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LETTERS

Institute of Human Origins Breakup

The 1 July letter from Donald C. Johanson, William H. Kimbel, and Susan C. Shea (p. 14) casts a flattering light on Johanson and the Institute of Human Origins (IHO) in response to Ann Gibbons' 27 May News article (p. 1247) about IHO's breakup. In fact, Gibbons should be congratulated for presenting a balanced set of views and portraying both Johanson and IHO as neutrally as circumstances permitted.

Gordon Getty's 25-year record of philanthropy to science is one of singular distinction. Getty has donated more money to IHO than all other supporters combined over the last 5 years. His 20-year involvement with the L. S. B. Leakey Foundation (he is chairman of the Board) places him in regular contact with many of Johanson's peers. Getty's basis for making informed, objective decisions about Johanson and IHO would appear to be well founded.

One aspect of IHO's breakup has received remarkably little attention. First, referring to the breakup as a "separation," as does the letter by Johanson *et al.*, is revisionism. In fact, the entire geochronology staff was *fired* on 3 May, despite the provision in Getty's Board motion for a strategically planned separation as an alternative to the personnel changes he sought. IHO's Board opted to fire the geochronology staff summarily rather than to discuss constructive alternatives.

The fired geochronology staff were thrust literally overnight into initiating their own nonprofit public benefit corporation (the Berkeley Geochronology Center, BGC), requesting transfer of National Science Foundation (NSF) grants while simultaneously applying for NSF eligibility, and explaining to scores of collaborators around the world that their ongoing research was suspended indefinitely pending resolution of laboratory access, which was refused by IHO.

The termination severely hindered presentation of the Eighth International Conference on Geochronology, Cosmochronology, and Isotope Geology (ICOG-8) from 5 to 10 June because the fired employees had critical roles in ICOG-8 production. Indeed, the office used to coordinate the ICOG-8 conference was locked just 2 days before the conference began, as more than 950 conferees from around the world were arriving and in need of logistical guidance, because IHO representatives said they had received too little credit in the conference program. The argon-40–argon-39 dating lab was locked on 4 June, which excluded tours scheduled as part of the conference. Many conferees had received funding to attend the conference on the basis of their plans to visit this laboratory in order to glean technical information. The laboratory was opened at 4 p.m. on the last day of the conference under threat of court order.

Meanwhile, the fired staff was denied access to facilities for 2½ months, even on an interim basis to fulfill urgent research commitments, despite BGC's repeated offers to pay rent, utilities, and all other reasonable costs of laboratory use. BGC was forced to take legal action, applying for a court injunction allowing resumption of research activities. IHO initially opposed the injunction, but finally capitulated after the Attorney General of California intervened in the case in support of BGC. The Attorney General stated in a memorandum of points and authorities that

> Given defendant IHO's express and repeated abandonment of its trust, it is the Attorney General's view that plaintiffs [BGC] will prevail on the merits of their claim. Moreover, the showing of irreparable injury by plaintiffs likewise appears uncontroverted. Based on these factors . . . the Attorney General urges this Court to grant a preliminary injunction prohibiting IHO from interfering with BGC's use of the geochronology laboratory . . . and equipment and appointing BGC as interim trustee of all such assets pending a trial on this matter.

IHO subsequently signed an agreement giving BGC possession and title to all equipment in the historic BGC laboratories. It is impossible to convey adequately the detrimental impact of this "lockout" on collaborating scientists throughout the world whose research depends on data from our group. The viability of some pending samples has already expired because of radioactive decay of argon-37; expiration of many more is imminent.

In short, science and scientists have been held hostage to a bid for additional funding from Getty, and BGC has been punished without cause for Getty's withdrawal of support from IHO. Why should there be such punitive behavior toward a department whose scientists published more than 90% of IHO's journal articles and brought in more than 70% of its grant funds over the last 5 years? Historic friction between Johanson and BGC's geo-

chronologists, combined with an IHO Board majority loyal to Johanson and antagonistic to BGC's friendly relations with Getty, appear to be the principal factors. BGC scientists have enriched IHO in many ways over the past 5 years. Results of their activities are still being used for fundraising in the private sector by IHO.

BGC simply wants to get back to doing science. A significant body of research by BGC staff, and dozens of collaborators around the world, has hung in the balance. More than 30 different projects funded by NSF, the Cal Space Institute, the U.S. Geological Survey, the National Geographic Society, and the L. S. B. Leakey Foundation have been disrupted by IHO's refusal to allow BGC to use the facilities historically funded through the efforts of its staff and constructed, applied, and maintained by them.

This is the legacy of the IHO breakup.

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Anyone reading about the funding troubles of the Institute for Human Origins ("Clash with billionaire costs anthropology institute dearly" (News, 27 May, p. 1247) might receive the impression that participating in a NOVA mini-series is damaging to the interests of scientific research. That is very regrettable. To fulfill the extremely ambitious demands of NOVA's three-part series "In Search of Human Origins," Don Johanson dedicated many months of his time, remunerated at extremely modest public television levels. But in terms of furthering public understanding of science, the effort has paid off handsomely. More than 17 million PBS viewers watched the series, which was the first serious exploration of human evolution on television in 15 years, and that number will continue to grow as the series is repeated over the next several years. In addition, the series with its related teaching materials will have a long life in the schools.

Perhaps because Johanson *has* spent so much time raising public support for paleoanthropology, he understands the importance of returning the fruits of their investment to the public. If more scientists felt as Johanson does, perhaps the public would be better informed about scientific research and it would be less difficult to find the resources to support it.

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UV-B and Ozone Observations

In their Technical Comment "Analyzing ultraviolet-B radiation: Is there a trend?" (27 May, p. 1341), Patrick J. Michaels, S. Fred Singer, and Paul C. Knappenberger state that I did not claim as a trend observations of a summer ozone minimum (230 Dobson units) and alpine-level ultraviolet-B radiation (UV-B) at South Central Texas on 23 June 1993 associated with tropical storm Arlene (*1*). However, my unpublished paper also describes record low ozone and correspondingly high UV-B after Arlene and during the entire summer of 1993. The regional nature of these observations is established by simultaneous observations with two identical ozonometers of record low ozone at Seguin and four other Texas cities.

Michaels *et al.* also incorrectly state that I used an instrument "similar to the Toronto instrument" used by Kerr and McElroy (*2*). The observations were made with two Total Ozone Portable Spectrometers (TOPS) (*3*). Although these instruments are considerably less sophisticated than the Brewer instrument used at Toronto, they measure direct UV-B and ozone sufficiently well to have detected a drift of several percent in an extrapolated calibration of the Nimbus-7–Total Ozone Mapping Spectrometer some 6 months before the drift was confirmed by the world-standard Dobson spectrophotometer (instrument 83) at Mauna Loa Observatory in Hawaii (*4*).

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References and Notes

1. F. M. Mims III, in preparation.
2. J. B. Kerr and C. T. McElroy, *Science* **262**, 1032 (1993).
3. The TOPS ozonometer is a two-channel version of the UV-B radiometer I described in 1991 [*Sci. Am.* **263**, 106 (August 1991)].
4. F. M. Mims III, *Nature* **361**, 505 (1993).

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Nitric Oxide Toxicity and Poly(ADP-Ribose)Polymerase

In their report "Nitric oxide activation of poly(ADP-ribose) synthetase in neurotoxicity" (4 Feb., p. 687) (*1*), Jie Zhang *et al.* incorrectly state that a paper of ours (reference 21) (*1*) deals with macrophage cytotoxicity. The paper did not deal with macrophages, but showed that inhibitors of poly(ADP-ribose) polymerase (PARP) prevented nitric oxide (NO)–mediated toxicity.

One major caveat of our and Jie Zhang *et al.*'s studies is that the evidence is only indirect, based on the effects of pharmaco-