

INTRODUCTION

The William Harvey Research Institute, part of Queen Mary, University of London, is conducting pioneering work at its Centre for Experimental Medicine and Rheumatology (EMR). EMR is the leading centre globally for biopsy-driven, stratified-medicine randomised clinical trials for rheumatoid arthritis. An existing Bright Instruments client, the EMR needed to upgrade its existing cryostat to boost operational efficiency. We were delighted to demonstrate the benefits that our latest OTF7000 Cryostat had to offer.

THE CLIENT

EMR focuses on developing innovative therapeutic and diagnostic approaches to inflammatory and degenerative arthropathies, including rheumatoid arthritis and osteoarthritis. The emphasis is on translational research, working alongside the nearby Barts Arthritis Centre.

Scientists at EMR perform histological analysis on tissue samples from both human and animal sources.



This type of work requires precise and efficient tissue storage and sectioning to maximise research opportunities and reduce waste with valuable tissue samples.

THE CATALYST

When looking to upgrade EMR's cryostat, the Institute's Laboratory Manager Erika Cadoni turned to us. Whilst EMR's existing Bright Instruments cryostat remained reliable, it had been in use for many years, prompting Erika to seek a more advanced model to boost efficiency and meet growing demand from a wider cohort of scientists.

BUYING CRITERIA

As part of her vendor research, Erika encouraged her colleagues to try a different cryostat from a leading manufacturer located elsewhere in the Institute. However, Erika's colleagues found that the existing Bright Instruments machine was easier to use and sectioned tissue more effectively.

THE SOLUTION

After receiving three supplier quotations, the Institute decided to purchase our OTF7000 Cryostat. The decision was influenced by positive user feedback, the superior features of the newer model, and EMR's positive experience with its existing cryostat.

There were several stand-out features that influenced the selection decision:

- **Memory feature:** enabled users to switch tissue samples and resume sectioning where they left off. Erika's team loved this feature which significantly enhanced efficiency.
- **High-quality sample sectioning:** EMR's scientists liked the exceptionally high-quality sections.
- **User-friendly displays:** reduced time spent learning the product.
- **UV sterilisation:** minimised the risk of cross-contamination and made clean-up faster.



OUTCOME

Erika praised our customer service team for its diligence and attention to detail during the buying process. This included providing a demonstration machine while waiting for delivery of EMR's new machine to meet the Institute's year-end budget requirements.

The installation of EMR's cryostat was smooth, with comprehensive training provided by our friendly technician, Martin.

Since installing the OTF7000 Cryostat, the Institute has seen several positive outcomes:

- **Reduced tissue wastage:** the OTF7000's ensures perfectly flat, high-quality sections. This has been key for the tiny pieces of biopsy tissue in their research.
- **Operational efficiency:** particularly with the Institute's histology work identifying inflammation markers, and in helping to service more research projects.
- **Expanded research capabilities:** due to the OTF7000's flexibility.
- **Quicker adaptation:** scientists have rapidly adapted to the new model.
- **Enhanced tissue integrity:** Erika remarked on the excellent freezing capability which helped maintain tissue integrity and sectioning accuracy. The Institute regularly uses the automatic defrosting function on the cryostat to avoid ice build-up.

"They were super-nice and were extremely helpful in working with us to ensure we met our purchasing and year-end budget requirements."

Erika Cadoni
Laboratory Manager
William Harvey Institute
Queen Mary, University of London

TO CONCLUDE

Our OTF7000 Cryostat has significantly enhanced the Institute's clinical analysis capabilities. By delivering superior tissue sectioning, reducing sample waste, and increasing operational efficiency, the OTF7000 has been enthusiastically received by the scientists at the Institute who are benefiting from its exceptional performance.



Erika Cadoni, operating the Bright Instruments OTF7000