LETTERS

port to conservation in areas of conflict.

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The eligibility requirements for Computer Science, Engineering, and Mathematics Scholarships, administered by the National Science Foundation, are clarified. Efforts to assist Congolese conservationists in maintaining the protective function of national parks in the midst of a warring region are described. Members of BIOPAT discuss the philosophy and goals of the organization, which lists new species that can be named in exchange for a donation: "We believe...that the kind of private sponsorship encouraged by BIOPAT will promote serious taxonomic work and will foster the description and conservation of biodiversity." And on presolar grains: "Stones from a time before there was an Earth, they speak not only of other systems in our universe but of times before our world existed."

Eligibility for CSEM Scholarships

The News Focus article "Demand for tech workers benefits undergraduates" by Jeffrey Mervis (7 Apr., p. 40) accurately describes the Computer Science, Engineering, and Mathematics Scholarships (CSEMS) program funded by H-1B visa applications. However, the quotes Mervis uses could leave readers with the impression that the program is primarily targeted to increasing the number of women and minorities entering these fields, and it would be unfortunate if the article discouraged institutions for applying for scholarships for any eligible group of students.

The National Science Foundation is committed to increasing the participation of populations currently underrepresented in scientific and technical fields, but I wish to clarify that the CSEMS program does not have this as an explicit goal. Neither the enabling legislation nor the program announcement implies any conditions for student eligibility other than low-income status, that recipients be majoring in one of the targeted fields, and that recipients be citizens, permanent residents, or refugee aliens.

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Support for Congolese Conservationists

Gretchen Vogel ("Conflict in Congo threatens bonobos and rare gorillas," News of the Week, 31 Mar., p. 2386) describes the current plight of apes in the Democratic Republic of Congo (DRC) whose habitat is on the front lines of a civil war that began about 18 months ago. The apes, including bonobos and the eastern lowland gorilla, are being poached for food by troops and refugees. The protection from poaching

that national parks would normally provide for wildlife has been thwarted by the disarming of park guards by military leaders. The very presence of researchers and local dedicated conservationists. Vogel notes. has helped to alleviate the situation: however, the presence of dedicated Congolese researchers with outside support can be much more effective than efforts of foreign researchers. The Wildlife Conservation Society (WCS) has been operating throughout the current civil war in collaboration with the Congolese national parks in the Okapi Wildlife Reserve.

In Okapi, it has been elephants and ungulates that have been heavily hunted to feed armed forces, which have passed through from Bunia to Kisangani. WCS has been able to work with Gilman International Conservation to support the rehabilitation of infrastructure as well as the salaries of Congolese conservationists. The presence of committed Congolese conservationists has meant that each successive incoming administration or army command has been approached and educated about the importance of the reserve for conservation. This has not stopped all poaching, but it has led to the rearming of the reserve guards and has led to reduced hunting by armed forces.

The effectiveness of committed Congolese, in Okapi and elsewhere, has been recognized. UNESCO, with support from the United Nations Foundation (supported through a \$1 billion gift from media magnate Ted Turner), has promised nearly \$3 million over 4 years to five World Heritage Sites in DRC (Okapi and Garamba, Virunga, Kahuzi-Biega, and Salonga national parks). This support will be used for the salaries of park staff, the only presence on the grounds in some parks, as well as to provide equipment and monitoring. This initiative, which came from several conservation organizations with UNESCO, might become a model for United Nations sup-

BIOPAT Does Not Trade in Names

In response to the letter by A. Minelli, O. Kraus, and P. K. Tubbs ("Names for cash," 18 Feb., p. 1203) in which they critique the BIOPAT initiative, we feel that an explanation of BIOPAT's aims is called for. The title of the original News Focus article by Sabine Steghaus-Kovac that Minelli et al. responded to, "Researchers cash in on personalized species names" (21 Jan., p. 421), with its "names for cash" message, is a little misleading, and their letter focuses so narrowly on this issue that the main objectives of our initiative seem to have been overlooked. We welcome remarks to the effect that names should not be sold and that pure taxonomy needs support, because they reflect our own point of departure. BIOPAT was founded because taxonomy and species description has no strong lobby and is regarded as inferior to "real" scientific issues, and because local institutions and conservation initiatives need strengthening. However, because ecological and evolutionary research as well as the protection of biodiversity all depend on named taxa, straightforward naming has to advance if we are to fulfill our aim of achieving a general inventory of living organisms in our rapidly changing world. The final message is that pure taxonomy and species description need sponsorship.

There is nothing exceptionable about honoring sponsors publicly by naming species after them; this has already been common practice in the past. However, we agree with Minelli et al.'s concern that species should not be named for financial profit. BIOPAT was founded to guarantee high standards in the allocation of dedicatory names given on a sponsorship basis. The philosophy underlying our initiative is that species described under this scheme should be ones that would have been described anyway. BIOPAT has a scientific board that must approve any name or sponsorship arrangement before publication. The financial transaction can only be effected through BIOPAT and can only take place after the relevant description has been published in a peer-reviewed journal or after a peer review has been organized by the scientific board before publication. Half of each donation goes to the department of taxonomy of the institution concerned (not to the individual scientist), and the other half goes to pro-

SCIENCE'S COMPASS

jects in the countries of origin. The message conveyed by this rigorous process is unmistakable: By giving a certain sum, you can both promote the discovery and description of new species (taxonomy) and support re-

search into, and the protection of, biodiversity in natural habitats (conservation); and in recognition of your

What's in the name Euops doertheae? Sponsorship for taxonomy and for conservation in this bug's native land, Papua, New Guinea. (Length, ~2 to 3 cm.)

support, you will be honored with a dedicatory name.

Anyone can sell names; there is nothing in the international codes to prevent this. In our experience, however, sponsors are interested in high-quality work resulting in reliable, enduring nomenclature; they are wary of dubious amateur publications that are likely, sooner or later, to result in duplication. BIOPAT is unique in this respect, and we do not accept that the risk referred to by Minelli et al. that "vendors could 'discover' species and invent genera for profit" will be increased as a result of serious scientific activity that is subject to rigorous review. Thus, while agreeing that "name selling" is not an

acceptable approach, we dispute the notion that BIOPAT engages in this. We believe, on the contrary, that the kind of private sponsorship encouraged by BIOPAT will promote serious taxonomic work and will foster the description and conservation of biodiversity. Finally, we should also like to point out that BIOPAT is a transnational initiative to which any reputable museum, collection, or research institution may apply for membership.

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Metabolic Analysis in Drug Discovery

The special issue on drug discovery (17 Mar., pp. 1951-1981) focuses on the revolution being brought about by the Human Genome Project, making almost no direct mention of metabolism.

Numerable illnesses are disturbances of metabolism, and many drugs act by altering metabolism. The implied assumption is that once an enzyme inhibitor has been identified and a means found for delivering it to its target, the metabolic consequences are so obvious that they do not need to be thought about in advance. However, partial inhibition of a typical enzyme has little or no effect in vivo (1). Coping economically with huge increases in the number of potential drug targets that genomic science is uncovering—from about 500 molecular targets in current drug therapy to as many as 100,000 human gene products-will require procedures for eliminating the useless ones in advance. Such a screening process will require metabolic simulation (2) supported by mathematical methods for converting lists of gene products into metabolic pathways (1). Of the current molecular targets, about 30% are enzymes and 45% are receptors, and few

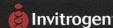


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FY00 Department of Defense Research on Combat Casualty Care Related Topics



The U.S. Army is soliciting proposals for \$1.1 million in research on combat casualty care related topics. The Combat **Casualty Care Research Program provides integrated** capabilities for far-forward medical care to reduce mortality and morbidity associated with major battlefield wounds and injuries. The goals of the research and development effort are to extend the "Golden Hour" for treatment in order to improve survival and minimize morbidity after life-threatening injuries, and to provide military medical capabilities for farforward medical or surgical care of battle and non-battle injuries. Preproposals are due by 5/26/00. Detailed information is available from the U.S. Army Medical Research and Materiel Command (USAMRMC) at http://wwwusamraa.army.mil. POC: Craig D. Lebo, Contracting Officer (301) 619-2036.

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