

ing it to the museum library, they stopped even that small resource.

More personally, I have for some years taken a certain ironic pleasure in using funds earned from speaking engagements where I talk about my work on gender and science to fund a small but fundamental project in basic biology. The time and emotional energy saved by not applying for grants has enabled me to develop a second field of scholarly expertise (feminist science studies). Not only that, I think it is a terrific example for my students, in this high-tech day and age, to see that the most essential tools of science are the brain, a little ingenuity, and a high level of devotion.

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One Man's "Torment..."

Arthur Taub (Letters, 9 Jan., p. 159) refers to acupuncture as "torment" and later describes it as "20-minute, painful needling." In the same manner, one might describe Taub's own practice of anesthesiology as a

systematic drugging of the patient that infrequently results in death.

Little if any pain is associated with acupuncture. If acupuncture truly were experienced as "torment" or a "20-minute, painful needling," it wouldn't have the widespread use and interest that prompted the National Institutes of Health to study it in the first place.

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"Gaps" in the K-T Record

In their letter "Ancient sharks and rays," (9 Jan., p. 161), J. Mark Erickson *et al.* state that, where they work in North Dakota, "the K-T [Cretaceous-Tertiary] boundary section is not complete because units of terrestrial Hell Creek and Ludlow Formations intervene...." They then state, in the next paragraph, that they sampled "nearshore marine facies on each side of the K-T boundary" and later say that "[s]ignificant species-level change in cartilaginous fish faunas occurred across the K-T boundary in the Williston Basin, and apparently globally...."

These remarks appear to be contradictory. Because one has Upper Cretaceous and Paleocene rocks superposed, one does not necessarily also have a K-T boundary section. The tick of the geological clock that we call the K-T boundary occurred whether or not we have rocks and fossils preserving the event. Probably no sections actually record the event, but several come close (tens of thousands of years) on one or both sides. The section studied by Erickson *et al.* is not one of those.

Data from a variety of sources [see references in (1)] suggest that the gap they study in the section through the K-T interval covers at least 1 million years—an extremely long time if one is attempting to examine species-level turnover.

Given this gap, I conclude that their data cannot be used to support the statement that "significant species-level change in cartilaginous fish faunas occurred across the K-T boundary in the Williston Basin, and apparently globally." As I have noted (1), because of this well-documented gap, it is not clear "whether the disappearances from the Western Interior [of elasmobranchs] are actually extinctions at the K/T boundary or whether the species survived elsewhere in marine environments into the earliest Paleocene." This also extends to statements

Them.