SOLE SOURCE DETERMINATION

The Purchasing Division has been requested to approve a sole source purchase for the commodity or service described below. Pursuant to West Virginia Code 5A-3-10c, the Purchasing Division is attempting to determine whether the commodity or service is a sole source procurement. If you believe your company meets the required experience and qualification criteria stated below, please e-mail the Purchasing Division at John.H.Abbott@wv.gov; copy Karen.Q.Byrd@wv.gov, to express your interest in the project. Please forward any and all information that will support your company's compliance with required qualification and eligibility criteria along with any other pertinent information relative to this project to the Purchasing Division no later than 8/1/2008; 10:00 AM.

Requisition Number:	DPS0837
Department/Agency:	WV State Police
Detailed Description of Project:	Upgrading of the ABI 3130 Genetic Analyzer
Proposed Sole Source Vendor:	Applied Biosystems, Inc.
Specific Eligibility Criteria:	Supplier and servicing dealer for the above
Specific Qualification Criteria:	Authorized servicing support dealer of Applied Biosystems

Sole Source Specification

1. The instrument must be a 4-capillary, fluorescence-based genetic analysis system. It must be fully automated from polymer loading and replacement, DNA separation, detection, and data analysis. Run conditions must be optimized for several applications, such as *de novo* or comparative DNA sequencing and DNA fragment analysis. A full complement of chemistry kits, software, and accessory products should be available from the vendor.

2. The instrument must be capable of analyzing multiple runs of samples—4 samples per run. The system must be fully automated from polymer loading to analyzed sequence or size-called results. The instrument must use a computer workstation for instrument operation and data analysis—specifically a Dell® Workstation running a Windows® XP or higher operating system, a powerful computing platform necessary for receiving data from the instrument at a high rate. The Windows® XP operating system should also be designed for networking with a larger laboratory management-computing environment.

3. The system should use software for sample import and instrument control that can regulate the functions of the instrument and automatically process the data once the instrument has detected it. It must also provide several options for instrument diagnostics and automatic import of sample plate information.

4. The instrument must use analysis software and algorithms that perform either basecalling for DNA sequencing or size calling for DNA fragment analysis. One application software type must be included with the purchase of the instrument system, the other must be available to be selected as an add-on kit. Data files should be generated in industry standard ABIF format, which must be viewed on a Windows® computing system.

5. The instrument must operate without user intervention (unattended) for 24-hours with a sample processing throughput greater than 144 sequencing or 144 fragment analysis samples per 24-hours.

6. The system must be able to detect and analyze five fluorescent dyes simultaneously.

7. The instrument must have:
   - Four capillaries
   - Automated polymer delivery system
   - Autoloading of samples performed from a single 96-well microtiter plate.
   - CCD detection technology and a spectrograph for color separation.
   - Simultaneous dual-side illumination detection system to maximize signal uniformity and sensitivity that in turn reduces the requirements placed on the user for sample preparation and cleanup.
   - Active temperature cooling/heating that can maintain temperatures from 15 to 65 degrees C.
   - A thermally stable detection region of the capillary array

8. Reagents optimized for use with this instrument must be available through the instrument's vendor.

9. The vendor must supply application-specific kits that are optimized for the instrument in the area of human identification, agriculture, molecular microbiology, and genetic disease research.

10. This instrument has the following licensing statement information:

    NOTICE TO PURCHASER:

    This instrument is Authorized for use in DNA sequencing and fragment analysis. This authorization is included in the purchase price of this instrument and corresponds to the up-front fee component of a license under process claims of U.S. Patent Nos. 5,821,058 and 5,332,666 and under all

process claims for DNA sequence and fragment analysis of U.S. patents now or hereafter owned or licensable by Applied Biosystems for which an Authorization is required, and under corresponding process claims in foreign counterparts of the foregoing for which an Authorization is required. The running royalty component of licenses may be purchased from Applied Biosystems or obtained by using Authorized reagents purchased from Authorized suppliers in accordance with the label rights accompanying such reagents. Purchase of this instrument does not itself convey to the purchaser a complete license or right to perform the above processes. This instrument is also licensed under U.S. Patent No. 5,171,534 and apparatus and system claims in foreign counterparts thereof. No rights are granted expressly, by implication or by estoppel under composition claims or under other process or system claims owned or licensable by Applied Biosystems. For more information regarding licenses, please contact the Director of Licensing at Applied Biosystems, 850 Lincoln Centre Drive, Foster City, California 94404, USA.

NOTICE TO PURCHASER

The purchase price of the Applied Biosystems 3130/3130*xl* Genetic Analyzers includes a grant of a limited, non-transferable license under U.S. Patent No. 5,567,292 and method claims of its foreign counterparts, and under U.S. Patent No. 6,358,385 and element claims of its foreign counterparts, to use this particular instrument for electrophoresis methods employing fluorescence as a means of detection. No other licenses or rights are hereby conveyed either expressly, by implication, or estoppel including, but not limited to, any claims to a composition.

11. The instrument must include software that has:
    - Electronic sample information that can be automatically imported from an external data-handling system.
    - Chemometric algorithmic processing of raw signal data.
    - Basecalling and size-calling algorithms that have been optimized for data from the instrument.
    - Instrument verification to check status of critical system components.
    - Available options for further downstream data analysis and data management.
    - Ability to run sequencing and fragment samples on a single plate.
    - Ability for the user to customize the run order.
    - Security, audit trail and electronic signature features that assist with 21 CFR Part 11 requirements.

12. The system's capillary arrays and polymers must have the following specifications:
    - Support for POP-4™, POP-6™, and POP-7™ Polymers
    - Dynamically coat the capillary walls to control for electro-osmotic flow.
    - Have capillary arrays consisting of 4 capillaries.
    - Have capillary arrays available in four different sizes: 22 cm, 36 cm, 50 cm, and 80 cm.
    - Employ capillary arrays that use bare silica capillaries with a useful life that exceeds 150 runs.

13. The instrument must be able to perform with:
    Unattended operation
    - One to several runs spanning a period of 24 hours

    Rapid sequencing:
    - Using DNA control standards and protocol provided with an installation kit, the genetic analyzer must sequence over 500 bases at 98.5% accuracy with no more than 2% N-called bases.
    - It should handle 41 runs with up to 164 samples in 24 hours.

    Standard sequencing:
    - Using DNA control standards and a protocol provided with an installation kit, the genetic analyzer must sequence over 850 bases at 98.5% accuracy with no more than 2% N-called bases.
    - It should handle 12 runs with up to 48 samples in 24 hours.

    Long Read Sequencing
    - Using DNA control standards and protocol provided with an installation kit, the genetic analyzer must sequence over 950 bases at 98.5% accuracy with no more than 2% N-called bases.

- It should handle 8 runs with up to 32 samples in 24 hours.

DNA sizing:

- Using DNA control standards and a protocol provided with an installation kit, the genetic analyzer must provide single-base detection of up to 400 bases with 0.15 standard deviation.
- It should handle 41 runs with up to 164 fragment analysis samples in 24 hours.

Mutation validation/screening:

- Single nucleotide polymorphism identification using five-color fluorescence with up to 120 bases. If using a 10-loci multiplex kit, it should handle 48 runs with up to 1,920 genotypes in 24 hours on a 36 cm array.
- Single nucleotide polymorphism identification using five-color fluorescence with up to 120 bases. If using a 10-loci multiplex kit, it should handle 96 runs with up to 3,840 genotypes in 24 hours on a 22 cm array.

14. The purchase of the instrument must include:
    - System installation and operator training performed by a vendor service engineer.
    - A one-year warranty on hardware parts and labor.
    - A 90-day warranty of software and chemistry kits.
    - Service contracts offered for additional years of service.

15. Purchase of the system must include:
    - Local service engineers.
    - Regional technical support/applications training.
    - On-site, in-lab customer training.
    - Technical phone support.
    - Support via the Internet.
    - Support via a fax-back document system.

REV.1 TJM 10.25.04