

Field I: BIOSCIENCES AND BIOTECHNOLOGIES

Field Description

This field encompasses studies of those sciences and technologies that concern living organisms. Psychology, medicine and the life sciences have long been rich domains of inquiry for historians and philosophers, and have more recently become preoccupations for sociologists and anthropologists of science and technology.

Scholars in this domain eschew the assumption that biological studies simply reveal the molecular or physiological workings of living entities and collectives; instead, they are produced in particular social, temporal and instrumental contexts. Embedded in the facts and artifacts of the biological sciences are linguistic and pictorial representations, pedagogical conventions, material constraints, moral anxieties and social hierarchies.

The Core Reading List (for all students)

Desmond, Adrian, and James Moore. 1991. *Darwin: The Life of a Tormented Evolutionist*. New York: Warner.

Dumit, Joseph. 2004. *Picturing Personhood: Brain Scans and Biomedical Identity*. Princeton: Princeton University.

Epstein, Steven. 1996. *Impure Science: AIDS, Activism, and the Politics of Knowledge*. Berkeley: University of California.

Foucault, Michel. 1978. *The History of Sexuality, Volume 1: An Introduction*. New York: Vintage.

Harraway, Donna J. 1997. *Modest_Witness@Second_Millennium.FemaleMan©_Meets_OncoMouseTM*. New York: Routledge.

Helmreich, Stefan. 2008. *Alien Ocean: Anthropological Voyages in Microbial Seas*. Berkeley: University of California.

Howell, Joel. 1995. *Technology in the Hospital: Transforming Patient Care in the Early Twentieth Century*. Baltimore: Johns Hopkins University.

Kay, Lily E. 2000. *Who Wrote the Book of Life? A History of the Genetic Code*. Stanford: Stanford University.

Keating, Peter, and Alberto Cambrosio. 2003. *Biomedical Platforms: Realigning the Normal and the Pathological in Late Twentieth-Century Medicine*. Cambridge: MIT.

Keller, Evelyn Fox. 2002. *Making Sense of Life: Explaining Biological Development with Models, Metaphors and Machines*. Cambridge: Harvard University.

Mol, Annemarie. 2002. *The Body Multiple: Ontology in Medical Practice*. Durham: Duke University.

Rabinow, Paul, and Nikolas Rose. 2006. "Biopower Today." *BioSocieties* 1 (2): 195-217.

Rheinberger, Hans-Jörg. 1997. *Toward a History of Epistemic Things: Synthesizing Proteins in the Test Tube*. Stanford: Stanford University.

Schaffer, Simon. 1992. "Self-Evidence," *Critical Inquiry* 18 (2): 327-62.

Star, Susan Leigh, and James R. Griesemer. 1989. "Institutional Ecology, 'Translations', and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology 1907-39." *Social Studies of Science* 19 (3): 387-420.

The Recommended Reading List

BODIES THAT MATTER

Butler, Judith. 1993. Introduction to *Bodies that Matter: On the Discursive Limits of 'Sex'*, 1-23. New York: Routledge.

Duden, Barbara. 1991. *The Woman Beneath the Skin: A Doctor's Patients in Eighteenth Century Germany*. Cambridge: Harvard University.

Hacking, Ian. 1999. "Making Up People." In *The Science Studies Reader*, edited by Mario Biagioli, 161-71. New York: Routledge.

Kuriyama, Shigehisa. 2002. *The Expressiveness of the Body and the Divergence of Greek and Chinese Medicine*. New York; London: Zone.

Lock, Margaret M. 2002. *Twice Dead: Organ Transplants and the Reinvention of Death*. Berkeley: University of California.

Martin, Emily. 1994. *Flexible Bodies: Tracking Immunity in American Culture from the Days of Polio to the Age of AIDS*. Boston: Beacon.

Murphy, Claudette Michelle. 2006. *Sick Building Syndrome and the Problem of Uncertainty: Environmental Politics, Technoscience, and Women Workers*. Durham: Duke University.

Ong, Aihwa. 1988. "The Production of Possession: Spirits and the Multinational Corporation in Malaysia." *American Ethnologist* 15 (1): 28-42.

Rapp, Rayna. 1999. *Testing Women, Testing the Fetus: The Social Impact of Amniocentesis in America*. New York: Routledge.

Schiebinger, Londa. 1993. *Nature's Body: Gender in the Making of Modern Science*. Boston: Beacon.

Serlin, David. 2004. *Replaceable You: Engineering the body in Postwar America*. Chicago: University of Chicago.

Winter, Alison. 1998. *Mesmerized: Powers of Mind in Victorian Britain*. Chicago: University of Chicago.

ORGANIC VITALITY AND MECHANISMS

Canguilhem, Georges. 1989. *The Normal and the Pathological*. Reprint, New York: Zone Books.

Crist, Eileen. 1999. *Images of Animals: Anthropomorphism and Animal Mind*. Philadelphia: Temple University.

de Chadarevian, Soraya. 2002. *Designs of Life: Molecular Biology after World War II*. Cambridge: Cambridge University.

Douthwaite, Julia V. 2002. *The Wild Girl, Natural Man and the Monster: Dangerous Experiments in the Age of Enlightenment*. Chicago: University of Chicago.

Harrington, Anne. 1995. "Metaphoric Connections: Holistic Science in the Shadow of the Third Reich." *Social Research* 62 (2): 357-85.

Lewontin, Richard C. 1991. *Biology as Ideology: The Doctrine of DNA*. Toronto: House of Anansi.

Maienschen, Jane. 2003. *Whose View of Life?: Embryos, Cloning, and Stem Cells*. Cambridge: Harvard University.

Maturana, Humberto R., and Francisco J. Varela. 1980. *Autopoiesis and Cognition: The Realization of the Living*. Dordrecht (Holland): D. Reidel Publishing.

Mendelsohn, J. Andrew. 1998. "From Eradication to Equilibrium: How Epidemics Became Complex after World War I." In *Greater than the Parts: Holism in Biomedicine, 1920-1950*, edited by Christopher Lawrence, and George Weisz, 303-34. Oxford: Oxford University.

Richards, Robert. 1987. *Darwin and the Emergence of Evolutionary Theories of Mind and Behavior*. Chicago: University of Chicago.

Vidal, Fernando F. 2009. "Brainhood, Anthropological Figure of Modernity." *History of the Human Sciences* 22 (1): 5-36.

Young, Robert M. 1985. *Darwin's Metaphor: Nature's Place in Victorian Culture*. Cambridge: Cambridge University.

THE FIELD AND THE LABORATORY

Browne, Janet. 1995. *Charles Darwin: Voyaging*. New York: Knopf.

Clarke, Adele, and Joan H. Fujimura. 1992. "What Tools? Which Jobs? Why Right?" In *The Rights Tools for the Job: At Work in the Twentieth-Century Life Sciences*, edited by Adele Clarke, and Joan H. Fujimura, 3-46. Princeton: Princeton University.

Creager, Angela N. H. 2002. *The Life of a Virus: Tobacco Mosaic Virus as an Experimental Model*. Chicago: University of Chicago.

Danziger, Kurt. 1990. *Constructing the Subjects: Historical Origins of Psychological Research*. Cambridge: Cambridge University.

Hopwood, Nicholas. 1999. "'Giving Body' to Embryos: Modeling, Mechanism, and the Microtome in Late Nineteenth-Century Anatomy." *Isis* 90 (3): 462-96.

Knorr-Cetina, Karin. 1999. *Epistemic Cultures: How the Sciences Make Knowledge*. Cambridge: Harvard University.

Koerner, Lisbet. 1999. *Linnaeus: Nature and Nation*. Cambridge: Harvard University.

Kohler, Robert. 1994. *Lords of the Fly: Drosophila Genetics and the Experimental Life*. Chicago: University of Chicago.

Latour, Bruno, and Steve Woolgar. 1986. *Laboratory Life: The Construction of Scientific Facts*. Princeton: Princeton University.

Lynch, Michael. 1988. "The Externalized Retina: Selection and Mathematization in the Visual Documentation of Objects in the Life Sciences." *Human Sciences* 11 (2): 201-34.

Pickstone, John V. 2001. *Ways of Knowing: A New History of Science, Technology, and Medicine*. Chicago: University of Chicago.

Rader, Karen A. 2004. *Making Mice: Standardizing Animals for American Biomedical Research, 1900-1955*. Princeton: Princeton University.

CURE, CARE & CONTROL

Biehl, João. 2005. *Vita: Life in a Zone of Social Abandonment*. Berkeley: University of California.

Cartwright, Lisa. 1995. *Screening the Body: Tracing Medicine's Visual Culture*. Minneapolis: University of Minnesota.

- Goffman, Erving. 1963. *Stigma: Notes on the Management of Spoiled Identity*. Englewood Cliffs: Prentice-Hall.
- Grob, Gerald N. 1994. *The Mad Among Us: A History of the Care of America's Mentally Ill*. New York: Free Press.
- Lakoff, Andrew. 2006. *Pharmaceutical Reason: Knowledge and Value in Global Psychiatry*. Cambridge: Cambridge University.
- Petryna, Adriana. 2002. *Life Exposed: Biological Citizens After Chernobyl*. Princeton: Princeton University.
- Porter, Roy. 2001. *Bodies Politic: Disease, Death and Doctors in Britain, 1650-1900*. Ithaca: Cornell University.
- Rosenberg, Charles. 1992. "Framing Disease: Illness, Society, and History." In *Framing Diseases: Studies in Cultural History*, edited by Charles Rosenberg, and Janet Golden, xiii-xxvi. New Brunswick: Rutgers University.
- Scull, Andrew. 1993. *The Most Solitary of Afflictions: Madness and Society in Britain, 1700-1900*. New Haven: Yale University.
- Starr, Paul. 1982. *The Social Transformation of American Medicine*. New York: Basic Books.
- Timmermans, Stefan, and Marc Berg. 2003. *The Gold Standard: The Challenge of Evidence-Based Medicine and Standardization in Health Care*. Philadelphia: Temple University.
- Weisz, George. 1997. "Medical Directories and Medical Specialization in France, Britain, and the United States." *Bulletin of the History of Medicine* 71 (1): 23-68.
- BIOTECHNOLOGY AND THE COMMODIFICATION OF LIFE*
- Cooper, Melinda. 2008. *Life as Surplus: Biotechnology and Capitalism in the Neoliberal Era*. Seattle: University of Washington.
- Fortun, Michael. 2008. *Promising Genomics: Iceland and DeCODE Genetics in a World of Speculation*. Berkeley: University of California.
- Franklin, Sarah. 2007. *Dolly Mixtures: The Remaking of Genealogy*. Durham: Duke University.
- Hayden, Corinne P. 2003. *When Nature Goes Public: The Making and Unmaking of Bioprospecting in Mexico*. Princeton: Princeton University.
- Landecker, Hannah. 2007. *Culturing Life: How Cells Became Technologies*. Harvard University Press.

- Rajan, Kaushik Sunder. 2006. *Biocapital: The Constitution of Postgenomic Life*. Durham: Duke University.
- Reardon, Jenny. 2005. *Race to the Finish: Identity and Governance in an Age of Genomics*. Princeton: Princeton University.
- Shukin, Nicole. 2009. *Animal Capital: Rendering Life in Biopolitical Times*. Minneapolis: University of Minnesota.
- Thacker, Eugene. 2004. *Biomedica*. Minneapolis: University of Minnesota.
- Thompson, Charis. 2005. *Making Parents: The Ontological Choreography of Reproductive Technologies*. Cambridge: MIT.
- Wailoo, Keith. 1999. *Drawing Blood: Technology and Disease Identity in Twentieth-Century America*. Baltimore: Johns Hopkins University.
- Waldby, Cathy. 2000. *The Visible Human Project: Informatic Bodies and Posthuman Medicine*. New York: Routledge.