**Salient Characteristics**

Brand Name or Equal

Equal must meet these salient characteristics. Explanation of how equal meets each salient characteristic and must be included with quote.

Contractor shall provide supplies and equipment necessary to provide two (2) Precise Calibration Pipette Systems, Part #PCS510 brand name is Artel and two (2) Aerospray Hematology STAT Series 2 Slide and Stainer / Cytocentrifuge (model #7122), Part #7122, brand name is Artel for the W.C. Bill Young Healthcare System in Bay Pines, FL, as defined by these salient characteristics.

EQUIPMENT REQUIREMENT: Below are the characteristics that shall be provided:

**1. Pipette Calibration System (PCS) – brand name or equal:**

* Must Calibrates single channel pipettes from 0.1 μL to 5,000 μL in less than three minutes
* Must Allow scheduling of operator competency assessments
* Must have an Intuitive dashboard to provide immediate overview of due calibrations and operator assessments
* Must Offer digital review and approval workflow
* Must Provide comprehensive reporting, including audit trail and printing of calibration labels
* Must be a Compact and portable design for use in any laboratory
* Must Perform to the same tight specifications under various laboratory conditions; no special environmental controls required
* Must Generate results traceable to national (NIST) and international standards (SI units)
* Must Comply with regulatory requirements (CAP, CLIA, ISO, CLSI)
* Must Facilitate compliance to 21 CFR Part 11
* Must Calibrate pipettes in the lab in which they are used
* Must Standardize pipetting technique with scheduled and documented operator competency assessments
* Must Conduct interim performance verifications to supplement full calibration programs
* Must Perform “quick checks” when pipetting performance or operator technique is in question
* Must be able to scan (barcode readable) calibration solutions
* Must be able to scan pipette IDs

**Specifications**

* Volume Range: 0.1 µL to 5000 µL
* Inaccuracy: 0.6%
* Imprecision: 0.3% CV
* Wavelengths: 520 nm and 730 nm
* Operational Ambient Specifications Temperature: 15 °C to 30 °C
* Relative Humidity: 10% to 90%, non-condensing
* Space Requirements: 22.4 cm x 33.0 cm x 14.7 cm (W x L x H)
* Weight: 5.7 kg (12.5 lbs.)
* Electrical Power Requirements: Voltage: 90 – 260 VAC
* Frequency: 50 – 60 Hz
* Current: 2 A maximum
* Warranty: 1 year
* Operating System: Windows® 10 or newer, x64 Processor: 1.4 GHz, 4 GB Memory, and 40 GB of hard drive storage space

**2. Aerospray Hematology Stat Series 2 – brand name or equal:**

* Must have Slide Carousel Capacity up to 12 slides
* Must have Cytocentrifuge Rotor Speed 100-2000 rpm (± 5%), user programmable
* Must have Dimensions (W x H x D): 57 cm x 25 cm x 54 cm (22” x 10” x 21”)
* Must have Clearance Height (lid open) 58 cm (23”)
* Must have Weight less than 15.2 kg (33.5 lb)
* Must have Electrical Requirements: 100 to 240 VAC (±10%), @ 50-60 Hz, 200 watts maximum
* Must have Drain Connection Outlet on rear panel
* Must have Safety Lid interlock: Lid must be closed for operation, and is locked down during carousel rotation
* Must have Reagent Level Detection on all reagent lines
* Must have Waste Level Detection in waste bottle
* Must be user programmability: must be easily programmed, must have a choice of 10 intensity settings including 3 settings for bone marrow.
* Must have the staining cycle in steps:
	+ Must have an aerospray technology: reagents applied from atomizing spray nozzles
	+ Must have Smears automatically fixed with methanol or fixative at the beginning of the staining cycle (alternatively, slides can be hand-fixed using methanol or fixative).
	+ Must have a drying sequence, eosin stain is applied to stain acidophilic cell components, followed by a brief period for stain penetration. Thiazin dye is then applied to stain the basophilic cell components, followed by another brief stain penetration period.
	+ Must have A buffered rinse to clean the slides of excess stain and is then removed by centrifugation.
	+ Slides must be dry and ready for the microscope at the end of the cycle.
* Must have an Stainer using a two-part aqueous Romanowsky stain.
* Must have RAPID STAINING KINETICS: Blood smears are fixed, stained, and dried in about 4 minutes.
* Must have IMPROVED STAIN STABILITY: a long shelf life and staining results are highly reproducible and consistent.
* Must have CLEAR FIELDS: virtually no stain precipitation or debris, slides are exceptionally clean.
* Must have BASOFIX: formula yields stain coloration more reminiscent of alcohol-based stains. In addition to fixing basophil granules, primary granules are also strengthened.
* Must have traceability: stores critical information including; reagent data, specimen ID, user ID, and cycle operation history
* Must have barcode scanner and manual keyboard entry
* Must have a cycle time as short as 5 minutes / process more than 115 slides per hour