

Equipment

Puritan Bennet Model 840 Ventilator (PB-840) – Multiple copies of this ventilator are owned by the University of California Davis (UCD). This ventilator is ubiquitously situated in the emergency department and all intensive care units at the medical hospital. Most importantly, this ventilator features an RS-232 data port that allows export of ventilator waveform data to an attached device.

Apple iMac – The desktop computer has 2 CPU cores, 8GB memory and 1TB storage. This computer is used as our central storage location for all patient data collected from PB-840.

Raspberry Pi 3 Model B – This micro-computer has 2 CPU cores, 4 GB memory, and 30GB flash storage. The Raspberry Pi operates as a data conduit from the PB-840 ventilator to our central storage iMac computer.

Laboratory Server – A Hewlett-Packard server with 2.4 GHz quad core CPUs, 192 GB of high speed RAM, and 16 TB of encrypted hard drive storage for research and development work, located at a UCD Medical Center collocation center that is used for data analytics.