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## Letters

### Musings on Biomuse

"Muscle Melodies and Brain Refrains" (SN: 4/1/89, p.202) intrigues me as a physician.

I foresee the possibility of many future applications for the Biomuse system in that someday the bioelectric signals of the brain may help us understand various psychiatric problems, mood swings and probably brain-dysfunction disorders as well. It may even be able to help us understand whether a patient is telling the truth.

Optimistic people always seem to have music in their hearts, whereas those who are more pessimistic seem to be relatively silent. Maybe it's all in their heads after all!

Lloyd W. Morey  
Wauwatosa, Wis.

**Biomuse seems to open a new method of control.** Is it possible this will provide a way for a person to remain in a safe place while

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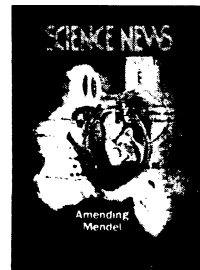
### Research Notes

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### Articles

#### 312 A Genetic Gender Gap

Cover: Molecular biology has revolutionized the study of genetics, but for the most part it has added new details rather than turning old thinking on its head. Among the more surprising findings to come from molecular studies in the past five years are those pointing to major differences between the mother's and father's genetic contributions to offspring. Contrary to a century of scientific thought, researchers find that male-derived and female-derived genes are not always created equal. (Illustration by Randy Fletcher)



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controlling a machine in a hazardous area, such as high radiation or explosive gases? After biosignals have been digitized, it seems they could be sent to distant places — such as the moon or outer space.

James F. Jackson  
Carlisle, Ind.

### Clouding up the issue

When I first studied meteorology in 1942, the clouds described in "Methane Clouding up the Twilight" (SN: 4/22/89, p.255) were called "noctilucent clouds." I notice that your article calls them "noctiluculent clouds." When was the name changed, and why? "Noctilucent" means "shining at night," which is certainly descriptive of these extremely high clouds.

Harold S. Lippmann  
Rockville, Md.

The "name change" was ours — a spelling mistake. *Noctilucent* remains the correct term.

— R. Monastersky

### Pollen 'acrobatics'

"Pollen provides ancient weather report" (SN: 4/8/89, p.220) makes clear our approach, which effectively provides the means of continental climate reconstructions as a complement to oceanic temperature reconstructions from deep-sea records. However, the palynologist's comment about the complexity of our method does not seem acceptable to us.

Our approach is quite simple in its principle: finding and utilizing modern analogs for fossil pollen spectra. If it seems complex, it is precisely for the same reasons that make it valuable: minimization of ecological noises (human action, vegetal dynamics and migration), estimates of the confidence degree of each result and, lastly, validation process.

All the programs involved are at the disposal of whoever may ask for them, and our study may seem "acrobatics" only to naturalists easily intimidated by mathematical

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# Important References from McGraw-Hill for your science library

The **McGraw-Hill Concise Encyclopedia of Science and Technology, Second Edition**, Sybil P. Parker, Ed., is now extensively revised. It includes a range of new developments including 400 all-new articles for coverage in areas where international scientific and technological advances have been most significant. These include Alzheimer's disease, expert systems, super-gravity, medical imaging, high-energy astrophysics, AIDS and more.

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tools more elaborate than elementary statistics.

In any case, the coherence of the reconstructions obtained in the two sequences presented — as well as in other sequences analyzed since then — shows the fitness and reproducibility of our method. Moreover, the compatibility between the values obtained and the present state of art in this field (deep-sea records and climate modeling from astrometric parameters) also argues for this method.

J. Guiot, A. Pons,  
J.-L. de Beaulieu, M. Reille  
Laboratoire de Botanique Historique &  
Palynologie  
Marseille, France

## CORRECTION

In "Global Change: The Scientific Challenge" (SN: 4/15/89, p.232), Francis P. Bretherton's affiliation is incorrectly described. Bretherton is director of the Space Science and Engineering Center at the University of Wisconsin-Madison.

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