## Corrigendum

| SI<br>No. | Section                                               | Present                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Amended                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
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| 1.        | Section 1<br>Table Serial No.<br>6                    | 5 <sup>th</sup> January 2024, 5 PM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 19 <sup>th</sup> January 2024, 5 PM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| 2.        | Section 3-A<br>Submission of<br>Tender<br>Point 2     | <ul> <li>b) Commercial Bid (Part-B) –<br/>Indicating item wise price for the<br/>items mentioned in the technical<br/>bid, as per the format of quotation<br/>provided in tender, and other<br/>commercial terms and conditions.<br/>The commercial bid should be<br/>broken up to the maximum extent<br/>possible into separate items with<br/>a cost against each (in particular<br/>the optional items) to enable<br/>better comparison of price for<br/>various configurations across the<br/>bidders. As an option, please<br/>provide itemized cost for any<br/>suggested accessories/add-ons<br/>that may enhance the usability,<br/>capability, accuracy or reliability of<br/>the tool. Vendors are encouraged<br/>to quote for as many add-ons as<br/>their tool portfolio permits.</li> </ul> | <ul> <li>b) Commercial Bid (Part-B) –<br/>Indicating item wise price for the<br/>items mentioned in the technical<br/>bid, as per the format of quotation<br/>provided in tender, and other<br/>commercial terms and conditions.<br/>The commercial bid should be<br/>broken up to the maximum extent<br/>possible into separate items with<br/>a cost against each (in particular<br/>the optional items) to enable<br/>better comparison of price for<br/>various configurations across the<br/>bidders.</li> <li>c) In addition, please provide<br/>itemized cost for any <u>suggested</u><br/><u>accessories/add-ons</u> that may<br/>enhance the usability, capability,<br/>accuracy or reliability of the tool.<br/>Vendors are encouraged to quote<br/>for as many add-ons as their tool<br/>portfolio permits.</li> </ul> |  |
| 3.        | Section 3-F<br>Warranty                               | The complete system is to be under<br>warranty period of 4 years including free<br>supply of consumables, spare parts and<br>data analysis software from the date of<br>functional installation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | The complete system is to be under<br>warranty period of 3 years including free<br>supply of consumables, spare parts and<br>data analysis software from the date of<br>functional installation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| 4.        | Section 4-A<br>Technical<br>Specifications<br>Point 2 | Trinocular observation tube with three<br>position prism for selection of light path for<br>full observation to 10X eyepiece, 50% - 50%<br>/ 80% - 20% Camera Port -<br>eyepiece, 100% Camera Port                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Trinocular observation tube with three position prism for selection of light path for full observation to 10X eyepiece, 50% - 50% and 80% - 20% / 100% - 0% and 0 – 100% camera port - eyepiece                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| 5.        | Section 4-A<br>Technical<br>Specifications<br>Point 4 | Universal Sample Holder for slides, 35-<br>60mm petridishes, 6/12/24 well plates,<br>labtek chambers etc                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Universal Sample Holder for slides, 35-<br>60mm petridishes etc                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| 6.        | Section 4-A<br>Technical<br>Specifications            | LED illumination with a minimum life time<br>of 10,000 Hrs / Halogen lamp with<br>12V/100W power for bright field / DIC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | LED illumination with a minimum life time<br>of 10,000 Hrs / Halogen lamp with<br>12V/100W power for bright field / DIC. In                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |

|     | Point 5                                                                                                                                                                                        |                                                                                                                                                     | case of Halogen, 10 extra lamps should be quoted to match the minimum lifetime.                                                                                                               |  |
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| 7.  | Section 4-A<br>Technical<br>Specifications<br>Point 7                                                                                                                                          | Band pass fluorescent filters for wavelenths<br>in range: DAPI, CFP, GFP, Cy3, Cy5; atleast 4<br>empty filter cube: these are part of the<br>turret | Band pass fluorescent filters for<br>wavelengths in range: DAPI, CFP (optional),<br>GFP, Cy3, Cy5; at least 1 empty filter cube:<br>these are part of the turret                              |  |
| 8.  | Section 4-A<br>Technical<br>Specifications<br>Point 11                                                                                                                                         | Z-drift compensator for long time stability<br>time lapse imaging (must use near IR light<br>to detect the correct focus position).                 | Not required                                                                                                                                                                                  |  |
| 9.  | Section 4-A<br>Technical<br>Specifications<br>Point 12                                                                                                                                         | C Mount Adapter for Left Side 100% Port for mounting Camera.                                                                                        | Not required                                                                                                                                                                                  |  |
| 10. | Section 4-APlan apochromatically corrected<br>(correction of chromatic and spherical<br>abberations from 400nm – 900nm) /<br>infinity corrected optics consisiting of<br>following objectives: |                                                                                                                                                     | Plan apochromatically corrected<br>(correction of chromatic and spherical<br>aberrations from 400nm – 900nm)<br>objectives / infinity corrected optics<br>consisting of following objectives: |  |
|     | 4X air objective NA ≥ 0.2                                                                                                                                                                      |                                                                                                                                                     | 4X/5X air objective NA ≥ 0.15                                                                                                                                                                 |  |
|     | 10X air objective NA ≥ 0.4                                                                                                                                                                     |                                                                                                                                                     | 10X air objective NA ≥ 0.4                                                                                                                                                                    |  |
|     | 20X air objective long working distance NA<br>≥ 0.7                                                                                                                                            |                                                                                                                                                     | 20X air objective long working distance NA<br>≥ 0.7                                                                                                                                           |  |
|     | 20X water dipping objective NA $\ge$ 0.5; WD $\ge$ 1 mm                                                                                                                                        |                                                                                                                                                     | 20X water dipping objective NA ≥ 0.5; WD ≥ 1 mm                                                                                                                                               |  |
|     | 40X air objective long working distance with NA ≥ 0.6                                                                                                                                          |                                                                                                                                                     | 40X air objective long working distance<br>with NA ≥ 0.6                                                                                                                                      |  |
|     | 40X water dipping objective NA $\ge$ 0.8; WD $\ge$ 2mm                                                                                                                                         |                                                                                                                                                     | 40X water dipping objective NA ≥ 0.8; WD ≥ 2mm                                                                                                                                                |  |
|     |                                                                                                                                                                                                | DIC modules for 10X - 60X                                                                                                                           | DIC modules for 10X - 60X                                                                                                                                                                     |  |
| 11. | Section 4-A<br>Technical<br>Specifications<br>Point 16                                                                                                                                         | Plan super apochromat objective - 60x; NA<br>≥ 0.8 water dipping / immersion                                                                        | Plan apochromat objective - 60x/63x; NA ≥ 0.8 water dipping / immersion                                                                                                                       |  |
| 12. | Section 4-A<br>Technical<br>Specifications<br>Point 17                                                                                                                                         | Plan super apochromat objective - 60X; NA ≥ 1.0 oil immersion                                                                                       | Plan apochromat objective - 60X/63x; NA ≥ 1.0 oil immersion                                                                                                                                   |  |

| 13. | Section 4-A<br>Technical<br>Specifications<br>Point 19        | Monochrome sCMOS camera with dynamic<br>range of 20,000 or better for wide field<br>imaging in epi-fluorescence (reflected<br>fluorescence). Minimum resolution of 2048<br>x 2048 pixels. QE between 400 to 850 nm<br>should be greater than 45%, with peak QE<br>at least 80%. Minimum full resolution<br>frame rate 30 fps.                                                                 | Monochrome sCMOS camera with dynamic<br>range of 20,000 or better for wide field<br>imaging in epi-fluorescence (reflected<br>fluorescence). Minimum resolution of 2048<br>x 2048 pixels. Peak QE at least 80%.<br>Minimum full resolution frame rate 40 fps.                                                                                                                                                                                                                                          |  |
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| 14. | Section 4-A<br>Technical<br>Specifications<br>Point 20        | The sytem should be capable of reflected<br>light microscopy in wide-field, fluorescence<br>and confocal modes, with appropriate<br>vertical illuminators and epi-plan<br>objectives.                                                                                                                                                                                                         | The system should be capable of reflected<br>light microscopy in wide-field, fluorescence<br>and confocal modes, with appropriate<br>vertical illuminators and epi-plan<br>objectives. Suitable filter/prism should be<br>quoted to perform widefield based<br>reflection mode imaging.                                                                                                                                                                                                                |  |
| 15. | Section 4-A<br>Technical<br>Specifications<br>Point 23        | The system should have atleast 2 high<br>sensitive GaAsP/HyD detectors having<br>atleast 45% QE and 2 PMT detectors and<br>should be capable of simultaneous<br>detection of 4 fluorophores. PMT detector<br>for transmitted light for brightfield / DIC<br>imaging with motorized switching.                                                                                                 | The system should have atleast 4 high<br>sensitive GaAsP / HyD detectors having<br>atleast 45% QE should be capable of<br>simultaneous detection of 4 fluorophores<br>PMT detector for transmitted light for<br>IC brightfield / DIC imaging with motorized<br>switching.                                                                                                                                                                                                                              |  |
| 16. | Section 4-A<br>Technical<br>Specifications<br>Point 24        | Hybrid XY scanner with scanning speed of 25 fps or better at 512 x 512 pixels                                                                                                                                                                                                                                                                                                                 | Hybrid XY scanner with scanning speed of<br>10 fps or better at 512 x 512 pixels and 200<br>fps for 512x16. Additional scanner to image<br>at 25 fps or better at 512 x 512 pixels and<br>400 fps for 512x16.                                                                                                                                                                                                                                                                                          |  |
| 17. | Section 4-A<br>Technical<br>Specifications<br><b>Point 28</b> | Laser combiner with 4 solid state Lasers, of<br>wavelengths in these ranges: 400-410, 480-<br>490, 530-578 & 620-660 nm, with<br>minimum powers of 15mW with fast laser<br>switching capability (using either AOTF or<br>some similar technology: please specify).<br>All the built-in lasers should be usable in<br>future for FCS and FCCS upgradation.<br>Option to add extra laser later. | Laser combiner with provision to<br>accommodate 6 solid state Lasers. Current<br>requirement is of lasers with wavelengths<br>in these ranges:<br>- 400-410 nm,<br>- 480-490 nm,<br>- 530-578 nm &<br>- 620-660 nm<br>All lasers with minimum powers of 15mW<br>with fast laser switching capability (using<br>either AOTF or some similar technology:<br>please specify). 405 nm laser should have a<br>minimum power of 30mW to enable FRAP<br>and FRET imaging. Option to add extra<br>laser later. |  |
| 18. | Section 4-A                                                   | Solid state diode laser 594 nm for dedicated mCherry applications                                                                                                                                                                                                                                                                                                                             | 594 nm laser line for dedicated mCherry<br>applications and 440-450nm laser line for<br>the CFP imaging.                                                                                                                                                                                                                                                                                                                                                                                               |  |

|     | Technical<br>Specifications                                   |                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
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|     | F 01112 25                                                    |                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
| 19. | Section 4-A<br>Technical<br>Specifications<br><b>Point 37</b> | Essential                                                                                                                     | Optional                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| 20. | Section 4-A<br>Technical<br>Specifications<br><b>Point 43</b> | Capability to perform FCS (provide details as appropriate)                                                                    | Not required                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |
| 21. | Section 4-A<br>Technical<br>Specifications<br><b>Point 44</b> | Lens cleaning papers, immersion oil and<br>standard slides for calibration should be<br>provided at the time of installation. | Lens cleaning papers, immersion oil and<br>standard slides for calibration should be<br>provided at the time of installation<br>(appropriate quantities to be provided).                                                                                                                                                                                                                                                                                  |  |
| 22. | Section 4-A<br>Technical<br>Specifications                    |                                                                                                                               | Added as Essential at Point No. 46<br>Super resolution imaging: The system<br>should have the capability of achieving<br>resolution of 120 nm or better in XY and<br>300 nm or better in Z during imaging with a<br>dedicated detector, should be possible with<br>any objective like 10X, 20x and 40X for<br>standard confocal dyes ranging throughout<br>the visible spectrum range without<br>compromising the speed (minimum 10 fps<br>at 512 x 512). |  |
| 23. | Section 4-A<br>Technical<br>Specifications                    |                                                                                                                               | Added as Essential at Point No. 47<br>Warranty for 3 years and AMC for two<br>years should be quoted.                                                                                                                                                                                                                                                                                                                                                     |  |
| 24. | Section 4-A<br>Technical<br>Specifications                    |                                                                                                                               | Added as <b>Optional</b> at Point No. 48<br>Additional image analysis software package<br>that can support wide range of applications<br>to generate insights from images with total<br>freedom to analyse and explore microscopy<br>data sets. E.g. Deep Learning and<br>Python/Matlab/Java or equivalent<br>Integration to apply any of pre-trained<br>machine learnt models/protocols/recipes<br>for image enhancement and/or                          |  |

|     |                                                      |                                                                                                                                                               | segmentation for enhancement of specific<br>intracellular parts like filamentous<br>structures, neurons, vessels, spines; nuclei<br>count and tracking, cell count and tracking,<br>particle count and tracking, cell<br>proliferation assay, neurite outgrowth,<br>wound healing (phase contrast), stem cell<br>colony detection (phase contrast), stem cell<br>tracking (phase contrast), object detection<br>(meshes), object detection (spots), object<br>tracking and lineage tracing. Video |  |
|-----|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|     |                                                      |                                                                                                                                                               | animations of up to 4K and 60 fps.                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| 25. | Section 5<br>Annexure 5<br>Instruction to<br>Bidders | <ol> <li>Bidders should clearly indicate<br/>compliance or non-compliance of<br/>the technical specifications<br/>provided in the tender document.</li> </ol> | <ul> <li>3. Bidders should clearly indicate compliance or non-compliance of the technical specifications provided in the tender document in the following format (see appendix).</li> <li>4. The proposal should contain a compliance table with 4 columns in addition to the ones in the technical requirements table that has been included with this RFQ below. The compliance table</li> </ul>                                                                                                |  |
|     |                                                      |                                                                                                                                                               | should include all the items in the same order and format (see appendix).                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|     |                                                      |                                                                                                                                                               | 5. The first column should describe<br>your compliance in a "Yes" or "No"<br>response. If "No" the second<br>column should state the extent of<br>deviation. The "third" column<br>should state the reasons for the<br>deviation if any. The fourth column<br>can be used to compare your tool<br>with that of your competitors or<br>provide details as requested in the<br>technical requirements table (see<br>appendix).                                                                      |  |
| 26. | Section 5                                            |                                                                                                                                                               | The <b>compliance table format</b> needs to be followed (see appendix)                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
|     | Annexure 5                                           |                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
|     | Instruction to<br>Bidders                            |                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| 27. | Section 6                                            | Warranty (5 years)                                                                                                                                            | Warranty (3 years)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |

| Tab                      | ble Serial No.                                 |                                     |                                        |
|--------------------------|------------------------------------------------|-------------------------------------|----------------------------------------|
| 5                        |                                                |                                     |                                        |
| 28. Sec                  | ction 7-A                                      | Annexure 5: Details of items quoted | Annexure 5: Details of items quoted in |
| Sea<br>"A"<br>Bid<br>Poi | aled Envelope<br>": Technical<br>d<br>vint 1-e |                                     | <u>required format</u> (see appendix). |

## Appendix

## Requested compliance table format:

| S.<br>No. | Specification                                                    | Essential/O<br>ptional<br>requested | Compliant<br>(Y/N) | If N, extent and<br>nature of<br>deviation | Reason for<br>deviation /<br>alternative | Comparison<br>with competitor<br>(optional) |
|-----------|------------------------------------------------------------------|-------------------------------------|--------------------|--------------------------------------------|------------------------------------------|---------------------------------------------|
| 1.        | Fully motorized<br>infinity corrected<br>microscope stand<br>for | Essential                           |                    |                                            |                                          |                                             |
| 2.        | Trinocular<br>observation<br>tube                                | Essential                           |                    |                                            |                                          |                                             |