Lockheed Martin And ZyGEM Accelerate DNA Identification For Law Enforcement, Homeland Security And Defense Communities

New, Fast Sample-to-Answer DNA Analysis Platform Previewed at 2010 Biometric Consortium Conference

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TAMPA, Fla., Sept. 22 /PRNewswire/ -- Lockheed Martin (NYSE: LMT) and ZyGEM Corp. Ltd. today are unveiling a new DNA analysis system that has potential to transform how law enforcement, homeland security and defense communities use DNA-based identification in support of their missions.

The prototype, called Rap*I.D.*™, will be previewed at a 2010 Biometric Consortium Conference special session on Rapid DNA. The day-long session is sponsored by the FBI's Criminal Justice Information Services (CJIS) division.

"Our law enforcement, homeland security and defense communities face a significant challenge in how quickly they can confirm an individual's identity," said John Mears, director, Lockheed Martin Biometric Solutions. "Our goal with the Rap*I.D.*™ sample-to-answer DNA analysis device is to transform today's DNA identification process from one that takes a great deal of training, sophisticated equipment and days or weeks to complete, into an affordable, on-site process that takes less than an hour."

Developed in collaboration with ZyGEM as a Lockheed Martin Technology Innovation Initiative, Rap*I.D.*™ leverages the latest in microfluidic research and development to accelerate the DNA identification process—essentially building a laboratory on a small, single chip that reduces the processing steps and time needed for analysis. The Rap*I.D.* ™ platform is currently in prototype at ZyGEM's Charlottesville, Va., MicroLab laboratories, with a Beta version expected to be released for testing in select laboratories early next year.

"ZyGEM's MicroLab technology has been developed with the goal of dramatically reducing today's complex analytic approaches. The result is a compact platform that can analyze DNA simply, accurately and rapidly, enabling DNA identification to be used more widely and in many more settings." explained ZyGEM CEO Paul Kinnon. "Forensic and other federal, state and local government applications represent critical near-term markets for our technology, and we are delighted to have Lockheed Martin as a key teammate in the development of our first systems."

The cost and complexity of current forensic DNA analysis methods has contributed to significant processing backlogs throughout the criminal justice system. Data from the Justice Department's FY 2009 Forensic DNA Backlog Reduction Program suggest that the backlog has increased in recent years, indicating that the 2008 backlogged cases reported by state and local government applicants for funding under the program had nearly tripled compared to comparable data from 2005.

Headquartered in Bethesda, Md., Lockheed Martin is a global security company that employs about 136,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services. The Corporation's 2009 sales from continuing operations were $44.5 billion.

ZyGEM Corporation is developing innovative products for the analysis of DNA and other nucleic acids. ZyGEM currently markets nucleic acid extraction solutions based on the company's exclusive collection of microorganisms from extreme environments, with applications in basic research, forensics, clinical diagnostics and agriculture. ZyGEM's MicroLab unit is developing integrated sample-to-answer systems with the potential to revolutionize DNA testing for the many applications where accuracy, speed, ease-of-use and accessibility are important.

For additional information, visit our Web sites:

http://www.lockheedmartin.com

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