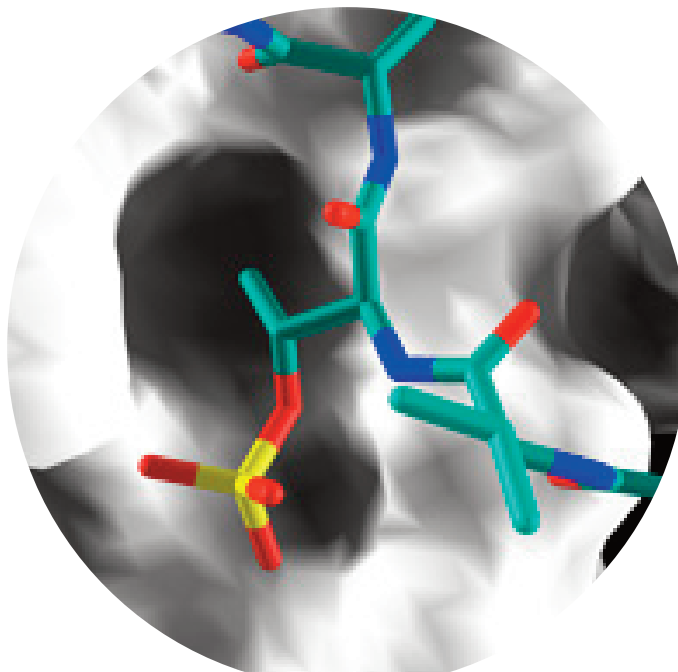


## Case Study / MRC National Institute for Medical Research (NIMR)

“... the recent advances in technology, such as the introduction of Next Generation Sequencers and Imaging systems which generate huge amounts of data, has dramatically changed requirements for large amounts of storage. Likewise, new developments in imaging systems have led to an explosion in the need to handle and store very large files.”

Clive Lunny  
Head of Computing and  
Telecommunications, NIMR



***NIMR implements archive service to comply with regulations and free up expensive primary storage.***

### Background

NIMR is a research institute dedicated to studying important questions about the life processes that are relevant to all aspects of health. The Institute is the largest supported by the Medical Research Council (MRC), a national organisation funded by the British taxpayer that promotes research into all areas of medical and related science to improve the health of the British public.

### Problem

The amount of data that needs to be stored by NIMR is increasing rapidly; this is due in part to MRC scientists increasingly using new data-hungry technologies. As Clive Lunny, Head of Computing and Telecommunications at NIMR, explains, “Some of the areas of research at NIMR, such as Immunology, wouldn’t traditionally have requirements for large amounts of storage; however the recent advances in technology, such as the introduction of Next Generation Sequencers and imaging systems which generate huge amounts of data, has dramatically changed this. Likewise, new developments in imaging systems have led to an explosion in the need to handle and store very large files”.

MRC regulations require that data generated through MRC funded research is managed and curated effectively throughout its entire life-cycle, including the archive phase. The amount of time that research data need to be retained for is dependant on the area of science:

- For ‘basic research’ this is a minimum of 10 years after the study has been completed.
- For clinical research undertaken in MRC research units, the MRC regulations expect research data to be retained for 20 years after the study has been completed.

## Case Study / MRC National Institute for Medical Research (NIMR)

### Problem - *continued*

To date NIMR have been archiving such data using their Isilon primary storage; this is expensive, especially when the costs of on-going support and maintenance are considered.

One impetus for NIMR urgently to establish data archiving processes and systems is the planned move from their laboratories in Mill Hill, to the Francis Crick Institute in mid 2015. The NIMR team had little time to implement an archiving service prior to this move and wanted to minimise any investment in infrastructure and hardware.

### Solution

To address their archiving needs, NIMR looked at on-site tape solutions and cloud/managed service solutions, as well as options to increase their primary and disaster recovery related storage. After careful consideration of all the factors, Arkivum's data archiving service was selected as the best fit. There were many reasons cited for the selection, including that the managed service retains and manages three copies of archived data, in geographically separate UK locations, including one in offline Escrow.

NIMR undertook a 'proof of concept' test as part of the selection process, to ensure that the service would integrate with the complex systems already in place at NIMR. Clive Lunny further commented, "Arkivum's service ticked all the boxes. The installation and testing process of the service was simple." He also added "Arkivum's services team provided a consistently excellent service throughout this process".

Jim Cook, CEO at Arkivum, commented "NIMR are not on their own in facing challenges from the deluge of data that they need to retain and the amount of time they need to retain it for. Arkivum's electronic data archiving service forms a natural tier to the data storage and retention policy and processes that MRC research units need to have in place."

### Benefits

Using Arkivum's data archiving service means that NIMR will be making significant savings just from the archiving of an initial 10% of data that is currently on primary storage. Since NIMR have begun to identify further data that can be archived, it is expected that the cost benefits will increase over the coming months and years.

Arkivum's end-to-end management of archive data aids NIMR's compliance with regulations, as well as removing the support and maintenance costs associated with primary storage.

The benefit from the user's perspective" said Clive Lunny, "is that the NIMR scientists can easily access their research data even when it is in the archive".

### About Arkivum

Arkivum is an established provider of data archiving solutions, including the industry leading A-Stor data archiving service, which provides a fully-managed and secure service for long-term data retention with online access and a unique 100% guarantee of data integrity that's part of our Service Level Agreement and backed by worldwide insurance.

Our links with University of Southampton IT Innovation Centre means that we have direct access to state-of-the-art research in digital preservation that helps us meet our commitments to our customers. This is complemented by a team at Arkivum that brings strong software skills together with in-depth experience in data centre operations and robust and reliable storage system implementation.

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