

neuroethical research addresses these types of questions (e.g., Farah et al., 2004).

Finally, neuroscience affects us all by changing the way we think about human nature. The neural underpinnings of responsible behavior, moral reasoning, consciousness, and spiritual experience have all been the subject of recent neuroscience research. This research seems to challenge the traditional worldview according to which people have immaterial minds or souls that control their behavior by the exercise of free will. Yet, another important strand of neuroethical research is concerned with the real and apparent implications of neuroscience for such metaphysically freighted concepts as morality, consciousness, and religion (e.g., Greene & Cohen, 2004).

As cognitive neuroscientists, we are not accustomed to thinking about the social and ethical implications of our work. Indeed, we are all too aware of our work's limitations and may be skeptical of its potential to play any role of consequence in the real world. But real-world applications are driven as much by market forces as by ivory-tower appraisals. In addition, scientific progress is notoriously hard to predict. For these reasons, it is time for cognitive neuroscientists to engage with neuroethics.

Beginning in 2007, the *Journal of Cognitive Neuroscience* will begin publishing articles on neuroethics. In so doing, it joins several other journals in disseminating scholarly work in this area. These include the *American Journal of Bioethics*, which has just established the quarterly *AJoB-Neuroscience*, the new journal *BioSocieties*, which describes itself as "an interdisciplinary journal for social studies of the life sciences, genomics and neuroscience," and the forthcoming *Neuroethics*. Each of these journals will come to occupy a different niche in the intellectual ecosystem of neuroethics, and each will be of interest to cognitive neuroscientists seeking a better understanding of the broader implications of their field. The decision to include neuroethics in the coverage of *JOCN* was based on the belief that cognitive neuroscientists have an important role to play in the development of neuroethics. Our

community is essential to keeping neuroethics rigorous and realistic about the current capabilities of our science, as well as attuned to its future prospects.

JOCN is especially interested in reports of empirical research and scientifically grounded analyses of the social, legal, and ethical implications of cognitive neuroscience. In keeping with our general editorial policy, work of a primarily clinical nature will not be considered. Just as *JOCN*'s patient-based research articles are limited to those that address basic science questions using clinical populations, our neuroethics coverage of clinical populations or methods will be limited to those that address nonmedical issues. For example, the use of neuroimaging for psychiatric diagnosis, despite its many important neuroethical dimensions, is not an appropriate topic for *JOCN*. The examples of neuroethics research given earlier are intended to provide some guidance. The Web site neuroethics.upenn.edu includes many examples of scholarly articles in neuroethics, both clinical and nonclinical. Authors are encouraged to contact me to discuss the suitability of their neuroethics manuscripts for *JOCN*.

Martha J. Farah
mfarah@psych.upenn.edu

REFERENCES

- Farah, M. J., Illes, J., Cook-Deegan, R., Gardner, H., Kandel, E., King, P., et al. (2004). Neurocognitive enhancement: What can we do and what should we do? *Nature Reviews Neuroscience*, 5, 421–425.
- Greene, J. D., & Cohen, J. D. (2004). For the law, neuroscience changes nothing and everything. *Philosophical Transactions of the Royal Society of London, Series B, Special Issue on Law and the Brain*, 359, 1775–1785.
- Illes, J., Kirschen, M. P., Edwards, E., Stanford, L. R., Bandettini, P., Cho, M. K., et al. (2006). Working Group on Incidental Findings in Brain Imaging Research. Ethics. Incidental findings in brain imaging research. *Science*, 311, 783–784.
- Phelps, E. A., & Thomas, L. A. (2003). Race, behavior and the brain. *Political Psychology*, 24, 747–759.