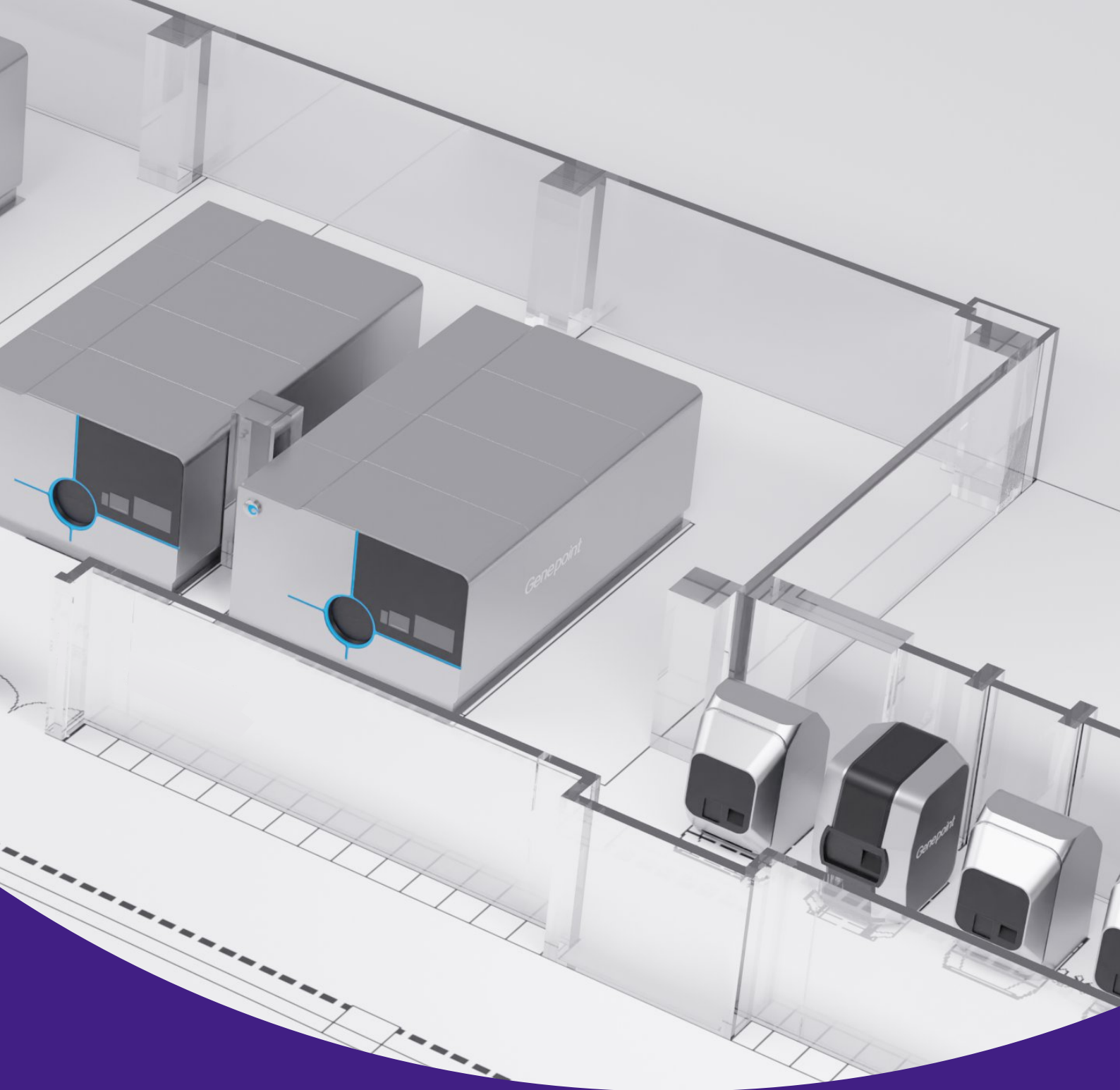




Case Study

PUMCH Enhances Sample Storage
Efficiency with Genepoint Automated
Sample Storage Solutions

Reliable, Secure, Affordable

 Genepoint

About PUMCH

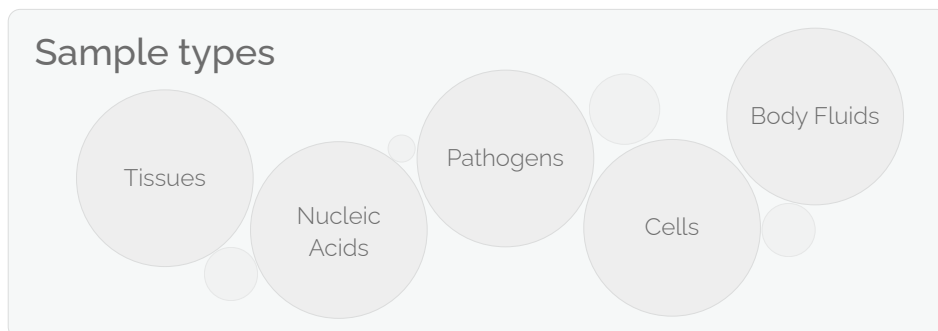
Peking Union Medical College Hospital (PUMCH), a leading medical institution in China, embarked on a transformative journey in 2012 to establish a comprehensive clinical biobank. The biobank is supported by the 12th Five-Year Plan for the National Development of Science and Technology.

As a hospital-level biobank, it was constructed according to national and international standards, including **ISBER Best Practices** and **ISO 20387:2018** - the General Requirements for Biobank Quality and Competence.

Areas of studies



Sample types



1.5 m⁺

Samples stored

300+

Major national scientific research projects

10+

National standards

Introduction

With over **4,800 samples processed weekly** and a total of 1.5 million critical specimens, PUMCH faced mounting challenges in manual sample management :

Moreover, frequent freezer door openings not only lead to significant frost accumulation but also induce temperature fluctuations that compromise sample integrity.

Consequently, PUMCH requires an intelligent automated solution to simultaneously optimize operational efficiency and ensure uncompromised sample integrity.

- time consuming
- labor intensive
- data inaccuracy
- risk of sample missing



Genepoint Solutions

In 2019, PUMCH implemented Genepoint's products and solution to store and manage their samples.

Kiosk

-80°C Automated Biobanking System

- Capacity: 1 million +
- Small footprint: ~30m²
- Fully automated process under -80°C
- Can be customized based on the requirement



Hatch-Lite, Hatch, Pelican

-180°C Automated Cryogenic Repository System

- -150°C tube picking
- Low LN₂ consumption
- Quick store and retrieval
- Dock with Pelican AGV to achieve automatic biobank



Crest

-180°C Intelligent Storage System

- Upgraded manual cryogenic tank
- Automatic lid opening
- Automatic shelf rotation
- Automatic shelf lifting



All Genepoint storage systems feature seamless LIMS integration, enabling automated order management with enhanced precision and operational control.



Traceable data for the entire process



Hierarchical permission management



Accessible only to authorized personnel



Scheduled sampling



"Manual retrieval took up to 15 minutes per sample —now through scheduled retrieval, targeted samples can be retrieved immediately."

-- Huang LI , Product Director of Genepoint

Why choosing Genepoint?



Reliable Products and Service

Since 2015, Genepoint has dedicated 30% of our workforce to R&D, ensuring continuous innovation in sample security.

Our products undergo 2,000+ hours of testing before deployment.



Market Validation and Recognition

With 10 years+ of specialized focus in cryogenic automation, Genepoint has earned unparalleled market recognition as an industry leader.

Our systems currently manage 8M+ samples for 200+ projects, including top global research hospitals, universities, biotech and public health institutes.



Sample Safety

Patented motor designs ensure sustainability in cryogenic environments.

Full automation maintains under ultra low temperature during all sample handling.

UPS and LN₂ backup ensure the sample safety under power failure.

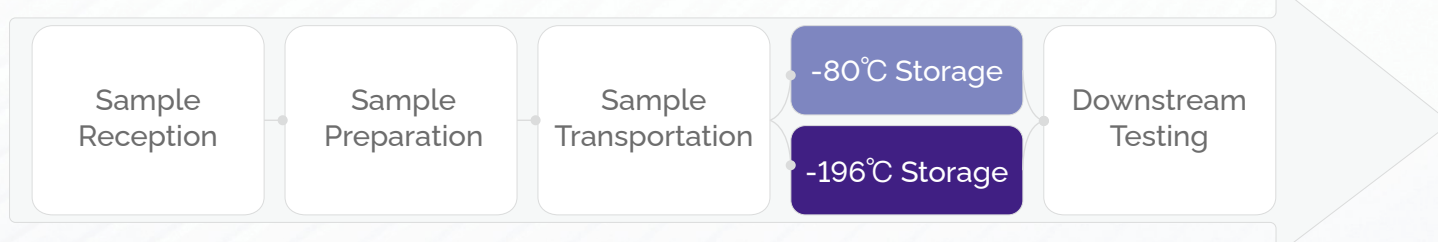


Compliance Without Compromise

CE and DOC
ISO 9001
ISO 14001
ISO 13485
GB/T 36132
21 CFR Part 11



To Build Future Biobanks



PUMCH's automated biobank now supports groundbreaking translational research, enabling faster discoveries, more accurate data and better patient outcomes.

