## CONTENTS

Preface	xiii
Acknowledgments	xvii
Introduction: Feminism, Science and Technology—Why It Still Matters	xix
SECTION 1. FROM MARGINS TO CENTER: EDUCATING WOMEN FOR SCIENTIFIC CAREERS	
1. Science Faculty's Subtle Gender Biases Favor Male Students	3
Corinne A. Moss-Racusin, John F. Dovidio, Victoria L. Brescoll, Mark J. Graham, and Jo Handelsman	
This article reports results from a randomized double-blind study indicating the need to develop meritocratic standards of evaluation of undergraduate students' potential as scientists.	
2. Snow Brown and the Seven Detergents: A Metanarrative on Science and the Scientific Method	15
BANU SUBRAMANIAM	
The main character in this fable is a woman from India who comes to the U.S. to pursue her dream of becoming a scientist.	
3. State of Knowledge about the Workforce Participation, Equity, and Inclusion of Women in Academic Science and Engineering DIANA BILIMORIA AND XIANGFEN LIANG	21
The authors review current statistics on the progress of women through the science and engineering pipeline, from undergraduate degrees to faculty ranks.	
4. Walking a Tightrope: The Feminist Life of a <i>Drosophila</i> Biologist Marta Wayne	51
This autobiographical account describes the interpersonal and social dynamics of gender relations in the author's academic and professional training.	

| CONTENTS Viii

5. When Computers Were Women	60	
Jennifer S. Light		
Historian Jennifer S. Light reveals the lost history of women who were key innovators in the technological developments underwriting contemporary computing.		
6. The Intersection of Gender, Race and Cultural Boundaries, or Why Is Computer Science in Malaysia Dominated by Women? ULF MELLSTRÖM	81	
Focusing on Malaysia, the author illustrates how women's relationships to technology are not universal but rather develop and change in specific economic, historical, and cultural contexts.	•	
7. Interdisciplinary Approaches to Achieving Gendered Innovations in Science, Medicine, and Engineering Londa Schiebinger and Martina Schraudner	100	
The authors describe concrete examples to explain how a focus on gender enhances scientific knowledge and technology design.		
8. The Gender Gap in Patents	111	
SUE ROSSER		
Based on interviews, statistical data, and theory, this essay examines the importance of securing patents as a gateway to professional advancement for women.		
SECTION 2. FEMINIST APPROACHES IN/TO SCIENCE AND TECHNOLOGY		
9. Sex and Death in the Rational World of Defense Intellectuals	133	
Carol Cohn		
Cohn explores the meanings behind the language used by those who develop U.S. military strategic analyses in relation to nuclear weapons.		
10. Socially Camouflaged Technologies: The Case of the Electromechanical Vibrator	157	
RACHEL MAINES		
Historian Maines describes the development and marketing of a technology directed at the taboo subject of women's sexuality.		
11. The Need to Bleed? A Feminist Technology Assessment of Menstrual-Suppressing Birth Control Pills	171	
Jennifer Aengst and Linda L. Layne		
Focusing on beliefs and attitudes about femininity, the authors review perspectives on the potential of technology to meet women's health choices and needs globally.		

12. Hardwired for Sexism? Approaches to Sex/Gender in Neuroscience	193
REBECCA M. JORDAN-YOUNG AND RAFFAELLA I. RUMIATI	
The authors describe the conceptual errors and problematic interpretations in contemporary research on the brain that presumes social behaviors have biological origins.	
13. Making Males Aggressive and Females Coy: Gender across the Animal-Human Boundary	206
Erika Lorraine Milam	
Milam traces evolutionary theory from Darwin to contemporary feminism, focusing on the shifting understandings of sex differences in relation to animal and human behavior.	
14. Asking Different Questions: Feminist Practices for the Natural Sciences	223
Deboleena Roy	
The author, a neuroendocrinologist, links philosophy and feminist science theory in order to outline how feminist commitments lead to innovative methods and new research insights.	
15. "Keep Life Simple": Body/Technology Relationships in Racialized Global Contexts	242
CHIKAKO TAKESHITA	
Using a case study approach, the author explores the racialized subtext of the development, adoption, and marketing of contraceptives globally.	
SECTION 3. TECHNOLOGIES OF SEX, GENDER, AND DIFFERENCE	
16. Science, Power, Gender: How DNA Became the Book of Life	265
RUTH HUBBARD	
Hubbard argues that social relations shape individuals' careers and the distribution of information, but that scientific insight emerges through empirical methods and evidence.	
17. The Bare Bones of Sex: Part 1—Sex and Gender	272
Anne Fausto-Sterling	
In this study, Fausto-Sterling details how the physiology of the human skeleton requires understanding bodies as systems that interweave culture with nature.	
18. Constructing Gender from the Inside Out: Sex-Selection Practices in the United States	297
Rajani Bhatia	
Bhatia's study of transnational reproduction-assisting industries focuses on the emergence of sex-selection as a routine prenatal diagnostic technology now available to would-be parents.	1

CONTENTS | ix

## CONTENTS х

19. Race, Gender, and Genetic Technologies: A New Reproductive Dystopia? DOROTHY E. ROBERTS	318
Roberts' examines the global high-tech fertility industry as marketed to women of color to become both consumers and donors, in the social and economic context of mothering.	
20. Sexing the X: How the X Became the "Female Chromosome" SARAH S. RICHARDSON	334
This article explains the history of scientific knowledge about the X chromosome and chronicles shifts in interpretations even while scientists sustain early conceptual errors.	
SECTION 4. THINKING THEORETICALLY	
21. Rethinking Cyberfeminism(s): Race, Gender, and Embodiment JESSIE DANIELS	353
This essay provides an overview of feminist theories about the subversive potential of the Internet, with an emphasis on the lived experiences and Internet practices of women.	
22. Gender and Technology Francesca Bray	370
The author taps anthropology in order to show how theories of innovation as a universal human activity contribute to understanding gender as emergent within material culture.	
23. Queering Feminist Technology Studies	385
Catharina Landström	
Landström analyzes heteronormative approaches to gender-technology relations and outlines how queer theory can fruitfully complicate research on the social construction of technology.	
24. Feminist Heterosexual Imaginaries of Reproduction: Lesbian Conception in Feminist Studies of Reproductive Technologies PETRA NORDQVIST	400
This essay investigates feminist representations of reproduction and sexuality and argues that pervasive heterosexual norms have limited the development of theory and research.	
25. From Reproductive Work to Regenerative Labor: The Female Body and the Stem Cell Industries	416
CATHERINE WALDBY AND MELINDA COOPER	
The authors argue that the transnational brokerage of stem cells is creating a bioeconomy in which women are laborers under contract to foster human self-regeneration science.	

	CONTENTS
26. Beyond Postcolonial Theory: Two Undertheorized Perspectives on Science and Technology Sandra Harding	431
In this essay, Harding argues that standpoint theory is an implicit co of postcolonial theory that can illuminate gender relations in local c despite its Western roots.	
SECTION 5. THEORETICAL HORIZONS IN FEMINIS TECHNOSCIENCE STUDIES	ſ
27. Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective Donna Haraway	455
This classic essay in feminist science studies presents an argument fo defining objectivity as achieved through engagement with, rather the detachment from, human activities.	
28. Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter	473
Karen Barad	
The author describes the limits of constructivist views and offers the alternative view that the empirical world has materiality and agency unrelated to human intentionality and subjectivity.	V
29. Animal Performances: An Exploration of Intersections between Feminist Science Studies and Studies of Human/Animal Relationsh	ips 495
Lynda Birke, Mette Bryld, and Nina Lykke	
In this essay, the authors explore the limits of nature/culture and ani human dichotomies and suggest that scientific knowledge constructs also constructed by the natural world.	
30. Sex Genes: A Critical Sociomaterial Approach to the Politics and Molecular Genetics of Sex Determination	507
JOAN H. FUJIMURA	
Fujimura details experimental research about the SRY and DAX-1 ge mice and humans to examine evidence that supports scientific claim the materiality of sex.	
31. Imaginary Prohibitions: Some Preliminary Remarks on the Foundir Gestures of the "New Materialism" SARA AHMED	ng 530
The author considers feminist theory about the body and reminds re that feminist science studies scholars have long recognized the tangi- human biology in a material world.	

xi

## xii | CONTENTS

	From Science and Technology to Feminist Technoscience Jutta Weber	543
	Conceptualizing technoscience as embedded in transnational capitalism, the author explores how transdisciplinary knowledge is challenging the boundary between science and culture.	
	Eco/Feminism and Rewriting the Ending of Feminism: From the Chipko Movement to Clayoquot Sound NIAMH MOORE	557
	Moore traces the international commitments of feminist environmental activism and argues that eco/feminist historical narratives reveal a hopeful pluralist vision of global feminisms.	
	Contributors	573
	Credits	577
	Index	583