Gerontechnology Lab Equipment

Age Simulation Suit: A wearable suit that simulates the various common bodily ailments that come with old age.

Touchscreen TV: Showcase an in-housed developed application that highlights renowned actors, sportsman and singers in a Malaysian context. Aims to stimulate older adult's memory.

Prototype Devices: A display of various prototype devices either being currently developed or are seeking investment.

Smartphone Home System: A gerontologically designed home system to control electronic devices, interfaced with an everyday smartphone and set-top boxes.

Ergonomic Forearm Supportive Walking Stick: Specially designed to provide additional support to the forearm.

Stand-up Recliner Chair: A sofa chair with motors that allow it to unfold and tilt to an upright position to assist users to their feet and when sitting back down again.

Four-way Ceiling Rail: The Lab can be effectively partitioned into four separate areas/stations with the use of four-way, ceiling-railed curtains.

Workstation: A dual monitor desktop setup for use by researchers.

Smartwatch: A computerized wristwatch with built-in heart rate sensor. It allows users to track their fitness and activity level with coaching advice to maintain a healthy lifestyle.
Digital Weight Scale and Height Rod: An electronic weight monitor with height rod that allows a quick BMI check.

Blood Pressure Monitor: Basic blood pressure monitor for blood pressure and heartbeat check at Health Station.

Health Tracking Band: Health tracking band that is able to track steps, distance walked, sleeping patterns, water consumed and nutritional intake.

Health Monitor: All in one health monitor that is used to measure body weight, body temperature, blood glucose, blood oxygen saturation, lung functions (spirometry) and heart functions (ECG).

Ophthalmoscope: For eye examination. It is used to detect and evaluate symptoms of various retinal diseases.

Soft Service Robot (Ubbo Open Source Telepresence Robot): A human-size tele-operated mobile robot platform which is integrated with soft robotic gripper to assist users such as care givers and older people.

Turtlebot 3 Research Robot Platform: A modular autonomous mobile robotic platform. It can also be integrated with soft gripper or controlled by brain-machine interface.

Brain machine interface (EMOTIV EPOC+ 14 Channel Mobile EEG): A brain machine interface for controlling robot by brain, already integrated with a casual robotic arm made of hard materials and will be integrated with soft robotic arm.

Laevo Exoskeleton LV2.56-0220: The Laevo is a wearable chest and back support that adapts to every posture. The Laevo transfers force from the rest to the thighs.
EksoWorks General Configuration V-1.0-0295: This is an upper body exoskeleton that elevates and supports a worker’s arms to assist them with tasks ranging from chest height to overhead.