The Cure for Your Biobanking Informatics Challenges

Todd Jones, Shawn Toffolo, S. Doug Holbrook, Mark Murawski, Kimberly Weldon, Tim Mitchell, Scott Savett, Don Crossett
Thermo Fisher Scientific
Philadelphia, PA

Introduction
Modern biobanks are facing numerous challenges as the need for collecting biological samples and providing access to research institutions is increasing every day. And successful biobanks must strike the precise biological material for clinical and discovery research. It is becoming more critical that the biobanks of tomorrow and securing this information not only become more efficient and cost-effective, but also faster collaboration and decision making.

Information Development and Implementation Services Group at Thermo Fisher Scientific have been working diligently over many years to provide biobanking and life sciences solutions that meet a wide variety of customer needs. Working with some of the world’s most renowned biobanks, such as UKBiobank and HUNT Biobank, we have developed a wide array of expertise in our Biobanking module which allows our customers to get up to speed quickly, with the flexibility to meet individual requirements and business needs.

Case Study – HUNT Biobank
The Nord-Trøndelag Health Study (HUNT) Biobank in Norway is one of the largest population-based health studies ever performed. Initiated to support epidemiological, clinical, and preventive medical research, the HUNT Biobank provides insight into disease status and progression, particularly in relation to quality-of-life measures such as environment, education, and occupation.

Thermo Fisher Scientific provides a fully integrated LIMS solution that supports biobanking operations. The system was also required to provide clinical follow-up, data handling, and quality control following data collection, and then distribute coded data files to various research groups (Figure 3).

Benefits:
- Ease of implementation with out-of-the-box functionality
- Supportable and upgradable
- Unifying Analytical Data
- Instrument Integration and Automation
- Inventory Management
- Request and Shipment Management
- Chain of Custody
- Barcoding

Conclusion
In addition to Nautilus LIMS, Thermo Fisher Scientific’s turnkey biobanking offering includes even greater capabilities, tools, and experience for building, operating, and managing biobanks. The comprehensive portfolio also comprises centrifuges, concentrators, freezers, robotics, 2D barcode technology, microplate readers and mass spectrometers required by biobanking organizations for turn-key operations. Fisher Biobank is currently managing more than 170,000,000 samples worldwide and was recently selected as the National Children’s Study (NCS) biological and environmental sample repository partner.

*Microsoft Corp. selected Thermo Fisher Scientific and HUNT Research Center and Biobank as winners of the 2009 Microsoft Pharmaceutical and Life Sciences Innovation Awards, honoring companies that have made the innovative use of Microsoft-based solutions for breakthroughs in business processes and practices throughout the pharmaceutical and life sciences industry.

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