New NSF Proposal Review Criteria

For several years, the National Science Foundation has been developing two criteria for all proposals: Scientific Merit and Broader Impact. PIs were asked to address both and reviewers asked to evaluate both. The implementation of this request has been increasingly emphasized and you should be aware of a new directive in this regard:

Effective October 1, 2002, NSF will return without review proposals that do not separately address both merit review criteria within the Project Summary.

The broader impact may relate to any of a number of aspects of the research, e.g. (not an exhaustive list)

* education of students
* conservation of primates
* developing international cooperation
* enhancing the science education of populations under-represented in science

Please keep this new requirement in mind as you prepare proposals to NSF.

Mark Weiss
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Kudos for Physical Anthropologists

Morris Goodman, recipient of the 2002 AAPA Charles R. Darwin Lifetime Achievement Award, was recently elected to the National Academy of Sciences. See the following website for details:

Congratulations to Emilio Moran, recipient of the 2002 Robert McCorkle Netting Award from the Cultural Ecology Specialty Group of the Association of American Geographers.

For details on this award, see:
http://www.u.arizona.edu/~batterbu/cesg/Netting.html.

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Editors note: Opinions expressed in this column are those of their authors alone. They do not represent official positions of the AAPA, nor do they necessarily reflect opinions of its officers, executive committee or the editorial board of this newsletter.

Bone Clones’ “re-creation” of Kenyanthropus

We want to inform the AAPA membership that the company Kronen Osteo has had no access to the Kenyanthropus hominin skull (KNM-WT 40000) of which they sell a Bone Clones “re-creation”. Casts of this fossil are not yet available and only a limited number of photographs have been published. Consequently, substantial aspects of the company’s “re-creation” of KNM-WT 40000 qualify as pure “creation”.

In 2001 we announced new Plio-Pleistocene hominin fossils from Lomekwi, Kenya (Leakey et al, Nature 410, 433-440, 2001). The finds include a cranium, KNM-WT 40000, which we designated as the type of a new hominin genus and species Kenyanthropus platyops. We are currently preparing a full description of the cranium, and the National Museums of Kenya does not yet sell casts of the specimen. It is thus with some surprise that we learned from US colleagues that, what appears to be a cast of the cranium takes pride of place on the cover of the Kronen Osteo 2002 catalogue (www.boneclones.com).

Under the name “Bone Clones” Kronen Osteo offers for sale what they describe as “re-created” hominin fossil crania. Their catalogue explains that the specimens are sculpted, based on casts and photographs of the originals. By not physically re-casting authorised casts the company avoids infringing on copyright. We do not intend to discuss here the quality of those “re-creations” that are based on actual casts and detailed photographs of well-published specimens. Neither do we on this occasion intend to consider the morality of using such “re-created” casts. What we do wish to bring to the attention of the membership of the AAPA, however, is that the “re-creation” of KNM-WT 40000 is a special case. Based on just a few photographs, it differs significantly from the “real thing”.

Published photographs of the Kenyanthropus cranium show its front, top, left side, and palate. Leaving aside the question how well these views are “re-created” by Kronen Osteo, it is clear that the cranial base, right side and rear must have been “created”. This has been done in part by incorporating the isolated temporal bone KNM-WT 40001, a specimen we explicitly did not assign to Kenyanthropus. It is also worth noting that the photograph shown in the catalogue as the example from which the sculptor is working is a three-quarter view published in National Geographic Magazine (October 2001). This was not a scientific photograph to document the cranium’s morphology. One of us (MGL) was simply asked by the photographer to pose holding up the separate facial and neurocranial parts of the cranium, without any intent of aligning them correctly. This may be fine for a popular science photo, but it is troubling when it is taken as the source for a “re-created” cast to be used in academic and scientific settings. We were not approached by Kronen Osteo for advice or comments.

Does any of this really matter? The current situation is that an important, but yet only partially described piece of evidence for human evolution is accompanied by a scientifically inaccurate facsimile, that has the potential of reaching a large audience of students and nonspecialists. We know that some of our colleagues have assume that it was sculpted using an authorised cast. Indeed, one of us (FS) has received comments suggesting that information in the Nature article is at odds with the morphology of the Bone Clones cast, and by inference questioning our descriptions. All we can do at this stage is to maximize awareness among colleagues of the discrepancy between the fossil evidence, and the creative output of Kronen Osteo.

One may be deeply concerned how the creationist lobby would respond when human evolution classes are being taught, and the general public informed through museum exhibits, using a “re-created” and partially invented fossil. More parochially, the members of the American Association of Physical Anthropologists should consider whether the prominent presence of Kronen Osteo exhibiting at their annual meetings amounts to an endorsement, even if by implication only…..

Thanks to the numerous colleagues who have discussed this matter with us, and have commented on drafts of this contribution.

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