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### **Picarro Demonstrates 25x Improvement in 488-nm Laser Lifetime**

SAN JOSE, CA, June 15, 2006 – Picarro, Inc., a manufacturer of high-reliability lasers for bio-instruments, announced the latest results of a reliability study covering their 488-nm Cyan lasers. The results demonstrate a mean-time-to-failure, (MTTF) of 200,000 hours for a 25x improvement in reliability over argon ion lasers commonly used in instruments such as DNA sequencers, flow cytometers, microarray scanners and confocal microscopes. The operating costs of these instruments can be substantially reduced by using these newer more reliable lasers. These results were presented this week at the SPIE Great Lakes Photonics Symposium in Dayton, Ohio by Dr. Steven Wallace.

Many bio-instruments use air-cooled argon-ion lasers to induce fluorescence in marker dyes attached to biological cells, DNA strands or micro-spheres. These lasers are notoriously unreliable, and users must frequently replace the lasers after 8,000 hours of operation or less. By using frequency-doubled semiconductor lasers, Picarro has achieved a breakthrough in reliability that can dramatically reduce operating expenses for users of laser-based bio-instruments.

Picarro's reliability study is based on data from nearly 2 million installed device-hours and 200,000 device-hours from captive product tests. A thorough analysis of this data was conducted using rigorous statistical methods adapted from the telecommunications industry. With the level of reliability demonstrated in this study, Picarro lasers can save users thousands of dollars a year on laser replacement and expensive maintenance contracts, while providing a laser footprint and power consumption that is a small fraction of argon-ion lasers'.

Dr. Steven Wallace, Picarro's Director of Laser Development, and the co-authors of the study are recognized experts in the area of laser reliability, and have been instrumental in bringing telecom-grade reliability to lasers for the bio-photonics industry.

#### **About Picarro**

Picarro, Inc. uses proprietary photonic technology to develop innovative solutions for the most demanding bioscience, environmental monitoring and process control applications. Our products enable our customers to achieve dramatic improvements in measurement precision, instrument size, reliability and total cost of ownership. We serve the needs of large and growing OEM and industrial customers across a diverse range of markets. Picarro's unique solid-state laser products are rapidly displacing legacy gas-tube lasers in bio-instruments used for cellular analysis, genetics and drug discovery. Picarro's Cavity Ring-Down Spectroscopy (CRDS) instruments are setting new standards for sensitivity, speed, selectivity and ease of use in trace gas detection for monitoring greenhouse gases, reducing diesel emissions, advancing semiconductor manufacturing, and improving petrochemical processing. The company is based in Sunnyvale, CA, with development and production facilities in Ottawa, Ontario. For more information on Picarro, visit our website at [www.picarro.com](http://www.picarro.com)

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