article "A new face for the glutamate receptor" by Marcia Barinaga (13 Jan. 1995, p. 177). On page 178, this article states that there is evidence suggesting that "the big loop [in the glutamate receptor] is phosphorylated, and as phosphorylating enzymes act only within the cell, that would mean it must be inside the cell." The reader is left with the impression that the statement *phosphorylating enzymes act only within the cell* is an accepted scientific fact, but it contradicts over 50 scientific papers published on the activity of extracellular protein kinases and extracellular phosphoprotein phosphatases in various cell types. Most of these papers have appeared in prestigious journals. Several research groups have provided evidence that ectoprotein kinases operate on the cell surface, and a review article updated through 1990 is available (*2*).

In particular, with regard to receptor function, readers might be interested to learn that ectoprotein kinases are active on the surface of cells that store the cosubstrate of protein kinase, adenosine triphosphate, within secretory vesicles and release it by exocytosis upon the stimulation of receptors or ion channels, such as platelets and neurons (*3*). Furthermore, the recent identification and characterization of an ectoprotein kinase with catalytic properties of atypical protein kinase C on the surface of brain neurons (*1*, *4*) can shed new light on the controversy regarding the phosphorylation of extracellular sites in the glutamate receptors, and the potential involvement of such extracellular phosphorylation in long-term potentiation, a process implicated in the formation of memory traces in the brain.

Finally, clinical investigators also could benefit from learning about this research area, as exemplified by recent reports implicating ectoprotein kinase activity in the action of Alzheimer's amyloid peptides (*4*) and in malignant transformation (*5*).

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Downsizing at DOE Facilities

I would like to clarify a statement attributed to me in the News & Comment article "Deep cuts put heat on fusion, labs," by Andrew Lawler (3 Nov., p. 728). In a description of the impact of federal budget cuts, the National Institute for Petroleum and Energy Research (NIPER) in Bartlesville, Oklahoma, and two fossil fuel technology centers in West Virginia and Pennsylvania were listed as "likely targets for privatization."

The U.S. Department of Energy (DOE) is considering privatizing NIPER but we are not considering privatizing the Pittsburgh Energy Technology Center, or the Morgantown, West Virginia, Energy Technology Center. What we are doing is consolidating some management functions as part of DOE's restructuring and downsizing. As a result, the two facilities in West Virginia and Pennsylvania will operate under a single management structure. This consolidation will result in a reduction of some 90 positions, in total, at the two sites.

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Comet Hunting: Discipline and Serendipity

The News article "Is Hale-Bopp the next great comet?" by Richard Kerr (29 Sep., p. 1818) describes the excitement felt by the astronomical community in anticipation of possibly the brightest comet of this century passing closest to the Earth. However, the article incorrectly identifies Alan Hale as an "amateur" astronomer. Hale received a Ph.D. in astronomy from New Mexico State University in 1993. Although Hale's primary research is not comets, he enjoys "comet-hunting" as a hobby. It was during one such session using his personal telescope in his backyard last July that he stumbled upon what may be the great comet of the 20th century. Serendipity continues to play an important role in astronomical discovery.

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