I find that graduate students in the sciences, at one time myself included, tend not to realize just how well they are being prepared for any conceivable career choice. It seems that the trauma of the graduate school–postdoctoral daze must first be given time to subside before most can appreciate the universality of their training. Some self-inspection is necessary, as Gale implies, to realize that academic appointments are just one among the many rewarding ways to translate these increasingly valuable skills into a livelihood.

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Environmental Health: Nickel-and-Diming It

Researchers in environmental toxicology should endorse the argument advanced by B. M. Lester, L. L. LaGasse, and R. Seifer (Policy Forum, *Science*'s Compass, 23 Oct., p. 633) on how to interpret the outcome of cocaine abuse during pregnancy. A predicted epidemic of "crack babies" never materialized. Instead, they note, the offspring exhibit subtle deficiencies such as IQ reductions of about 3%. Although small magnitude, it is a gap with vital public health and policy implications that even many scientists fail to appreciate.

I urged such a perspective for neurotoxicity risk assessment some time ago (*1*) and for grasping the consequences of maternal drug abuse (*2*). The definition of excessive lead exposure in children is now based largely on shifts in the population distribution of IQ scores (*3*), as are many of the economic benefits flowing from the removal of lead from gasoline (*4*). The debate about the health risks of methyl mercury in fish is essentially a debate about similar shifts in measures of neurobehavioral development (ScienceScope, 18 Sept., p. 1779). The health risks of polychlorinated biphenyls (PCBs) and endocrine disruptors can be viewed from the same vantage point (*5*). Environmental health protection, so to speak, is a nickel-and-dime business.

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References

1. B. Weiss, *Trends Pharmacol. Sci.* **9**, 59 (1988).
2. ———in *Cocaine Mothers and Cocaine Babies: The Role of Toxins in Development*, M. Lewis and M. Bendersky, Eds. (Erlbaum, Hillsdale, NJ, 1995), pp. 41–55.
3. Centers for Disease Control, *Preventing Lead Poisoning in Young Children* (U.S. Department of Health and Human Services, Washington, DC, 1991).
4. *The Benefits and Costs of the Clean Air Act, 1970 to 1990* (U.S. Environmental Protection Agency, Washington, DC, 1996).
5. B. Weiss, *Neurotoxicology* **18**, 581, (1997); J. L. Jacobson and S. W. Jacobson, *N. Engl. J. Med.* **335**, 783 (1996).

An Early Snowball Earth?

In their article "A Neoproterozoic snowball Earth" (Reports, 28 Aug., p. 1342), Paul F. Hoffman *et al.* report that global ice-house conditions existed during the Proterozoic, as inferred from negative carbon isotopes in carbonate rocks from Namibia. These conditions are said to have led to the near termination of life on Earth. In summary, the hypothesis suggests that global glaciation existed until volcanic outgassing increased carbon dioxide (CO_2) concentrations to 120,000 parts per million of volume, at which time the global ice-house conditions collapsed. Several issues of geology and climate, however, remain unresolved.

First, how did global glacial conditions come about? Reduced solar forcing could not have been the cause, because the solar constant was lower before the breakup of the Rodinia supercontinent. A positive ice-albedo feedback triggered by reduced CO_2