

## 11. Laboratory Equipment

Laboratory equipment used to fit out a biological specimen preparation (BSP) laboratory requires mostly stainless-steel equipment, designed to be cleaned and sanitised, and purpose built for a commercial environment. Appliances designed for use in domestic environment are not suitable for use in a workplace or laboratory. The following equipment was supplied with the recent fit-out of the Queensland Museum BSP laboratory.

Note: The following equipment costs represent purchases made in 2023 and 2024 and should not be taken as a quoted price. Costs do not include packing or delivery.

Equipment description	Supplier	Net cost	Total cost
Custom-size soak tank (890 x 1100 x 1020 mm)	Soak Tank Australia	\$12,000.00	\$13,200.00
Large veterinary table (height adjustable)	Shotton Parmed	\$14,320.00	\$15,752.00
Custom stainless-steel drying racks x 4	T&H Sheetmetal	\$10,572.00	\$11,629.20
Custom stainless-steel cupboards x 2	T&H Sheetmetal	\$8,160.00	\$8,976.00
Custom stainless-steel benches x 2	T&H Sheetmetal	\$9,570.00	\$10,527.00
Stainless-steel instrument trolley M1541 (6 drawers & 2 shelves with rails)	MHA Products	\$2,755.00	\$3,030.50
Stainless-steel instrument trolley M1532 (2 drawers)	MHA Products	\$855.00	\$940.50
Stainless-steel instrument trolley M1541 (6 drawers)	MHA Products	\$2,755.00	\$3,030.50
1910 series cage trolley with mesh shelves	MHA Products	\$1,170.00	\$1,287.00
Q series procedure cart	Alpha Lifecare	\$3,171.90	\$3,171.90
Manual scissor-lift trolley (150 kg)	Adaptalift	\$372.73	\$410.00
Steelco sliding steel door cabinets	Zenith Corporation Aust.	\$2,716.89	\$2,988.57
Flammable liquid cabinet 250 L (A50250)	Seton Australia	\$2,252.00	\$2,477.20
Corrosive substance cabinet 250 L (A50238)	Seton Australia	\$2,705.00	\$2,976.16
Commercial stainless-steel fridge and freezer	Advanced Air Con.	\$7,036.22	\$7,739.84
SZ61 microscope & LG-LSLED LED light	Evident Australia	\$4,292.07	\$4,721.28
LED bench/desk magnifying lamp ML201LE	Redbank Group	\$654.00	\$719.40
DMA 35 EX portable density meter	Anton Paar	\$6,040.00	\$6,644.00
Stainless platform scales (150 kg) S3228	MHA Products	\$1,813.00	\$1,994.30
Stainless waterproof scales (30 kg) S3224	MHA Products	\$492.00	\$541.20
Ergonomic drafting chair x 4	Empire Office Furniture	\$1,821.20	\$2,003.32
One-step safety step (Gorilla) A40287	Seton Australia	\$104.05	\$114.46
Two-step safety step (Gorilla) A48295	Seton Australia	\$170.00	\$187.00
Sanitising footbath (800 x 1000 mm)	Seton Australia	\$277.52	\$305.27
Large butcher knives and knife sharpener	CQ Butchers & Catering Supplies	\$830.00	\$913.00
IT411FO-BLS foot-operated double linen skip	Newfound Distributors	\$896.00	\$985.60
Green wheelie bin 660 L	Materials Handling	\$1,205.00	\$1,325.50
MHP06 Backsaver midi (bin spring lift) 400 x 700 mm	Materials Handling	\$890.00	\$978.00
Clinical waste bin with foot pedal	Alpha Medical Solutions	\$168.18	\$185.00
SETESTKIT Pratt shower and eyewash test kit	Rowe Scientific	\$308.15	\$338.97

When purchasing equipment, an assessment that identifies the needs of the work and workers is key to managing and minimising the risk of injury in the laboratory. For example:

- The large veterinary table allows users to easily adjust the height of the working surface with a powered, rechargeable lifting mechanism. The table is mobile, with large wheels that can be locked for stability and unlocked to allow the table to be moved to the soak tank to transfer with minimal manual handling risks.
- The soak tank contains a hydraulic lifting and lowering mechanism, which allows workers to place the prepared specimen directly onto a raised surface which slowly lowers and raises into and out of the liquid with minimal risk of splashing or manual handling issues.
- The large laundry bin (green wheelie bin 660 L) was fitted with a spring lift device (MHP06 Backsaver midi) that lowers as laundry bags are put into the bin and then lifts when as the laundry bags are recovered and the weight reduces. This eliminates the problem of workers needing to reach into the bottom of the bin to recover laundry bags, reducing the risk of injury.
- Clinical waste bins, the general waste bin and laundry bins are all supplied with foot pedals or sensory lid lifting devices to avoid the need to lift the lid and reduce handling and contamination risks.

The following table identifies the consumables and personal protective equipment supplied with the fit-out of the refurbished BSP laboratory at Queensland Museum.

<b>Consumables and PPE</b>	<b>Supplier</b>	<b>Net cost</b>	<b>Total cost</b>
Avagard™ Antiseptic Hand and Body Wash 1.5 L x 5	Joya Medical Australia	\$195.50	\$215.05
Virkon® disinfectant 10 kg	Oveds Horse & Pet Store	\$457.86	\$503.65
A21694 Sharps container 2 L	Seton Australia	\$93.9	\$103.29
3M P2 respirator masks A41040 – box of 10 x 2	Seton Australia	\$155.22	\$170.74
A41254 Nullarbor safety glasses with clear anti-fog lens x 12	Seton Australia	\$235.80	\$259.38
Clinical waste bags 60 L – 50 pack x 2	Alpha Medical Solutions	\$48.18	\$53.00
Heavy-duty aprons – blue PVC	CQ Butchers & Catering Supplies	\$413.64	\$455.00
Face shields x 200	Joya Medical Australia	\$260.00	\$286.00
Medline® disposable blue polyethylene isolation gowns x 15	Joya Medical Australia	\$56.00	\$61.60
Shoe covers (CPE) x 50	Joya Medical Australia	\$6.00	\$6.60