

UNIVERSITY OF MISSISSIPPI

Notice of Intent to Certify Sole Source

SS 071

The University of Mississippi (UM) anticipates purchasing the item(s) listed below as a sole source purchase. Anyone objecting to this purchase as a sole source shall follow the procedures outlined below.

Commodity or commodities to be purchased (manufacturer, model, description):

Nikon Model Ti2-E High Throughput Microscopy System with custom configuration

The need to be fulfilled by this item(s) and why it is the only one that can meet the specific needs of the department:

This request is for a Nikon, Ti2-E motorized, inverted, epifluorescent, microscope. This microscope comes with a calcium-imaging system (Sutter, Lambda DG-5 Plus), 5 objectives, 4 spectrum filters, Nikon live-cell incubators (for live-cell imaging), a anti-vibration table and compressor (necessary for time-lapse imaging), the camera and stages needed for live-cell imaging, as well as the computer and proprietary software that is needed for all of our imaging needs (time-lapse imaging, image-tiling and stitching, 3-D reconstruction and deconvolution of images, and ratiometric analysis (for ion imaging). This microscope brand and model is critical to carry out the experiments proposed in the PI's NIH-funded work. There are 5 proprietary advantages that make this system essential. (1) The PI's research questions hinge on the capacity to do live-cell imaging in atypical flasks (necessary for the type of cells and wavelengths of light required) and only Nikon provides the CO2 incubators with the proper heating-style element that is made to accommodate this. Larger environmental chambers, such as those offered by other companies are not compatible with the PI's work. The PI's cells have been piloted in such chambers and they do not survive for the necessary duration of the PI's future experiments. (2) Microscope objectives are proprietary to each manufacturer and only Nikon makes an objective with a 25 mm field of view which is necessary to achieve high-resolution and still maintain the field of view that allows recording of calcium transients across multiple cells. Competitor objectives achieve high resolution or a wide-field, but not both. (3) Alternative microscope companies have different strengths (e.g. one company is largely unmatched for narrow-field, high-resolution objectives), but Nikon's cameras are the state-of-the-art for the present imaging needs. They are built for both speed and large-volume data acquisition which is necessary for the ion-imaging the PI will conduct. (4) The Ti2 model has been re-engineered to overcome a well-known flaw that has plagued other microscopes (including past Nikon models). Previously, the "Z-drive" (the engineering unit that focuses the objective on the z-plane) was

designed to "fight gravity." With age and usage, the focus on microscopes drifts downwards. This can make 3-D reconstruction impossible. The Ti2 has been re-engineered so that this mechanism is smaller and housed in a different location within the microscope where it will no longer fight gravity, obviating slippage over time. (5) Lastly, the Ti2 is the most upgradeable base microscope of its kind. As the PI's research program grows, the flexibility of the Ti2 base will allow the addition of new components, potentially turning the epifluorescent microscope into a confocal microscope. Competitor brands have more limited options and ultimately require the sale of multiple microscopes to achieve optimal performance on each task. This microscope is ideal to grow with a startup lab.

Name of company/individual selling the item and why that source is the only possible source that can provide the required item(s):

Among microscope manufacturers, the objectives, cameras, and base designs that they use are proprietary. Each of the top competing companies specializes in a different aspect that drew them into this market. Nikon Instruments Inc.'s live-cell imaging system, their specialty in wide-field objectives, fast cameras capable of meeting the high-data demands of ion imaging, and their newly-designed and upgradeable Ti2 base, underlie their unique compatibility with the PI's research needs. Competitors cannot meet the ion imaging design needs of the PI.

Why the amount to be expended for the commodity is reasonable:

The cost has been negotiated and is 22% percent below the next most competitive quote and 17% below the typical price for this package. Moreover, the microscope quoted in the more expensive design will not meet the PI's research needs.

Efforts that the agency went through to obtain the best possible price for the commodity:

After comparing multiple microscope designs across companies, this design was initially quoted as 5% less expensive than that of a competitor's design which was more expensive and also would not meet the needs of the PI's research. The present Nikon quote was negotiated down even further and is now 17% below the price of this typical package.

Submission Instructions and Format of Response from Objecting Parties:

Interested parties who have reason to believe that the item(s) above should not be certified as a sole source should provide information in the following format for UM to use in determining whether or not to proceed with awarding the Sole Source purchase.

1.1 Interested Party Information

1.1.1 Contact Name, Phone Number, Address and email address

1.1.2 Company Website URL, if applicable

1.2 Objection to Sole Source Certification

- 1.2.1 **Interested parties must present specific objections to the Sole Source certification using the criteria listed above.**
- 1.2.2 **A statement regarding the Interested Party's capabilities as related to this Sole Source Certification Request.**
- 1.3 **Comments will be accepted at any time prior to Wednesday, September 20, 2017 at 3:00 pm (Central Time) to Katherine Jones at kajones4@olemiss.edu (with Cc: to purchase@olemiss.edu) at The University of Mississippi Procurement Services Department, 164 Jeanette Phillips Drive, PO Box 1848, University, Mississippi 38677. Responses may be delivered by hand, via regular mail, overnight delivery, or e-mail. The envelope or email should reference the sole source number. **UM WILL NOT BE RESPONSIBLE FOR DELAYS IN THE DELIVERY OF RESPONSES.** It is solely the responsibility of the Interested Parties that responses reach UM on time. Interested Parties may contact Katherine Jones to verify the receipt of their Responses. Responses received after the deadline will be rejected.**

If after a review of the submitted notice and documents, UM determines that the commodity in the proposed sole source request can be provided by another person or entity, then UM will withdraw the sole source certification and submit the procurement of the commodity to an advertised competitive bid or selection process.

If UM determines after review that there is only one (1) source for the required commodity, then UM will appeal to the Public Procurement Review Board for approval to purchase.