should include an epidemiological investigation of risk factors, blind testing of samples, and clear records of the chain of custody of samples. She says juries should also be told explicitly that phylogenetic analysis cannot prove direct transmission.

Schmidt, who will be sentenced in the next month, faces 15 to 50 years in prison. His lawyers have said they plan to appeal.

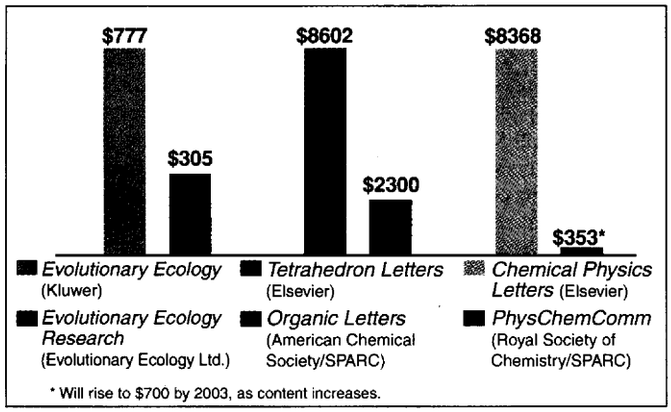
–GRETCHEN VOGEL

ACADEMIC PUBLISHING

New Journals Launched To Fight Rising Prices

A librarian-led rebellion against spiraling prices for commercial scientific journals has gained some new allies. Last week, Britain's Royal Society of Chemistry (RSC) announced plans to launch a low-cost journal that will compete directly with a more expensive commercial publication, and a prominent ecologist has taken the unusual step of defecting from a successful title he founded a decade ago to start a lower cost competitor.

Both ventures are backed by the Scholarly Publishing and Academic Resources Coalition (SPARC), a Washington, D.C.–based organization that is encouraging scientific societies and rebel publishers to create journals that compete head to head with commercial titles. "We are focusing the spotlight on a lack of competition that we believe is narrowing the dissemination of knowledge," says Richard Johnson, enterprise director for the coalition. Although the new alliances are unlikely to ease the budgetary pressures on libraries anytime soon, industry observers say they suggest that a decade-old war between major academic libraries and a handful of large commercial publishers is heating up.



Price-wise. The subscription prices of three established journals (top row, with publisher) are several times higher than what their competitors (bottom row) plan to charge.

SOURCE: SPARC AND OTHER PUBLISHERS

Soaring journal prices are not a new problem for librarians. Since 1986, median prices for scholarly journals issued by both commercial and nonprofit publishers have risen at least 169%, or more than three times the rate of inflation, according to the Association of Research Libraries (ARL) in Washington, D.C., which represents 121 collections in the United States and Canada. Unable to keep pace, ARL libraries have cut thousands of subscriptions and are now spending 124% more to stock 7% fewer titles.

In particular, librarians say that an increasing share of their budgets goes for widely cited, "must-have" scientific and technical journals published by a few dominant commercial publishers, such as Europe-based Reed Elsevier and Netherlands-based Wolters Kluwer. Each journal typically has less than 500 subscribers and can cost up to $15,000 annually, notes Ken Frazier, an ARL official who directs the University of Wisconsin, Madison, library system. "To say that commercial research journals are expensive is like saying tornadoes are windy," he jokes. Publishers, however, say their prices are justified by their quality and the number of pages they run.

ARL officials believe the academic market could benefit from a little competition—and last year they organized SPARC to provide it. The idea is that SPARC's 114 members will agree in advance to buy the new, cost-conscious journals endorsed by the group. That solidarity is intended to provide publishers with an immediate cash flow that might carry a new title through its perilous early years. In its first deal last July, SPARC teamed with the American Chemical Society, which agreed to develop three new journals over 3 years. The first, *Organic Letters*, will debut in mid-1999 as a $2300 alternative to Elsevier's $8602 *Tetrahedron Letters* (*Science*, 3 July, p. 21).

Now, with the two new deals, SPARC has expanded its reach. Last week, it joined the RSC and more than 100 European libraries to promote a new $353-per-year electronic chemistry journal called *PhysChemComm*. This time, the target is Elsevier's *Chemical Physics Letters*, which costs $8368. By publishing the journal, "the RSC sees itself reclaiming the moral high ground," says Mike Hannant, the group's electronic publisher. Elsevier officials, however, have charged that SPARC is promoting the proliferation of journals in an already overcrowded marketplace—and that only time will tell if soci-

ScienceScope

FRENCH MINISTER NOT IN SYNC WITH NEW LAB

The sudden opposition of the French science minister to a long-planned synchrotron has dismayed researchers.

Last week, while answering questions in Parliament, science chief Claude Allègre hinted that he won't support construction of the $180 million, 106-meter-diameter SOLEIL electron-storage ring, on the drawing board since 1991. Allègre said the machine isn't needed because there will soon be seven new European x-ray sources that can produce similar beams for biological and biomedical research.

The remarks outraged synchrotron scientists at the LURE facility in Orsay. "We are dumbfounded by your answers," they wrote to him on 22 October. And European synchrotron directors warned Allègre that, without SOLEIL, there won't be enough x-rays to go around and that French research could suffer.

Next month the European Science Foundation is expected to issue a report on beamline supply that could clarify the picture.

U.K. LIFE SCIENCES GET BIG BOOST

Life sciences are the big winner as the British government announced this week how it would divvy up a $1.1 billion boost for science over the next 3 years.

The 15% hike in science spending was announced in July without details of how it would be distributed among the six main research councils. The new information shows the Medical Research Council's (MRC's) budget rising the fastest, by 6.8% after inflation. Hikes of slightly more than 3% go to engineering and the physical sciences, environmental research, and biotechnology and biology. Although particle physics and astronomy can expect just a 0.5% boost, officials say it's enough to preserve their place in various international projects. The government and the Wellcome Trust also will contribute equally to a $950 million pot to improve university laboratories.

George Radda, head of the MRC, says he is "enormously pleased" by the boost, adding: "It recognizes that research is a long-term business."

siveness, although it could enhance the adaptability of the ants in other ways. Furthermore, Holway cautions, no one has shown that fighting in Argentine ants has a genetic basis. For now, at least, Argentine ants in kitchens around the world will continue to enjoy their peace dividend.

–EVELYN STRAUSS

Evelyn Strauss is a free-lance writer in Berkeley, California.

ITALIAN RESEARCH

Reforms at Final Stage Under New Minister

TRIESTE—Italian government ministers can expect to see few major projects through to completion in the country's turbulent political system, but Luigi Berlinguer came close. Last week, Berlinguer was replaced as Italy's research minister just as a parliamentary committee began its final vetting of his grand reform of Italian science. Berlinguer must curse his luck that the unusually long-lasting government of Romano Prodi—which was replaced last week by an administration headed by Massimo D'Alema—couldn't hang on a few more weeks.

The reforms are now in the hands of D'Alema's choice to succeed Berlinguer as science minister: Ortensio Zecchino, an associate professor in the history of criminal law at the University of Naples and a senator since 1987. Major changes to Berlinguer's program are not expected at this late stage, especially as D'Alema has put much emphasis on continuity.

Berlinguer got his opportunity to shake up Italian science early last year when the then–minister for public affairs, Franco Bassanini, set up a streamlined process for reforming public administration: Ministers could propose reforms by decree, which would be approved by a parliamentary committee, now known as the "Bassanini" committee, rather than the full Parliament. Berlinguer issued decrees last summer for reform of the Italian Space Agency, the alternative energy agency ENEA, and the national research council (CNR), a body with 320 research institutes and centers. All are now being considered by the Bassanini committee, but the proposed changes for the CNR are the most radical and have drawn the most attention.

Few dispute that CNR is ripe for reform. CNR's committee of chairs of the 15 national subject committees has become a forum for an annual scramble to grab as much as possible for each member's own scientific area or even research group. CNR is also notoriously top-heavy with management. CNR headquarters in Rome employs some 1000 staff members, while few of its 190 independent institutes have over 30 researchers. The average number of researchers at its university-based centers is only 4.6.

In Berlinguer's new model, CNR would no longer fund research in the universities outside its own centers or assist in defining government research policy; instead it will focus on its own research efforts, at CNR labs or through collaborations with academia. CNR institutes would also be rationalized into "macroinstitutes," and only those potentially of international stature would survive. The decree promises cuts of up to two-thirds in both the number of CNR labs and in the headquarters staff.

The national subject committees would also be scrapped. The decree only provides for a president, auditors, and an executive committee. Initially, this committee alone would decide on CNR's future—including the make-up of new funding committees, mechanisms for review, and collaboration—and five of its seven members need not have any scientific experience. The CNR would have a new scientific committee, but its role would be limited to consultation and support.

The proposed reforms have angered CNR researchers and lab directors because they would diminish CNR's role and reduce its autonomy. "The CNR could become just a tool for the Ministry, under tight political control, no longer the expression of and meeting point for the Italian scientific community," says Paolo Locatelli, a member of the CNR chemistry committee. CNR's College of Directors, which represents all the university-based centers, also strongly objects to the composition of the executive committee. "All the power is concentrated at the top," complains chemist Mario Mammi, president of the college. "It's like the Russian Academy of Sciences." The Plenary Assembly of the subject committees presented a motion to the research ministry in mid-September suggesting a scientific committee that is not just advisory but is a statutory part of the CNR, well represented on the executive commit-

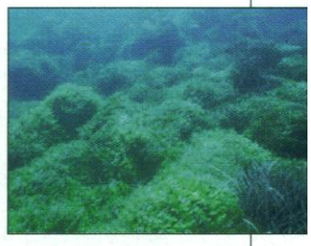
Former minister Berlinguer must curse his luck that the government of Romano Prodi couldn't hang on a few more weeks.

CREDIT: ALEXANDRE MEINESZ/UNIVERSITY OF NICE-SOPHIA ANTIPOLIS

ScienceScope

BABBITT ASKED TO BAN SEAWEED IMPORTS

Marine scientists are asking U.S. Interior Secretary Bruce Babbitt to make possessing a particular seaweed a crime. Last week, 107 scientists wrote Babbitt and urged him to ban the possession, transport, and sale of *Caulerpa taxifolia*, a lush aquarium plant that has already invaded Mediterranean coastal waters, choking out native life. Without a ban—which France, Spain, and Australia have already imposed—researchers say it is only a matter of time before the weed gains a foothold in U.S. waters.



Invader. *Caulerpa taxifolia.*

The researchers also called on Babbitt to consider a big change in import policy. Currently, the United States bans the entry only of those organisms on a few short "dirty lists" of pests and weeds. But the researchers say the ecological risks posed by invaders demand a "clean list" approach: "Organisms [should] be imported only if the evidence shows they are not dangerous," says ecologist Dan Simberloff of the University of Tennessee, Knoxville. A formal response is not expected until early next year.

GLOBAL TEAMS TO BATTLE INFECTIOUS DISEASES

Biomedical scientists in North America, the United Kingdom, and tropical nations will need to work together to win funding from a new $25 million research effort to fight infectious diseases.

Yesterday, the U.K.–based Wellcome Trust and the U.S.–based Burroughs Wellcome Fund unveiled an Infectious Diseases Initiative that aims to promote equal research partnerships among developed and tropical developing nations. "It is clear that forming global partnerships ... is a key step toward reducing the health toll of infectious diseases," said fund President Enriqueta Bond.

The multinational teams—which must include members from the United States or Canada, Britain, and a tropical nation—will compete for 5-year awards worth up to $4 million. The first proposals are due in January, with a decision expected in August. A second funding round is planned for 2000.

Contributors: Alexander Hellemans, Nigel Williams, David Malakoff