

## Verspeeten Family Cancer Centre's Biospecimen Lab Year Three Progress Report May 2024

Advancements in cancer research are driven by the collaboration between healthcare providers, scientists, and patients. This collective effort in disease diagnosis, treatment, and monitoring propels research forwards. To support this crucial research, the Biospecimen Lab (BSL) was established in March 2021 within the Verspeeten Family Cancer Centre. The BSL provides essential resources and expertise, offering dedicated, high-quality processing and consultation on biospecimen study protocols to facilitate high-impact clinical cancer studies.

Located on the 4th floor of Verspeeten Family Cancer Centre within the Cancer Research Laboratories Program, the BSL is generously supported by donor funding as part of the Gerald C. Baines Centre for Translational Cancer Research in partnership with the London Health Sciences Foundation. The BSL is available to any oncology investigator in London interested in conducting clinical research involving biospecimens. The BSL is operated under the leadership of Biospecimen Research Coordinator Dr. Emma Churchman, with scientific and clinical oversight provided by Dr. Alison Allan and Dr. Stephen Welch. We have highlighted several key highlights and updates below:

## **Key Highlights**

**Research Contributions:** Supported 80 research studies across 10 disease sites lead by investigators in the Verspeeten Family Cancer Centre, backed by academic and industry funding.

**Sample Processing:** Processed over 2000 biospecimens within the last year, including blood, saliva, urine, surgical drain fluid, and tumor tissues.

**Quality Assurance Program:** Developed and implemented a quality assurance program in the lab following the guidelines of the International Society for Biological and Environmental Repositories (ISBER)

**Conferences:** Presented the BSL model and accomplishments as a poster presentation at the 2023 Canadian Cancer Research Alliance Conference.

## Infrastructure and Capacity Building

**Facility Upgrades:** Reached frozen biospecimen capacity over the last year and expanded such by purchasing a new -80° C freezer that includes a temperature monitoring system to improve quality management.

Equipment Certification: Certified freezer and centrifuge to meet ISO9001:2015 standards

**Electronic Laboratory Inventory Management System:** Integrated an electronic laboratory inventory management system to elevate biospecimen management, including a new barcoding labelling system.

**Staff Development:** Emma Churchman successfully defended her PhD and continues to develop her skills and expertise in biospecimen management, physiology, and genomics.

## **Future Plans and Goals**

**Strategic Goals:** Expanding research collaborations, enhancing our technological capabilities, and increasing our support for clinical and translational cancer research.

**Expansion Plans:** Plans are underway to further expand our lab team and storage capacity, ensuring we can continue to support an increasing number of research projects.

We deeply appreciate your continued support and collaboration, which have been instrumental in our achievements. We look forward to working together to advance cancer research and improve patient outcomes.

For more information, please feel free to contact Emma Churchman at <a href="mailto:emma.churchman@lhsc.on.ca">emma.churchman@lhsc.on.ca</a> or 519-685-8600 x53283.

As always, we value your feedback. Please let us know how our services are currently working for you <a href="here">here</a>, and any areas where you see room for improvement or expansion.

Sincerely, The Biospecimen Lab Team