



Rosalyn Berne's research focuses on the ethical, cultural, and societal implications of the emergence and convergence of nanotechnology, biotechnology, information technology and cognitive sciences. Specifically, she employs the use of fiction to teach science, technology, and society (STS) and ethics to engineers. She is particularly interested in the role and function of moral imagination, mythology and religious belief in conceptualizations pertaining to ethics in technological development. Recently she has been investigating indications of sentience, intelligence, and interspecies communication in and among plants and animals, and the socio-ethical implications thereof.

Science, Technology, and Society Research

Rosalyn W. Berne

Associate Professor

rwb@virginia.edu

www.sts.virginia.edu/stshome/tiki-index.php?page=Rosalyn+Berne

Department of Engineering and Society
University of Virginia
Charlottesville, VA
434.924.6098

"As we search for meaning about who we are, how does technology influence our sense of self and our place on the planet, in relationship to each other and other living species?"



Ethics in Emerging Technologies

Dr. Berne's research focuses on the socio-ethical implications of the emergence and convergence of NBIC (nanotechnology, bio-technology, information- and cognitive sciences). These she has explored and discussed in her book *Nanotalk: Conversations with Scientists and Engineers about Ethics, Meaning and Belief in the Development of Nanotechnology* (Erlbaum, 2005). Berne uses fiction as a source of reflection and as a pedagogical tool of deliberation about the future of socio-technical change in our world, which is the subject of *Biotechnology and Science Fiction* (Pan Stanford Publishing, 2014). Her SF novel, "Waiting in the Silence" (Spore Press, 2012) explores the changing nature of human procreation in a near-term future world. Dr. Berne is particularly interested in the role and function of moral imagination, mythology and religious belief in conceptualizations of ethics in technological development. Recently she has been looking at the socio-ethical implications of interspecies communication, as explored in *When the Horses Whisper* (Rainbow Ridge Books 2012).

Creating Life from Life: Biotechnology and Science Fiction – book summary

Dr. Berne's most recent book is a collection of essays by scientists, historians, philosophers of science, and students. The essays meld biotechnology into science fiction stories and thereby open a conversation about the morality of what we may be one day, and what it may mean to be human as our biotechnological endeavors continue to evolve.

The biotechnology "revolution," launched on a global scale many decades ago, has taken a direct course toward re-creating life. Yet there are still many choices to be made in shaping the future that it may one day make possible. The book motivates readers toward deep reflection and continual discourse, which are essential if biotechnology is to evolve in ethical, meaningful, and sustainable ways.

RECENT RESEARCH DEVELOPMENTS

Published books

- *Creating Life from Life: Biotechnology and Science Fiction*. (Pan Stanford Press, 2014)
- *When the Horses Whisper* (Rainbow Ridge Books, 2013)
- *Waiting in the Silence* (Spore Press, 2012)
- *Nanotalk: Conversations with Scientists and Engineers about Ethics, Meaning and Belief in the Development of Nanotechnology*. (Erlbaum, 2005)

SEAS Research Information

Pamela M. Norris,
Executive Associate Dean for Research
University of Virginia
Box 400232
Charlottesville, VA 22903
pamela@virginia.edu
434.243.7683

