than entirely homegrown," he says. "Now we know of extrasolar planets, of complex organic molecules in interstellar clouds, of micrometeorites depositing carbon on Earth, and of microbes living in extreme environments, and there is evidence of water on Mars and on Jupiter's moon, Europa."

The budding pan-European approach to exo/astrobiology builds on efforts in individual nations. In France, for example, the nation's space agency and CNRS in 1999 formed a federation of 50 exo/astrobiology labs that ended their isolation. Spain has gone a step further, in 1998 launching the $8.6 million Centre for Astrobiology in Madrid, and the Italian Space Agency, for the first time, will have a specific line for exo/astrobiology in its 2002 budget. (The amount is under discussion.)

But in spite of this apparent enthusiasm for exo/astrobiology, the prospects for Aurora are uncertain. ESA may have a hard time extracting the additional money from member states, which are already tightfisted when it comes to ESA's regular budget. "There are many difficulties to resolve at ministerial level," admits ESA's Schmitt, who told workshop participants that the agency is seeking the backing of the scientific community on Aurora—something that will be essential for making a strong case to the ministers this fall.

–HELEN GAVAGHAN

Helen Gavaghan writes from Hebden Bridge, U.K.

U.S. CONGRESS

New Leaders Emerge After Senate Shake-Up

A political earthquake has U.S. science advocates scrambling to survey a dramatically altered Washington, D.C., landscape. With Republican Senator Jim Jeffords's (VT) announced defection from his party, control of the Senate will switch to the Democrats. That power shake-up, say science lobbyists, could affect both research budgets and science policy.

Last November's elections left the 100-member Senate balanced on a knife's edge, with both parties controlling 50 seats. Republicans had the upper hand, however, because Senate rules allow Vice President Dick Cheney to break any ties. As a result, Republicans claimed the body's top leadership posts and the right to control the legislative calendar, choose committee leaders, and determine the makeup of panels that negotiate differences with the House of Representatives. Now that Jeffords has become an Independent, Democrats will have sway over all those decisions. Senator Tom Daschle (D–SD) is expected to replace Trent Lott (R–MS) as majority leader as early as 5 June; committees will also get new chairs (see table).

Incoming chairs. Democrats Barbara Mikulski (*above*) and Tom Harkin await Senate posts.

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THE EXPECTED LINEUP

Committee	In	Out
	Appropriations	
Full committee	Robert Byrd (D–WV)	Ted Stevens (R–AK)
Labor-HHS panel	Tom Harkin (D–IA)	Arlen Specter (R–PA)
VA-HUD "	Barbara Mikulski (D–MD)	Kit Bond (R–MO)
Energy "	Harry Reid (D–NV)	Pete Domenici (R–NM)
Defense "	Daniel Inouye (D–HI)	Stevens
	Authorization	
Armed Services	Carl Levin (D–MI)	John Warner (R–VA)
Commerce & Science	Ernest Hollings (D–SC)	John McCain (R–AZ)
Science panel	John Breaux (D–LA)	George Allen (R–VA)
Energy	Jeff Bingaman (D–NM)	Frank Murkowski (R–AK)
Environment	Jim Jeffords (I–VT)	Bob Smith (R–NM)
Health and Education	Ted Kennedy (D–MA)	Jeffords

In many cases, the key science spending panels are expected to stay the course. Senator Barbara Mikulski (D–MD), an ardent supporter of a bigger budget for the National Science Foundation (NSF), is expected to replace the equally enthusiastic Kit Bond (R–MO) on the panel that oversees NSF and NASA. Similarly, Senator Tom Harkin (D–IA), a leading voice for doubling the budget of the National Institutes of Health (NIH), is in line to succeed fellow doubling advocate Arlen Specter (R–PA) as head of the panel that oversees NIH. Both senators also oppose possible moves by the Bush Administration to ban federal funding for research using stem cells harvested from human embryos.

Other committees, however, could see changes in emphasis. Senator Pete Domenici (R–NM), known as St. Pete for his efforts on behalf of Los Alamos National Laboratory and several other large Department of Energy (DOE) research facilities in his state, will likely cede control over DOE funding to Senator Harry Reid (D–NV). Although Reid is friendly to science, he has criticized the planned Yucca Mountain nuclear waste repository in his state, as well as the $3.4 billion National Ignition Facility, a giant laser project at DOE's Livermore National Laboratory in California. Renewable-energy advocate Jeff Bingaman (D–NM) is expected to take over DOE's authorizing committee from Frank Murkowski (R–AK), a friend of the oil and gas industry. That switch virtually assures that the Senate will block controversial portions of the Bush Administration's new energy policy, such as a call to open Alaska's Arctic National Wildlife Refuge to drilling (*Science*, 25 May, p. 1462). A Democratic Senate is also likely to question Bush's plans to increase funding for missile defense, downplay controls on global warming gas emissions, and cut funding for environmental research.

Whereas most lobbyists are hedging their bets, Michigan State University's Howard Gobstein ventures that a divided government will be good for research. "Support for science is bipartisan," he says, and the new lineup gives both parties an incentive to take the lead.

–DAVID MALAKOFF

ULTRAFAST LASERS

Strobe Light Breaks the Attosecond Barrier

If you want to see Harm Geert Muller's latest handiwork, don't blink. On page 1689 of this issue, Muller—a physicist at the FOM Institute for Atomic and Molecular Physics in Amsterdam, the Netherlands—along with Dutch and French colleagues reports creating the fastest strobe light ever made, with individual pulses lasting just 220 attoseconds, or 220 billionths of a billionth of a second. These unimaginably short pulses are the first to be confirmed as breaking the attosecond barrier, a goal of high-speed-laser researchers for nearly a decade. Down the road, such pulses may one day serve as an ultrafast camera, allowing researchers to freeze action and perhaps to spot the gyrations of individual electrons whirling around an atomic nucleus.

"This is a great paper," says Paul Corkum, a pioneer in making short laser pulses and a physicist at the National Research Council of Canada in Ottawa, Ontario. Laser researchers have likely been making trains of attosecond pulses for years, says Corkum. But until now they've had no