

NEWSLINE

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HONORING THE
2006 R&D 100
WINNERS

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SINGING THE
PRAISES OF
MARTIN LUTHER

LAB NEWS

2006 'Oscar of invention' winners honored

In 2006, LLNL researchers won more R&D 100 awards than any other institution in the United States. On Jan. 10, they celebrated — and were celebrated — for their award-winning efforts during a ceremony in Bldg. 453's Armadillo Room.

Cherry Murray, the Laboratory's deputy director for Science and Technology, substituted for Director George Miller and presented the researchers' awards to six teams and one individual LLNL researcher.

Murray's praise of the Lab scientists and engineers was echoed by Camille Yuan-Soo Hoo, the Livermore site office manager for the National Nuclear Security Administration, and by Roger Werne, the chief technologist for the Lab's Industrial Partnerships and Commercialization Office.

"This is a very prestigious award," Murray said. "Livermore won seven this year.

"It's really astounding what's been done. I personally looked at all of the award packets and I was blown away by the technology. What the Lab does best is science and engineering and getting technology out into the field."

Yuan-Soo Hoo noted that through recent years "LLNL has continued to win multiple R&D 100 awards each year."

"It really is very special, listening to Cherry read off the winners in terms of the actual work — it almost sounds like the Academy Awards. It's a tremendous effort on the part of all of you in cooperation with your teams," Yuan-Soo Hoo added.

For his part, Werne said that the purpose of the awards ceremony was "to celebrate your accomplishments and recognize what you have done."



NANCY RUTTER/TID

From left, Bill Goldstein, associate director for Physics and Advanced Technologies, David Erskine, R&D 100 winner, Cherry Murray, deputy director for Science and Technology, and Camille Yuan-Soo Hoo, manager of the NNSA Site Office at LLNL.

Livermore's 2006 R&D 100 award total matches the Laboratory's previous record number of seven awards (also achieved in 1987, 1988, 1997 and 1998). With last year's awards, the Laboratory has now captured a total of 113 awards since 1978.

Like other R&D 100 award winners, the LLNL recipients were honored during an Oct. 19 black-tie dinner in the Grand Ballroom of Chicago's Navy Pier.

LLNL teams and one individual LLNL researcher won awards for:

- An explosive detector known as ELITE, the Easy Livermore Inspection Test for Explosives, that can be used by airport screeners, military personnel and others to detect more than 30 different explosives.

- A new high-precision radiation detector called UltraSpec that operates at very low temperatures and could assist security officials in identifying even small amounts of nuclear material.

- The creation of the Sonoma Persistent Surveillance System, which offers the first integrated, broad-area, high-resolution, real-time motion imagery system for surveillance applications.

- A high-average-power wavelength conversion device that can change the "color" of laser light, permitting large-aperture high-average-power lasers to operate at half the wavelength of the laser crystal's natural emis-

sion wavelength.

- A technique called "Externally Dispersed Interferometry" to conduct precision measurements of the Doppler velocities of stars or sunlit targets.

- Analysis algorithms allowing the exploration of large, complex and multidimensional data sets. The technology has been dubbed Sapphire.

- A tool called Babel addresses the problem computer scientists face in developing simulation codes that have language incompatibilities among the software libraries they must use.