Re-drawing the Line
A Commentary on ‘Preparation for Professional Self-Regulation’ (Braxton and Baird)

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Keywords: professional self-regulation, research conduct

Most scientists like to characterize themselves, like the ‘80s pop icons ‘the Police’, as “spirits in the material world”. This, of course, is a throwback to the notion of science as a calling, not unlike the priesthood. The worlds of the secular and of the sacred may seem non-intersecting, but the inhabitants of these worlds of knowledge seek goals single-mindedly according to rules inculcated through long training by professional practitioners, both pre- and post-degrees. According to Braxton and Baird,1 graduate school is the site of most of this socialization, with the rest coming on the job.

Becoming a scientist – and being a scientist – in the 21st century is a maddening experience. The stereotypical “spirit” living in, but not sharing the dominant values of, the material world surely applies to only a fraction, perhaps even a minority, of practitioners. The doing of science, depicted as a refuge known as “the ivory tower”, has always been part of the material world down below. Indeed, scientists are faced with a slew of norms in the workplace that may challenge their graduate socialization: Honor thy data – be skeptical in interpreting the results of experiments, but suppress information that attenuates the company’s claims? Share thy data – but do not disclose them prematurely, especially to competitors bent on licensing and patenting? Use thy data – to advance the state of knowledge, but not one’s career or the company’s market share?

Scientists now routinely inhabit the corporate world and the policy world, as well as the academic world. The stereotype of “other-worldly scientist” appears particularly tenuous and certainly dated today. Merton2 was not wrong, just a citizen of a different

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time and place, a postwar period where fascism posed threats to the accumulation and application of knowledge, rather than the post-industrial imperatives of dot-coms and embryonic stem cell research. Just as business and government exhibit a distribution of ethics among the ranks of their practitioners, so do universities who grow new PhDs and reproduce the knowledge carriers of the next decades.

Moreover, for nearly a half-century, scientists have debated whether the “norms of science” that Merton codified were prescriptive or descriptive. According to some, they were nothing more than ideal types and never captured actual behavior. Rather, they provided a neat rhetoric for characterizing what scientists do and how other-worldly their values – purportedly driven by the pursuit of knowledge – seemed to be.

It is time, indeed long overdue, to acknowledge the diversity in our midst – the diversity of practitioners, of work settings, and of professional conduct (that has always been present more or less, by the way). We must fashion policies and procedures that not only encompass a range of behavior, but at the same time sustain the ability of various communities to generate knowledge and practitioners who will carry on with a moral center. Those policies must further reflect insight into the vices of the material world that will inevitably confront ethical principles and intrude on the convenient but narrowly construed ideal types of another world and time.

Analytical categories for making sense of our worlds and, more important, the communities within them – public, private, nonprofit, and for-profit – may be familiar, and dear. Yet at some point, they must be understood as representing only part of what is seen – foisted off on us for one purpose, but obscuring others. So it is also with the range of professional conduct in science, of which conduct in research is a subset of behaviors. It may help us in workaday situations to rely on categories that render the world more predictable, but this may come at the expense of falsely attributing characteristics of groups to individuals and of leveling individual differences altogether.

Case in point: What are the values attributed to a corporation with a stem cell line? Are company researchers concerned about basic development or about how reproducing insulin-producing cells becomes the centerpiece of the company’s business plan? And what motivates geneticists at a research-intensive institution? What are their values? Is advancing knowledge and sharing it widely through publication their guiding ethic? Does “disinterestedness,” in the classic sense of detached objectivity, have any relevance at all? Is the academic researcher aloof from the material considerations of his or her work? And what does one pass along – values and expectations conveyed in word and deed – to graduate students and postdocs?

The academic researcher is hardly the self-righteously value-free inquirer in a sea of greed, secrecy, and deception. Yet until recently, when even the journal Nature adopted a policy on authors’ disclosure of conflicts of interests,3 the rhetoric would have us believe such is the case: If you are on campus, your motives are noble and your behavior is assumed to be beyond reproach. If you do science anywhere else, other motives predominate; the company ethic demands it and the practitioner must succumb to it. Such stereotypes! All are stereotypes fed by a huge dose of self-deception. Can