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# The Chronicle of Higher Education

# Opinion & Arts

From the issue dated September 24, 1999

## LETTERS TO THE EDITOR

# There's More to Biology Than Molecules

To the Editor:

David L. Wheeler's article on biology's new frontiers gives the impression that all exciting things going on in the life sciences these days have to do with technological advances at the molecular level ("For Biologists, the Postgenomic World Promises Vast and Thrilling New Knowledge," August 13).

However, a lot of exciting things are also going on at the organismal level in, for example, conservation biology, paleobiology, ecology, and evolutionary theory. Unfortunately, many colleges and universities are producing biologists whom Herbert Marcuse would have referred to as "unidimensional." They are, essentially, illiterate biologists who have never read Theodosius Dobzhansky, Ernst Mayr, Richard Dawkins, or even Darwin -- to the point where they believe that if you know how to operate a sequencer, you know how to do science.

To answer the larger questions in biology, we need to provide our students with broader perspectives and an appreciation of science as a human endeavor. Biology is, in the end, an integrative branch of knowledge. Although molecular studies plays a very important role in the life sciences, it is just one of the many tools we need to use to further our understanding of nature.

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