biobanks & Industry’. These articles will describe (i) how biobanks in the public sector interact with the pharmaceutical, diagnostics and biotechnology industries, (ii) the barriers preventing such interaction, and (iii) potential solutions that would enhance industry access to biosamples. The series starts with this article on why biobanks should provide biosamples to industry.

The Main Reason

First and foremost, the main reason why biobanks should provide biosamples to industry is that industry plays a vital role in bringing new and improved drug and diagnostic products to the patient, but industry can only achieve this if it has access to sufficient well-documented human biosamples.

Here are some quotes to back up this statement:

“The development of new drug therapies, and diagnostic and screening tests, to the point where they can be made sufficiently widely available to benefit human health,
is **crucially dependent on commercial involvement**. Therefore access by the commercial sector to samples of human material collected in the course of MRC-funded research should be facilitated, where this is consistent with our mission.'

From: Human Tissue and Biological Samples for use in Research - Medical Research Council (MRC) Ethics Series. Section 4.1

'The involvement of commercial companies seems crucial for realising the potential within biobanks to contribute to better diagnostics and improved drugs'


'Private sector discoveries account for 80 – 90% of pharmaceutical products ... The discovery and development of new drugs, medicines, and vaccines to solve unmet medical needs is an extremely long and expensive process ... **Commercial companies have the funds, the expertise and the experience to take a potential product from bench to market.**'


*Progress from basic research to advances in patient care, including ‘analysis of correlation and causation between genes and diseases leading to **innovative pharmaceuticals**, including aspects such as pharmacogenetics/pharmacogenomics in **drug development**, genetic variation as a key to **personalized medicine**, and systems biology approaches to target identification and validation for **drug discovery**, is unthinkable without access to well-annotated patient samples'.*


**A Moral Responsibility**

Biobanks in the public sector are the main gatekeepers controlling access to human biosamples. These biobanks receive public funding to support medical research for the public good. This medical research must occur in both public and private (commercial) sectors. Therefore, biobanks in the public sector have a **moral responsibility** to provide biosamples to the private sector (ie. pharmaceutical and biotechnology industries). In recognition of this fact, these biobanks should be assessed, at least in part, by measuring the level of support they provide to pharmaceutical and biotechnology industries.

**A Proposal To Encourage Best Practice**

Here is a proposal to encourage best practice:
A key performance indicator (KPI) for biobanks in the public sector should be the level of support provided by the biobank to the pharmaceutical and biotechnology industries.

For example, the biobank KPI could specify the number of industry projects supported per year, or the number of samples provided to industry per year.

Another Reason

Another reason why biobanks in the public sector should provide biosamples to industry, is that it enables them to generate funding and help ensure their own financial sustainability. This second reason will be addressed in a future article.

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Disclaimer: the author of this article works independently and any views expressed are his own.

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