though in this case it was purely scientific. A team led by Andrew Cameron of the University of St. Andrews in Scotland reported that in observations at the 4.2-meter William Herschel Telescope in the Canary Islands, they detected a glimmer of starlight reflected by the planet thought to be orbiting Tau Boo. In their paper, released last week on the Los Alamos National Laboratory's preprint server (xxx.lanl.gov; see astro-ph/9911314), Cameron's team reported that the amount of light reflected by the planet indicates that it must be about twice the size of Jupiter. They also teased from the signal the planet's orbital inclination, and thus its mass: eight times that of Jupiter. (Their posting indicated that the paper was under embargo by *Nature*, where it had been accepted for publication, but the embargo did not last long; stories about the find appeared on several Web sites, including that of the British Broadcasting Corp.)

Charbonneau, for one, was surprised to hear the news. Several months earlier, he and his collaborators had observed Tau Boo at the 10-meter Keck Telescope on Mauna Kea in Hawaii and failed to see any reflected light. "Something just doesn't jive between our two results," says Lick Observatory astronomer Steven Vogt, a member of Charbonneau's team. But no one is crying foul in this controversy, mostly because identifying reflected light from the glare of a star is so challenging that success or failure can turn on the most minute of assumptions.

The object of the search is a faint ghost of the parent star's spectrum that appears to jiggle back and forth, from longer to shorter wavelengths, in time with the star's orbital period—3.3 days, in the case of Tau Boo. The ghost is the small portion of the star's light reflected from the planet, and the jiggle is the result of the Doppler shift—the motion-induced wavelength change that makes the pitch of a car horn rise and fall as the car approaches and then recedes. Why only Cameron's team saw this telltale ghost, no one is quite sure.

"Charbonneau did everything correctly, but Cameron's result is pretty compelling," says University of California, Berkeley, astronomer Debra Fischer, the leader of the Lick Observatory planet search team. "It is a very suggestive result," agrees Charbonneau, "but by no means conclusive." Charbonneau says he can't tell from the paper exactly how Cameron's team analyzed its data, "and it is really the nitty-gritty that sets the level of confidence."

Cameron declined interview requests, citing *Nature*'s embargo policy. But even Charbonneau is confident that conclusive evidence for reflected light from the Tau Boo planet will be found shortly. "We just need more telescope time," he says.

–MARK SINCELL

Mark Sincell is a science writer in Houston.

MOLECULAR BIOLOGY

Member States Buoy Up Beleaguered EMBL

A financial crisis facing the European Molecular Biology Laboratory (EMBL) in Heidelberg, Germany, and one of its key outstations has edged closer to resolution. Last week, EMBL's governing council, made up of delegates from the lab's 16 member countries, agreed in principle to meet the costs of a multimillion-dollar pay claim by staff members dating back to 1995. The council also tentatively resolved to cover a shortfall next year in the infrastructure budget of the European Bioinformatics Institute (EBI) near Cambridge, U.K., caused by a recent decision by the European Union to stop funding its share of the infrastructure costs for the EBI and several other European research facilities (*Science*, 5 November, p. 1058). Britain's Medical Research Council (MRC) has also come to EBI's aid with an offer to loan the center stopgap funds.

Troubled home. EMBL's council reacted positively to the lab's financial travails.

CREDIT: EMBL

EMBL and EBI are far from being home free, however. Last week's resolutions—which will not be implemented before the council's next meeting in March 2000, so that delegates can see if their own governments are willing to allot the additional EMBL funding needed—leave some key issues unresolved. EMBL is forced to pay retroactive pay increases because the administrative tribunal of the Geneva-based International Labour Organization (ILO) recently ruled that the lab had violated its own staff guidelines by setting 1995 salaries too low. But the ILO judgment leaves ambiguous exactly how much money is due in back payments. One interpretation would mandate EMBL to boost 1995 salary levels by an average of 8%. When back pay and the 10% annual interest awarded by the tribunal are factored in, this would amount to an immediate payment equivalent to a quarter of EMBL's annual core operating budget of about $43 million. (Cases concerning 1996 and 1997 salary levels are still pending before the ILO and could cost the lab even more.)

The other interpretation, which EMBL's council and management are fervently hoping will win out, would require an average boost in 1995 levels of only 2.1%. At its meeting, the council agreed to make funds available to cover this less costly scenario while asking the ILO to clarify its ruling, a process that will take at least 6 months. Cell biologist Julio Celis, chair of the council and head of the Center for Human Genome Research in Århus, Denmark, told *Science* that the council's main concern was "to keep the morale of the staff high," but it is at this point only prepared to pay the 2.1% figure and has directed EMBL director-general Fotis Kafatos to prepare a contingency plan for its March meeting in the event the ILO tribunal says it must pay 8%.

Concerns over the impact of such payouts on EMBL's scientific program have prompted many staff members to accept the 2.1% figure. "This would provide a fair solution to the problem," says molecular biologist Matthias Hentze, who was one of the original complainants before the ILO. On the other hand, Hentze says, he understands the dilemma of many EMBL staffers—particularly nonscientific workers—who are trying to cope with Heidelberg's high cost of living on relatively low salaries. But even if all of the present staff could be persuaded to accept a compromise, any one of a large number of former EMBL employees could still challenge the deal before the ILO. "The basic principle here is the rule of law," says one former EMBL scientist who asked not

to be identified. "EMBL should honor its contract" with the staff.

But at the moment, a slim majority of current staff is in favor of compromising. In a vote conducted by EMBL's staff association last month, 54% of the staff said they would be willing to accept the 2.1% figure, while 46% insisted upon the 8% interpretation. In a 23 November letter to the council delegates, which *Science* has obtained, the staff association warned that despite this slim majority in favor of the less costly interpretation, "individual members of staff would continue the case" by appealing to the ILO, and went on to urge the council to "consider implementing the 8% salary adjustment." Such an outcome "will be a substantial financial challenge to the laboratory," Kafatos told *Science*. But he says that he will argue "forcefully" that EMBL's scientific program must go ahead despite the costs. "The focus has to be on science."

That scientific program will be put under more pressure next year by the need to make up for the withdrawal of the European Union as a funding partner for EBI. Until the council can get government approval to increase its funding to EBI next March, the MRC has offered to loan EMBL enough money to keep the center running. "EBI is not out of the woods yet," says Graham Cameron, co-head of the institute. Cameron adds that although the council "has expressed a clear intention to insure that the 2000 budget will be up to the 1999 level ... our [$8.3 million annual] budget is still less than half that of our peers in the United States"—namely the National Center for Biotechnology Information (NCBI) in Bethesda, Maryland, whose yearly budget is about $19 million. Catching up with the NCBI is a key component of EMBL's 5-year plan for 2001–05, a draft of which Kafatos presented at the council meeting.

Despite these uncertainties, many EMBL scientists expressed satisfaction that the council had acted quickly to deal with the crisis. "The council has taken the high road, and that is very good for EMBL," Cameron says.

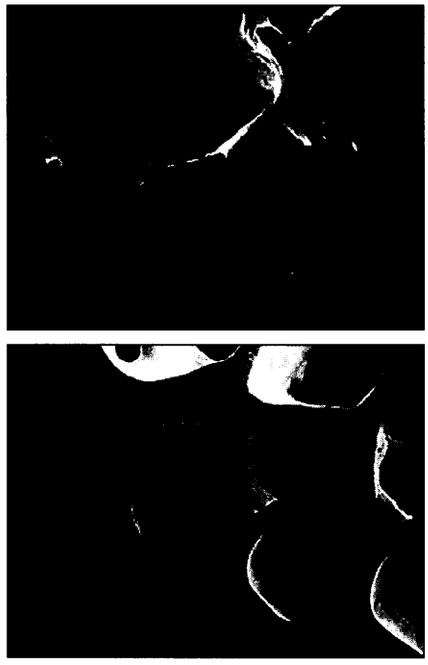
—MICHAEL BALTER

BIOMEDICINE

Cholesterol-Lowering Drugs May Boost Bones

Most drug side effects are unwanted, but a newly discovered "side effect" of the statins, drugs taken by tens of millions of people to lower their cholesterol levels and presumably their risk of heart disease, may in fact be beneficial. On page 1946, a team led by endocrinologist Greg Mundy of the biotech company OsteoScreen and the University of Texas Health Science Center in San Antonio shows that statins trigger bone growth in tissue culture and in rats and mice. If they have the same effect in humans, statins could be the first drugs able to increase bone growth in patients with osteoporosis, the bone-weakening condition that often afflicts postmenopausal women.

The observation could be "a real breakthrough" in osteoporosis treatment, says Lawrence Riggs, an endocrinologist at the Mayo Clinic in Rochester, Minnesota. "If you can thicken remaining bone, you could theoretically bring bone mass back to normal" in patients, he says. "We have not had effective treatment for that." Drugs available today can slow ongoing bone loss but cannot fully repair weakened bones.



Heartfelt aid. Cholesterol-lowering statin drugs might help restore bones weakened by osteoporosis *(top)* to normal density *(bottom)*.

Statins lower blood cholesterol concentrations by blocking an enzyme called HMG Co-A reductase, which the body uses to synthesize the lipid. But there were already hints that the drugs might have broader effects. A meta-analysis published in the journal *Circulation* last year, for example, showed that people taking the drugs in large clinical trials had lower death rates from all causes, not just heart disease. Even so, Mundy says, finding an effect of statins on bone came as a "total surprise."

He and his team had been screening a library of 30,000 natural compounds to find potential bone-strengthening drugs. They tested the molecules in cultured mouse bone cells, looking for any that could increase the production of bone morphogenetic protein–2

CREDITS: (LEFT TO RIGHT) DEMPSTER *ET AL.*, *J. BONE MINER. RES.* 1, 15 (1986); DARESBURY LABORATORY

ScienceScope

DESY Debate Researchers are contesting a one-man campaign to shutter Germany's flagship particle physics facility. In an article last month in the magazine *Der Spiegel*, physicist Hans Grassmann charged that the Deutsche Elektronen Synchrotron (DESY) in Hamburg conducts "irrelevant physics" and advocated making better use of its $140 million annual budget. In response, DESY's directors, led by physicist Albrecht Wagner, posted a four-page rebuttal on the lab's Web site, along with more than 50 endorsements from physicists around the world. In one, Fermilab director Michael Witherell calls DESY "one of the world's most important physics laboratories."

But Grassmann, a German who recently joined Italy's University of Udine, contends that DESY's scientific output has been poor. And he denies that his attack was motivated by his failure to win a job at DESY, where he worked briefly as a student. But Grassmann has found few allies so far. Because German scientists fear reprisals, he says, it is "almost impossible" to find physicists "who would make such criticisms in public."

Choices, Choices The saga of where to build DIAMOND, Britain's new $290 million synchrotron x-ray source, has taken some new twists. Just as he was expected to announce which of two sites had won the machine, Trade and Industry Secretary Stephen Byers last week told Parliament that he will put off the choice until next month pending the completion of two new government studies.

Along with the delay came word that the charitable Wellcome Trust, which is footing $184 million of DIAMOND's construction costs, favors one competitor: the Rutherford Appleton Laboratory (RAL) near Oxford (*Science*, 22 October, p. 655). Indeed, trust officials asserted in a statement last week that their discussions with Byers's department and the French research ministry, which is contributing $57 million to the project, "have been based on the understanding that the ... RAL site was the preferred location." Wellcome said DIAMOND would face engineering problems at RAL's rival, the Daresbury Laboratory near Manchester.

But such claims are "flimsy," charges physicist Graham Bushnell-Wye, who helps run the "DIAMOND at Daresbury" campaign. And he predicts Daresbury is going to do just fine in the new studies, which will weigh engineering issues and opinions in the scientific community.