

## CORRESPONDENCE

# Finding ways to improve the use of biobanks

### To the Editor:

A recent news story in *Nature Medicine* (19, 253, 2013) proposed a number of solutions to the problem of sample underuse in biospecimen repositories, but the article failed to address one important source of underuse: the lack of access to biobank resources by researchers working in the biomedical industry.

The creation of any biobank should start off with a clear purpose for the future use of the samples and the data that are collected and stored. The goals should not only be based on an understanding of the current and future needs of the medical research community but also incorporate a thorough comprehension of the scientific and regulatory requirements for pharmaceutical and diagnostic product development. Unfortunately, not every biobank has taken the latter sufficiently into account, which may result in sample collections with limited value—although this is not necessarily owing to a lack of biospecimen quality.

Billions of dollars have been invested around the world, often from public funds, to collect and store many millions of samples by hundreds of biobanks. It is time to have an open discussion with all parties concerned with respect to the benefits that are being created for the patients and healthy participants. The donors provided their samples on the basis of informed consent that promised their use to advance research and create benefits for health care. Although everyone agrees that fundamental and basic research in academia has tremendous value, ultimately it is the applied research by industry that brings new innovations to the patient. Yet, too many biobanks have policies and guidelines that seem to be constructed to exclude access to their sample collections by industry, or at least make access very cumbersome and time consuming.

For example, in some cases, access policies explicitly exclude providing access to biospecimens to investigators who are associated with for-profit research entities (such as pharma, biotech and diagnostic companies). Although biobanks often, and understandably, give preferential access to scientists within the institution with which the biobank is associated, many will consider access requests from other parties, including commercial entities, only when a collaborative study is involved in which

the institution will be directly involved. Some biobanks even demand rights to intellectual property related to the project from the industrial partner. In other cases, biobanks would open access to their sample collection only if they can perform the analyses on ‘their’ samples for the industrial partner themselves.

It is obvious that many biobanks are either insufficiently aware of or, for other unknown reasons, do not take into account the requirements and obligations that must be met by industrial players to develop products and obtain approval from the US Food and Drug Administration and other regulatory authorities. Biobankers must understand that in many cases the industrial partner who requests access to their biological samples cannot include the biobank as a real scientific collaborator in the study. Although in earlier stages of product development this may be due to the need for confidentiality in a competitive landscape, for later stages the design is defined by regulatory requirements.

To really improve the usage of the many valuable biological sample collections contained in many biobanks around the world, biobanks will need to become more open and more flexible. This is the only way to unlock the potential of the investments that have been and continue to be made in biobanks and to boost the translational research from bench to bedside that is urgently needed for patient and public benefit.

As with academia, the biomedical industry is experiencing major restructuring, with less funding for new projects. Closer collaboration between industry and biobanks can benefit both, helping to develop new products for the healthcare system and generating funding to support the building and maintenance of biorepositories and their research.

### COMPETING FINANCIAL INTERESTS

The author declares competing financial interests: details are available in the online version of the paper ([doi:10.1038/nm.3257](https://doi.org/10.1038/nm.3257)).

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