



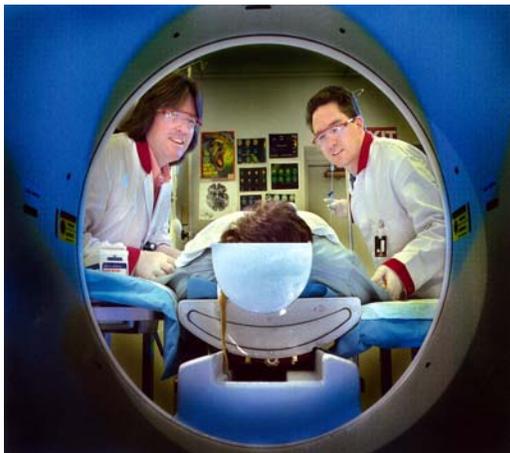
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The staff of the Department of Energy Brookhaven Group and the staff of Brookhaven National Laboratory, wish you health, happiness, and exciting discoveries during this New Year, 2001.

The Laboratory congratulates Michael Holland, who was recently appointed manager of the Department of Energy's Brookhaven Group, whose offices are located at the Lab site.

Brookhaven Expanding Center for Imaging and Neurosciences



- By nearly doubling the size of Brookhaven's Center for Imaging and Neurosciences, space will be provided for two new positron emission tomography (PET) scanners, as well as new research labs and patient-preparation areas.
- A large scanner will allow expansion of human PET studies of addiction and its treatments as well as aging, and will enable scientists to explore new research directions, including cancer imaging. A smaller scanner will be used to perform genetic studies and drug research.

Brookhaven Lab Spent More Than \$31 Million on Long Island in FY 2000

- During FY00, the Laboratory purchased more than \$31 million worth of supplies and services from Long Island businesses.
- New construction, environmental cleanup, and repair of an aging infrastructure accounted for a large part of Brookhaven's purchases. For example, Frendolph Construction of West Babylon was paid about \$4.6 million for construction related to a project funded by the National Aeronautics and Space Administration to determine how cosmic radiation in space affects astronauts. Bove Industries was paid more than \$1.5 to upgrade Brookhaven's sanitary system, which consists of more than 20 miles of piping to transport wastes from the Lab's buildings to its Sewage Treatment Plant.

Scientists Decode Genes of Microbe that Thrives in Toxic Metals

- Understanding the genetic makeup of microbes that thrive in polluted environments may one day help scientists engineer bacteria that can clean contaminants from soil.
- In a step toward that goal, the U.S. Department of Energy's Joint Genome Institute (JGI) just released the draft gene sequence of one such toxin-tolerant bug.
- The bacterium, known as *Ralstonia metallidurans*, is being deciphered by Laboratory biologists in collaboration with scientists in Belgium and others at JGI.
- Through genetic engineering, scientists might be able to transfer the heavy-metal-resistant genes from *Ralstonia* into other microbes that decompose organic pollutants. Or alternatively, scientists might use *Ralstonia* as a host for other bacterial genes that would enable it to break down a variety of pollutants. In either case, the result would be bacterial strains with a combination of traits: ones that can tolerate heavy metals in a polluted environment while digesting organic contaminants to convert them to harmless forms.

January/February Events Open to the Public

- *Kirsten Olafson, January 17, Noon, Berkner Hall:* Pianist. Free.
- *Paul Galbraith, January 31, Noon, Berkner Hall:* Eight-string guitarist from England, Free.
- *James O'Malley, February 14, Noon, Berkner Hall:* Acoustic guitar. O'Malley writes and performs in the New Folk or Acoustic Contemporary style. Free.
- *Marta Felcman, February 28, Noon, Berkner Hall:* Pianist from Argentina. Free.

