Corrigendum for Tender No. RCB/ATN/08 /15-16/ DAILAB (advanced high-resolution, high-speed and high-sensitivity spectral laser scanning confocal microscope).

The following specifications have been modified to read as below:

1) Point 1b: The following high-resolution (Plan Apochromat, unless otherwise mentioned) objectives corrected for both UV & visible lines should be quoted: 10x air/ 0.4 NA, 20X air/ NA 0.7 or above, 40x oil / 1.3 NA (Plan Apochromat preferred, Plan fluor only if Plan Apochromat is not available with the company), 60x/ 63x / 1.4 NA oil along with DIC accessories for all objectives. In addition, the following objectives with DIC accessories should be quoted as optional items: 40X air/ NA 0.8 or above, 100x oil/ 1.4 NA, 63x water immersion objective with correction collar/ NA 1.2, 40X water immersion objective with correction collar/ NA 1.1.

2) Point 2: The microscope should have hardware based (LED 750 – 850 nm) control of focus drift during live cell imaging.

3) Point 4: The system should be able to carry out five colour simultaneous spectral detection. The point -scanning confocal unit should be completely motorised with built-in/ integrated internal high sensitivity spectral detectors (with GaAsP or similar technology). GaAsP-based imaging for at-least 2 channels in addition to the standard 2 channel PMT. Detection with independent analog gain controls for all channels. All the fluorescence detectors of the scan head should be in spectral mode with freely selectable emission bandwidth detection capability. The system should be capable of recording emission spectra with spectral resolution of $\leq$ 5nm.

4) Point 7: Scanner 1: Scan speed of $\geq$ 5 fps @ 512x512 pixels in spectral mode for at least 5 channels simultaneously. ROI scan and bleach with various ROI shapes should be possible for FRAP experiments. The Field of View (scan field diagonal) should be 20mm or more.

5) Point 8: Scanner 2: High Speed Spectral Scanner 2: Should have video rate scanning of $\geq$24fps or above at standard format of 512 x 512 full frame. It should be capable of simultaneous imaging of multiple fluorophores with online spectral un-mixing capability.

6) Point 10: The following lasers should be provided: Laser Unit including blue diode laser 405/ 408nm (50mW), multiline Argon (35mW or more) for 458/488/514nm, 561 nm laser (20mW), 633nm laser (5-10mW), or higher wattage lasers should be provided. A 594nm laser should be quoted as an optional item. All the laser lines should be controlled through 6-8 channel AOTF for fast laser switching and attenuation. Separate laser ports for UV/405nm, Vis, IR and additional ports for future upgrades should be provided. All lasers should be switched on/ off through a single switch and should be provided in a closed unit.

7) Point 13: The system should be capable of providing improved resolution of at least 1.5x laterally and 1.7x-2x axially for two or more fluorescence channels simultaneously for high resolution imaging of smaller structures like cell organelles, nano particles and live imaging of the same. It should be done either by automatically changing/enhancing the system parameters with high sensitive/QE detectors or alternate technology. The improved resolution images should retain the image metadata and image acquisition parameters and should be fully analyzable in the offline software asked for.

8) Point 16: Confocal system control software capable of controlling all motorized functions of the microscope, scan head, lasers, image acquisition & processing. Image acquisition for 3D, 4D, in-line spectral imaging and unmixing and co-localization. Live cell imaging control for multi-time series, FRAP, FRET (Acceptor photo bleaching), FRET (Sensitized emission), photo activation and conversion. Auto-fluorescence separation by online emission fingerprinting. Advanced multidimensional software for online 3D visualization and reconstruction, with movie co-localization with histogram analysis, intensity profiles for quantification etc., with multi-export formats for data output. The system should be capable of high dynamic range imaging using the high sensitivity detectors.

9) Point 18: Each offline software/ dongle should have the complete offline version of the online software including colocalization, FRET and FRAP analyses, line profiling etc. The software should be able to perform 2D automated image analysis, measurements and object tracking, 3D reconstruction, editing and movie generation. 3D volumetric analysis and measurement software should be quoted as an optional module.

10) Point 21: The manufacturer/ supplier should agree for one free replacement of all lasers in the system when requested by the institution within the first six years after installation.

All other specifications and the terms and conditions of the tender remain unchanged.