

tions—Johns Hopkins University and Johns Hopkins Hospital/Health System (JHH/S). Since their origins in the 19th century, the university and the hospital have had separate charters, separate governing boards, and separate budgets. This will continue to be the case.

In devising a new governance structure, the trustees sought to ensure that these distinct but interdependent corporations will respond to the health care marketplace in an integrated way. Hence, the new Office of Johns Hopkins Medicine was created, chaired by the president of the university. This new office will more tightly coordinate all of the Johns Hopkins University School of Medicine and JHH/S health care delivery activities. The president of the Hospital/Health System and the dean of the School of Medicine are a part of the office and retain responsibility for the operations of the Hospital/Health System and the School of Medicine.

We also would like to point out that the Hopkins Health Maintenance Organization (HMO), which was known as the Johns Hopkins Health Plan, was developed and sold by the Johns Hopkins Health System, not by the university.

The important point to emphasize, however, is that after 4 months of intense study, in which they examined every imaginable model for governance, the trustees decided on an organization they determined would best serve the two Johns Hopkins institutions. At a time when many of the old economic and policy assumptions are being turned upside down, we are determined still to succeed. We will do so through cooperation and collaboration between a medical school and a hospital—health system that, although separate, share the same name, the same heritage, and the same longstanding commitment to innovation and excellence.

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Genes and Grocery Stores

The opposition of religious leaders to the patenting of genes and genetically engi-

neered organisms (R. Stone, News & Comment, 26 May, p. 1126) illustrates the confusion generated by treating DNA as equivalent to life itself (1). The United Methodist Church objects to the patenting of engineered genetic material because it constitutes “the commodification of life,” as if DNA, and only DNA, could be equated with “life” (2). No criticism here of grocery stores, farmers, or restaurants for “[reducing] life to its commercial value and marketability,” although one might think that the sale of tomatoes, chickens, and whole-wheat bread also constitutes the commodification of life. Also, most of the (former) life on sale at the grocery has been “engineered” as thoroughly as any synthetic gene through techniques such as selective breeding, pruning and training, and the generous use of fertilizers and pesticides.

Scientists who write about DNA in ways that raise it to the status of a mythic entity should not now be surprised to find an unfortunate convergence between scientific and religious mythology, one that in the present political and social climate is likely to play out to their disadvantage.

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Source of Comets

Richard A. Kerr portrays the discovery of comet-size bodies in the Kuiper belt by Anita Cochran *et al.* (“Home of planetary wanderers is sized up for first time,” Research News, 23 June, p. 1704) as another example of an overblown discovery by the Hubble Space Telescope (HST). The implication is that Cochran’s work is not important, when, in fact, it is quite significant and used the HST at the limits of its capabilities. It would not have been possible with ground-based instruments.

Gerard Kuiper’s idea of a comet belt beyond Neptune has received considerable attention since being revived by J. A. Fernandez in 1980 (1) [although the 1988 work (2) mentioned by Kerr was highly significant, cometary dynamicists were discussing the idea of a trans-Neptunian comet belt throughout the early 1980s]. In the early 1990s, the advent of an enabling technology, large-area CCD’s, made possible the discovery of the first several objects in the Kuiper belt by David Jewitt and Jane Luu,

who continue to do outstanding work in finding these distant giant comets. However, all of these objects are on the order of 100 to 400 kilometers in diameter, far larger than typical comets observed passing through the inner planets region. The existence of a handful of large bodies in the Kuiper belt (as this cometary reservoir has come to be called) is not proof that the much larger population needed to supply the short-period comet flux in the inner solar system actually exists. Indeed, Jewitt and Luu point out (3) that, given the limited number of discoveries to date, they cannot rule out a Gaussian-size distribution for the Kuiper belt objects, in which there would only be large bodies and no comet-size bodies with diameters of 1 to 10 kilometers.

Cochran *et al.*’s discovery thus provides the missing link in the Kuiper belt problem and demonstrates that typical comet-size bodies do exist, and in sufficient numbers to provide the observed short-period comet flux. Luu’s comment quoted in Kerr’s article that the population can be extrapolated from the ground-based discoveries, appears to contradict her own paper (3). She and her co-author (2, p. 1873) stated, “We note that Gaussian or weak (e.g., $q = 2$) power-law distributions may not accommodate the large number of $D \sim 1$ to 10 km sized objects that are required if the trans-Neptunian region is the source of the short-period comets.” Jewitt and Luu conclude (2) that the size distribution of the largest bodies was characterized by a weak power law with $q < 3$.

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Corrections and Clarifications

In the report “Tissue- and species-specific expression of sp56, a mouse sperm fertilization protein” by L. H. Bookbinder *et al.* (7 July, p. 86), the units in the third column of table 1 on page 88 should have been “fg” (for femtograms), not “pg.”

In the News article “Share and share alike isn’t always the rule in science” by Jon Cohen (Special section: Conduct in Science, 23 June, p. 1715), the name of the International Union of Crystallography was given incorrectly on page 1718.