that we have recently completed at Texas A&M University. In short, a well-supported phylogeny for the order Cetartiodactyla (Cetacea and Artiodactyla) was found by using eight independant nuclear DNA fragments. I wish to clarify an incomplete quote. We are not the first group to sequence or analyze multiple nuclear DNA genes in an attempt to determine the position of the Cetacea. For a recent thorough review of this topic, interested readers are referred to Gatesy *et al.* (*1*) and references therein.

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References
1. J. Gatesy *et al.*, *Syst. Biol.* **48**, 6 (1999).

Cold Fusion Prediction

Eugene F. Mallove (Letters, 18 June, p. 1929) maintains his continued enthusiasm for cold fusion and writes about me, "Garwin and others are simply ignoring data in favor of their theories that these low energy nuclear reactions are impossible. Garwin's quoted assertions indicate a paradigm paralysis that is familiar to historians of science. Its remedy is a hard look at data, not uninformed opinion."

In the spirit of informing your readers, I suggest a look at the Mallove prediction to be found at www.math.ucla.edu/~barry/CF/mmbet.html. This URL documents a bet between Eugene Mallove and Barry Merriman and others as to whether by 19 July 1996 "cold fusion (CF) will be widely accepted as existing; as energy producing; or as economically viable." Mallove's written testimony to the subcommittee on energy of the U.S. House of Representatives Committee on Science, Space, and Technology (5 May 1993) includes, "Prototype cold fusion home heating units are widely expected to emerge this year or next...."

I would love to see cold fusion a reality. However, my own calendar reads 1999, and I have yet to see any home heating units or electrical power generation by cold fusion.

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Growing Metallic Whiskers: Alternative Interpretation

Additional experiments have shed new light on the phenomenon reported by one of us and L. Farber (Reports, 7 May, p. 937). The fabrication details of the porous samples examined in this work, Ti_2GaN, $TiGa_3$, and $FeGa_3$, are described elsewhere (*1*). X-ray diffraction of the samples indicated that they were predominantly single phase, with small (≈5 vol. %) amounts of unreacted Ga. Two sets of samples were prepared; one set was quenched in water from the processing temperature of 800°C, the other was furnace cooled. The lattice parameters of all samples tested remained unchanged before and after the growth of the Ga filaments, implying that it is unlikely that the crystalline lattice is the Ga source (*2*).

The surfaces of the furnace-cooled samples were sporadically covered by nonwetting Ga droplets (*1*). The droplets, which appear to be connected to the substrate by what can best be described as liquid Ga stringers or ligaments (*1*), increased in size with time. Samples that were slowly cooled did not grow whiskers. Conversely, the quenched samples grew whiskers identical to those previously observed (*2*). The mutual exclusivity of the whiskers and droplets implies that their source is identical. Because the lattice is not the Ga source, by a process of elimination, we believe that it must be unreacted Ga trapped in the internal surfaces or pores. Given that the formation of the droplets results from Ga dewetting of the internal surfaces, we conclude that the driving force for the growth of the whiskers is the overall reduction in surface energy and not a reaction with the atmosphere or a phase transition (*2*). Furthermore, the whiskers are not monolithic, but are comprised of bundles of Ga fibrils (*1*). The growth habit of these fibrils is unknown, but must reflect a strong anisotropy in growth along a given crystallographic direction.

Last, the necessary requirements needed to grow whiskers are the right combination of surface diffusivity, anisotropic growth, and nonwetting. If these conditions can be achieved for higher melting-point metals, such as Bi and Sn, they could be grown as whiskers as well.

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References and Notes
1. Relevant text and figures can be found at www.materials.drexel.edu/faculty/Barsoum/Abstracts/A21.htm
2. M. W. Barsoum and L. Farber, *Science* **284**, 937 (1999).
3. We thank L. Ho-Duc for help in carrying out some of the experiments and M. Gamarnik and T. Twardowski of Drexel University for many helpful discussions. Partially supported by the Division of Materials Research of the National Science Foundation (DMR 9705237).

Minority Data

I was surprised to read in the article by Jeffrey Mervis (News Focus, 28 Aug. 1998, p. 1268) that my own mathematics department was ranked second in the nation for producing 12 minority Ph.D.s in