Biology

Science & Society

A Field Guide to Values in Science for Biologists

Dr. David Frank, Brown University

The past few decades have seen the emergence of a significant philosophical literature on values in science. In this talk I offer a field guide to ongoing debates about values in science for biologists. I first consider arguments against the ideal of value freedom, presenting the case that science is thoroughly, normatively value-laden. On this view, scientists ought to take social or contextual values into account in their work, in ways that go beyond the traditional emphases of Responsible Conduct of Research training on preventing fabrication, falsification, and plagiarism on the one hand and protecting human and non-human research participants on the other. Drawing on my own research, I illustrate by discussing roles for social values in problem selection, concept formation and operationalization, the analysis and interpretation of data, and the communication of results in the life sciences. I close by introducing two alternative models of value-laden science: the social value management model and the social justice standpoint model. I conclude that both of these contain important insights about socially responsible science, suggesting both might be relevant to specific contexts.

Thursday, January 13th
1:30–3pm, KI Luria Auditorium, 76-156

Zoom Link: https://mit.zoom.us/j/95724157796?pwd=RXFRNm5zVEh3RE9Ea0hIWXBIemxuQT09

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Professional Cultures and Inequality in STEM

Dr. Erin Cech, University of Michigan, Depts. of Sociology and Mechanical Engineering

Can the culture of STEM help reproduce inequality? The professional cultures of STEM, which give each discipline its particular "feel" and unite discipline members under a taken-for-granted system of meanings and values, are not benign. Drawing from several NSF-funded survey and interview-based studies, I argue that these professional cultures can have built within them disadvantages for women and other under-represented groups in STEM. Specifically, I discuss the role of three particular cultural ideologies—schemas of scientific excellence, depoliticization, and the meritocratic ideology—in producing these disadvantages. I end by explaining why decisions (e.g. admissions, hiring, tenure) that partially rely on assessments of individuals' "fit" with professional cultures are particularly important to critically examine for their potential to contribute to inequality.

Wednesday, January 19th
1:30–3pm, 68-181

Zoom Link: https://mit.zoom.us/j/92403566263?pwd=NXA1YWF0WjFqUHFWd2plQWlXOTlEUT09

Password: DEI

"But I'm Not A Feminist": Why women leave engineering, meritocratic ideologies, and professional role confidence

Dr. Susan Silbey, Leon and Anne Goldberg Professor of Sociology and Anthropology, Behavioral and Policy Science, Sloan School of Management, MIT

Despite direct experiences and reports of sexism, differential treatment, and marginalization, women engineering students describe the profession as meritocratic and objectively rewarding individual accomplishment. This talk will present results from a comparative study of engineering students at four institutions, locating the results within a larger context concerning gender, scientific careers, and organizational practices more generally.

Thursday, January 27th
4:00-5:30pm, KI Luria Auditorium, 76-156

Zoom Link: https://mit.zoom.us/j/99798672528?pwd=T2NHbERuZFQyRkZoa1Z2VEc3cU5hZz09

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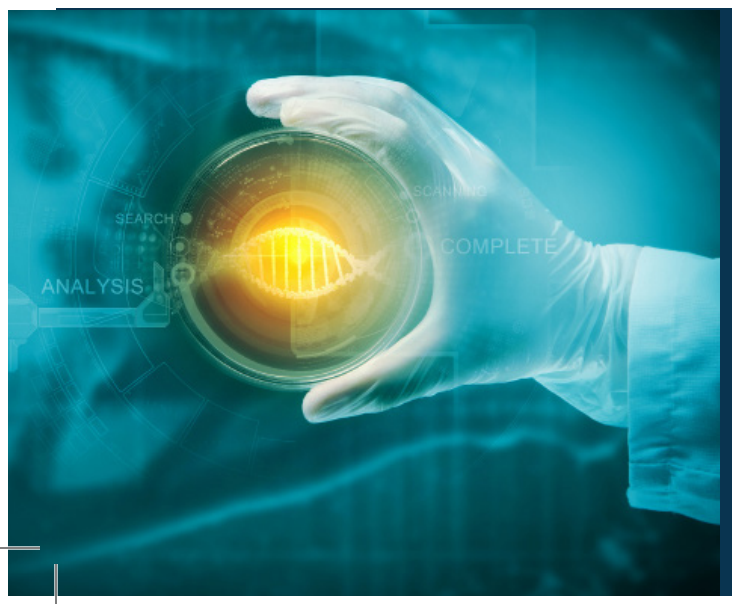

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