

SEXUAL HARASSMENT, MISCONDUCT, AND THE ATMOSPHERE OF THE LABORATORY: THE LEGAL AND PROFESSIONAL CHALLENGES FACED BY WOMEN PHYSICAL SCIENCE RESEARCHERS AT EDUCATIONAL INSTITUTIONS

ELLEN SEKRETA*

I. INTRODUCTION

Former Harvard University President, Larry Summers, once made public remarks correlating women's intrinsic academic abilities to their scarcity in high-powered science jobs.¹ These controversial comments sparked a debate about the advancement of women scientists at research universities.² While Summers' talk focused on innate intelligence, a more apt explanation for women's failure to advance in the sciences may be that they are still mistreated on the job. Sexual harassment,³ discrimination,⁴ and disparate impact⁵ claims are still commonplace at research universities, despite the fact that universities have increasingly developed strategies to cope with the social and legal issues related to sexual harassment⁶ and are bound to enforce Title IX,⁷ if they accept federal funding.

* J. D., CUNY School of Law; PhD in Chemistry, Indiana University; B. S. in Chemistry, SUNY at Stony Brook. I wish to thank Professor Deborah Zalesne at CUNY Law School for supervising this research. Dean Mary Lu Bilek, Professors Sandra Del Valle, Rick Rossein, Victor Goode, Jenny Rivera, Julie Goldscheid and Andrea McArdle of CUNY Law School, and Ronald Branch, and Eric S. Gold of the National Science Foundation all provided helpful comments concerning this work. I also wish to thank my editors, Virginia Frasure and Jessica Cox, for working tirelessly to make this article the best it could be.

1. See Sara Rimer & Patrick D. Healy, *Furor Lingers as Harvard Chief Gives Details of Talk on Women*, N.Y. TIMES, Feb. 18, 2005, at A1; see, e.g. *Excerpts from Harvard Leader's Remarks*, N.Y. TIMES, Feb. 18, 2005, at A20.

2. See Cornelia Dean, *Theorist Drawn Into Debate 'That Will Not Go Away'*, N.Y. TIMES, Apr. 12, 2005, at F2; Sara Rimer, *For Women in the Sciences the Pace Is Slow*, N.Y. TIMES, Apr. 15, 2005, at A15.

3. See *Vast Abuses Cited at National Health Institutes*, N.Y. TIMES, Apr. 12, 2005, at A18.

4. See Carey Goldberg, *M.I.T. Acknowledges Bias Against Female Professors*, N.Y. TIMES, Mar. 23, 1999, at A1; Karen W. Arenson, *Uneven Progress Is Found for Women on Princeton Science and Engineering Faculties*, N.Y. TIMES, Sept. 30, 2003, at B5.

5. See Tamar Lewin, *University of California Faulted on Hiring of Women*, N.Y. TIMES, May 18, 2005, at B9; Tamar Lewin, *Despite Gain in Degrees, Women Lag in Tenure in 2 Main Fields*, N.Y. TIMES, Jan. 15, 2004, at A23; Natalie Angier, *Pay Gap Remains for Women in Life Sciences*, N.Y. TIMES, Oct. 16, 2001, at F3.

6. Katherine S. Mangan, *Thorny Legal Issues Face Colleges Hit by Sexual-Harassment Cases*, CHRON. HIGHER EDUC. (Wash., D.C.), Aug. 4, 1993, at A13; Carol Simpson Stern, *Colleges Must Be Careful Not to Write Bad Policies on Sexual Harassment*, CHRON. HIGHER EDUC. (Wash., D.C.), Mar. 10, 1993, at B1. The overall number of sex discrimination claims has risen over the last two decades. See U.S. EQUAL EMPLOYMENT OPPORTUNITY COMM'N, TRENDS IN HARASSMENT CHARGES FILED WITH THE

This Article examines the sexual harassment of female physical scientists at academic research institutions and shows that sexual harassment is both endemic to those institutions and that the response is inadequate. Sexual harassment is of special concern to women scientists at research universities because of the unique dynamics of those workplaces. First, the strictly hierarchical structure inherent to the world of science research makes women vulnerable to abuse, precisely because they tend to hold lower-ranked positions. Second, women researchers are also made more vulnerable by the intimate, one-on-one nature of research work, which can make it less clear whether harassment occurred, and subject women scientists to a dissection of their personal and professional lives when they make claims of sexual harassment. Third, institutions are deterred from taking action against scientists accused of harassment, because these scientists often significantly contribute to the reputation of the university, and thus, indirectly, to its financial well-being.

Part II of this Article summarizes how sexual harassment laws are applied to educational institutions. Part III explores the various definitions and models of sexual harassment, establishing that sexual harassment is an abuse of power. Part IV probes institutional trends in the employment and education of women in the physical sciences, sex discrimination, and the culture of conducting scientific research. Part V analyzes several sexual harassment cases involving physical science researchers and students, and discusses how scrutiny of the plaintiff's behavior affects court decisions. It also discusses whether sexual harassment constitutes misconduct under the federal regulations of science ethics.

In Part VI, this Article ultimately concludes that courts frequently ignore the power dynamics inherent in the definition of "sexual harassment," and instead concentrate on the actions and characteristics of the victim. Despite legal developments that both protect women against sexual harassment and facilitate the bringing of sexual harassment claims, courts continue to see women as provoking the sexual attention, rather than presuming that the harassing conduct (1) is unwelcome, (2) compromises academic standards, and (3) is inconsistent with an environment that purports to treat men and women equally. This attitude is particularly damaging for women researchers in the physical sciences, not just because women are in the minority and typically hold more "junior positions," but because the research culture emphasizes compliance and secrecy. Part VI also recommends policies for decreasing the prevalence of sexual harassment in the physical sciences.

EEOC, <http://www.eeoc.gov/stats/harassment.html> (last visited Oct. 10, 2005) (showing an overall increase in lawsuits between 1980 and 2003); see, e.g., U.S. EQUAL EMPLOYMENT OPPORTUNITY COMM'N, SEXUAL HARASSMENT CHARGES: EEOC & FEPAS COMBINED: FY 1992-FY 2004, <http://www.eeoc.gov/stats/harass.html> (last visited Oct. 10, 2005); see also J. Freedley Hunsicker Jr., *Significant Labor and Employment Law Issues in Higher Education During the Past Decade and What to Look for Now: A Management Perspective*, 29 J.L. & EDUC. 343, 343-44 (2000) (discussing how sexual harassment litigation was a major development of labor and education law in the 1990s).

7. 20 U.S.C. § 1681(a) (2000).

II. SEXUAL HARASSMENT LAW

Title VII of the Civil Rights Act of 1964 makes it illegal “to fail or refuse to hire or to discharge any individual, or otherwise to discriminate against any individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual’s race, color, religion, sex, or national origin”⁸ The Equal Employment Opportunity Commission (EEOC) has promulgated regulations to enforce Title VII:

Unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature constitute sexual harassment when (1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual’s employment, (2) submission to or rejection of such conduct by an individual is used as the basis for employment decisions affecting such individual, or (3) such conduct has the purpose or effect of unreasonably interfering with an individual’s work performance or creating an intimidating, hostile, or offensive working environment.⁹

Retaliation against employees who initiate Title VII complaints is prohibited.¹⁰ The Civil Rights Act of 1991 allows plaintiffs to sue under Title VII for compensatory and punitive damages¹¹ and attorney and expert witness fees.¹² It also guarantees a jury trial when the plaintiff seeks compensatory or punitive damages under Title VII.¹³

In addition, Title IX of the Education Amendments of 1972 prohibits sex discrimination in any educational program or activity that receives federal funds:

No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance¹⁴

Educational institutions that receive federal funds must adopt formal grievance procedures and designate a person who is responsible for making sure that the provisions in the law are carried out.¹⁵ The Supreme Court has held that the

8. 42 U.S.C. § 2000e-2(a)(1) (2000).

9. 29 C.F.R. § 1604.11(a) (2005).

10. 42 U.S.C. § 2000e-3(a) (2000).

11. 42 U.S.C. § 1981a(b) (2000).

12. 42 U.S.C. § 1988(b)-(c) (2000).

13. 42 U.S.C. § 1981a(c) (2000).

14. 20 U.S.C. § 1681(a) (2000).

15. 34 C.F.R. § 106.8(a)-(b) (2005). There are many other ways to bring a claim involving sexual harassment other than through Title VII or Title IX. See generally Alba Conte, *Legal Theories of Sexual Harassment*, in *SEXUAL HARASSMENT: CONFRONTATIONS AND DECISIONS* 173 (Edmund Wall ed., 2000). Relief may be obtained if the plaintiff demonstrates that the defendant’s actions deprived her of her constitutional rights, privileges, or immunities, and that the defendant acted under color of state law. *Id.* at 193. Conspiracy to deprive another person of equal protection can also be prosecuted. *Id.* at 194. A prolonged pattern of harassment can demonstrate racketeering which can be prosecuted under RICO. *Id.* at 195. States may have equal rights amendments and employment statutes that prohibit discrimination. *Id.* at 195-96. Federal courts can exercise pendent jurisdiction over state claims when the plaintiff also brings a Title VII action. *Id.* at 196-98. Other claims can be made

prohibition against sexual discrimination under Title IX includes a prohibition against sexual harassment.¹⁶

The D.C. Circuit ruled in *Bundy v. Jackson* that even when sexual harassment does not cause direct employment consequences or tangible losses, it could still be a violation of Title VII.¹⁷ This decision was affirmed by the Supreme Court in *Meritor Savings Bank, FSB v. Vinson*,¹⁸ where the Court held that a hostile work environment could constitute sexual harassment under Title VII.¹⁹ The Court asked whether the sexual advances towards the victim were unwelcome, not whether her responses were voluntary.²⁰ The Court stated that in order for there to be a valid claim, the harassment “must be sufficiently severe or pervasive ‘to alter the conditions of [the victim’s] employment and create an abusive working environment.’”²¹ Furthermore, it held that supervisors and administrators are not necessarily immune from prosecution for the actions of their subordinates because of a lack of notice.²² In *Harris v. Forklift Systems, Inc.*,²³ the Court stated that a hostile environment is one which a reasonable person would find hostile or abusive.²⁴ The victim must also subjectively find the environment abusive.²⁵ The Court also held that psychological harm was unnecessary to establish a Title VII violation.²⁶

Alexander v. Yale University was the first case to demonstrate that students can bring sexual harassment complaints under Title IX.²⁷ In *Moire v. Temple University School of Medicine*, a federal court ruled that the EEOC guidelines that were applicable to Title VII sexual harassment cases were also applicable to Title IX sexual harassment cases.²⁸ The Supreme Court has since also held that students can seek monetary damages under Title IX.²⁹ A school official may be held liable for sexual harassment of a student when the official has notice of the

depending on the situation; these can include worker’s compensation; intentional infliction of emotional distress; assault and battery; tortious interference with contracts; defamation, libel, and slander; invasion of privacy; false imprisonment; loss of consortium; wrongful discharge; and negligent hiring, retention, or supervision. *Id.* at 199-213.

16. *Franklin v. Gwinnett County Pub. Sch.*, 503 U.S. 60, 75 (1992).

17. 641 F.2d 943, 943-44 (D.C. Cir. 1981).

18. 477 U.S. 57, 64 (1986) (interpreting Title VII as “not limited to ‘economic’ or ‘tangible’ discrimination”).

19. *Id.* at 73.

20. *Id.* at 68.

21. *Id.* at 67 (quoting *Henson v. Dundee*, 682 F.2d 897, 904 (11th Cir. 1982)) (alteration in original).

22. *Id.* at 72.

23. 510 U.S. 17 (1993).

24. *Id.* at 21.

25. *Id.* at 21-22.

26. *Id.* at 22.

27. 459 F. Supp. 1, 5 (D. Conn. 1977) (conceding that a Title IX claim could be brought under different circumstances than those in the case), *aff’d* 631 F.2d 178 (2d Cir. 1980) (affirming without comment). Despite the outcome of *Alexander*, there are still complaints that Yale University is not accountable or responsive to sexual harassment on its campus. See Naomi Wolf, *The Silent Treatment*, N.Y. MAG., Mar. 1, 2004, at 23.

28. 613 F. Supp. 1360, 1366 (E.D. Pa. 1985), *aff’d* 800 F.2d 1136 (3d Cir. 1986) (affirming without publication or comment).

29. *Franklin*, 503 U.S. at 76.

harassment and shows deliberate indifference to it.³⁰ Furthermore, the school official must have control over the situation,³¹ the authority to take action to resolve the situation,³² and the harassment must be so severe that it bars the harassed student's educational opportunity or benefits.³³

III. SEXUAL HARASSMENT AS AN ABUSE OF POWER

A. The Social Definition of Sexual Harassment

According to Catherine MacKinnon, sexual harassment is the "unwanted imposition of sexual requirements in the context of a relationship of unequal power."³⁴ Currently, there are two commonly-recognized forms of sexual harassment. Traditionally, quid pro quo, or "this for that," is the exchange of an employment opportunity or activity for compliance with a sexual requirement.³⁵ In an educational context, quid pro quo occurs when "a teacher or other employee conditions an educational decision or benefit on the student's submission to unwelcome sexual conduct."³⁶ The second form of sexual harassment occurs when unwelcome sexual conduct or sex discrimination creates a hostile, abusive, or intimidating environment that interferes with a person's work or education.³⁷

There is no single definition of sexual harassment. Formal definitions can be divided into theoretical propositions and lists of behaviors.³⁸ For example, the National Advisory Council on Women's Educational Programs defines sexual harassment in education as "the use of authority to emphasize the sexuality or sexual identity of the student in a manner that prevents or impairs that student's full enjoyment of educational benefits, climate, or opportunities."³⁹ The City University of New York's sexual harassment policy moves beyond

30. *Gebser v. Lago Vista Indep. Sch. Dist.*, 524 U.S. 274, 277 (1998).

31. *Davis v. Monroe County Bd. of Educ.*, 526 U.S. 629, 644 (1999) (holding that a school could be liable for student-student sexual harassment).

32. *Id.* at 644.

33. *Id.* at 632.

34. CATHARINE A. MACKINNON, *SEXUAL HARASSMENT OF WORKING WOMEN: A CASE OF SEX DISCRIMINATION* 1 (1979).

35. *Id.* at 32-40.

36. See OFFICE FOR CIVIL RIGHTS, U.S. DEP'T OF EDUC., *REVISED SEXUAL HARASSMENT GUIDANCE: HARASSMENT OF STUDENTS BY SCHOOL EMPLOYEES, OTHER STUDENTS, OR THIRD PARTIES* 5 (2001), available at <http://www.ed.gov/offices/OCR/archives/shguide/index.html>.

37. MACKINNON, *supra* note 34, at 40-47; see e.g., JUDITH BERMAN BRANDENBURG, *CONFRONTING SEXUAL HARASSMENT: WHAT SCHOOLS AND COLLEGES CAN DO* 3-4 (1997). The EEOC Guidelines quoted in Part II address quid pro quo behavior in parts (1) and (2), while part (3) addresses hostile environments. See 29 C.F.R. § 1604.11(a) (2005).

38. See generally Louise F. Fitzgerald, *Sexual Harassment: The Definition and Measurement of a Construct*, in *SEXUAL HARASSMENT ON COLLEGE CAMPUSES: ABUSING THE IVORY POWER* 21 (Michele A. Paludi ed., 1996) (exploring several definitions of sexual harassment, including those that are theoretical, empirical, and operational in nature).

39. FRANK J. TILL, *SEXUAL HARASSMENT: A REPORT ON THE SEXUAL HARASSMENT OF STUDENTS, REPORT OF THE NATIONAL ADVISORY COUNCIL ON WOMEN'S EDUCATIONAL PROGRAMS* 7 (1980) (quoted in Fitzgerald, *supra* note 38, at 26-33).

quid pro quo, describing sexually harassing behavior to include, but not be limited to:

1. sexual comments, teasing, or jokes;
2. sexual slurs, demeaning epithets, derogatory statements, or other verbal abuse;
3. graphic or sexually suggestive comments about an individual's attire or body;
4. inquiries or discussions about sexual activities;
5. pressure to accept social invitations, to meet privately, to date, or to have sexual relations;
6. sexually suggestive letters or other written materials;
7. sexual touching, brushing up against another in a sexual manner, graphic or sexually suggestive gestures, cornering, pinching, grabbing, kissing, or fondling; [or]
8. coerced sexual intercourse or sexual assault.⁴⁰

In general, theoretical definitions of sexual harassment usually contain some aspect of an unequal power relationship; however, this power imbalance is not absolutely necessary for sexual harassment to occur.⁴¹ While sexual harassment was once viewed as a broad continuum of behaviors, it is now perceived as discrete categories of behavior that can include unwanted sexual attention, sexual coercion, and gender harassment.⁴² In studies, students were most likely to label unwanted sexual attention and sexual coercion as sexual harassment, while they were least likely to equate gender harassment with sexual harassment.⁴³

The status of the harasser can also affect what behaviors he perceives to be harassing.⁴⁴ For example, although students and faculty may exhibit the same

40. CITY UNIV. OF N.Y., POLICY AGAINST SEXUAL HARASSMENT (2004), available at http://portal.cuny.edu/cms/id/cuny/documents/level_3_page/001178.htm.

41. Fitzgerald, *supra* note 38, at 21-41.

42. Sharon Toffey Shepela & Laurie L. Levesque, *Poisoned Waters: Sexual Harassment and the College Climate*, 38 SEX ROLES 589, 590-92 (1998). Unwanted sexual attention includes seductive behavior, attempts to establish sexual relationships, invasion of privacy, touching, and fondling, among other things. *Id.* Sexual coercion involves bribery and rewards for sexual cooperation, and threats or acts of retaliation for refusal or rejection. *Id.* Gender harassment consists of behavior such as offensive jokes, crude remarks, staring, leering, etc. *Id.*

43. Michele L. Kelley, *Sexual Harassment in the 1990s: A University-wide Survey of Female Faculty, Administrators, Staff, and Students*, 71 J. HIGHER EDUC. 548, 560 (2000). Even though university sexual harassment policies are in place, common conceptions of sexual harassment have changed little in recent years, probably due to a lag in training regarding how to recognize sexual harassment. *Id.* at 561. *E.g.*, Shepela & Levesque, *supra* note 42, at 598-600; Patricia A. Frazier et al., *Social Science Research on Lay Definitions of Sexual Harassment*, 51 J. SOC. ISSUES 21, 24-25 (1995) (showing that gender harassment was least likely to be considered sexual harassment by university students, staff, and faculty).

44. Frazier et al., *supra* note 43, at 27-29 (reviewing Krisanne Bursik, *Perceptions of Sexual Harassment in an Academic Context*, 27 SEX ROLES 401 (1992)); Louise F. Fitzgerald & Alayne J. Ormerod, *Perceptions of Sexual Harassment*, 15 PSYCHOL. WOMEN Q. 281 (1991); see also David Lester et al., *Judgments About Sexual Harassment: Effects of the Power of the Harasser*, 63 PERCEPTUAL & MOTOR SKILLS 900 (1986); John B. Pryor & Jeanne D. Day, *Interpretations of Sexual Harassment: An Attributional Analysis*, 18 SEX ROLES 405 (1988); Timothy Reilly et al., *The Factorial Survey: An Approach to Defining*

harassing behaviors, faculty members are less likely to be aware of the effects of their power, their behavior, and how their positions of power make them more likely to be perceived as harassers.⁴⁵ Furthermore, both the perceived motivation of the harasser and delays in reporting the harassment can affect whether outside observers consider certain behavior to be sexual harassment.⁴⁶ In addition, gender also plays an important role. Women are more likely to find a broader range of behavior to be sexually harassing than men, but this is most often the case where the behavior is not perceived as severe or is ambiguous.⁴⁷

Most studies examining the prevalence of harassment in education report that twenty to forty percent of undergraduate and graduate women experience some type of sexual harassment while they are in school.⁴⁸ Forty to fifty percent of female faculty members experience harassment at some point in their careers.⁴⁹ Undergraduate women are more likely to report other students as perpetrators, whereas graduate women and faculty typically report male faculty.⁵⁰ It has been postulated that these differences exist because sexual harassment is more likely to happen between those who work closely together.⁵¹

B. Models of Sexual Harassment

Scholars have developed several models to predict what types of people are likely to be involved in sexual harassment and in what types of situations it is likely to occur. Professor Tangri, for example, has proposed three models.⁵² First, in the biological model, sexual harassment is in part the result of a natural attraction between the sexes, with a lack of intent to harass.⁵³ Second, in the organizational model, the opportunity to harass is created by differences in power and position, leading the more powerful individual to extort various types of sexual gratification.⁵⁴ Educational institutions create opportunities for

Sexual Harassment on Campus, 38 J. SOC. ISSUES 99 (1982); U.S. MERIT SYS. PROTECTION BD., *SEXUAL HARASSMENT IN THE FEDERAL GOVERNMENT: AN UPDATE* (1988).

45. Frazier et al., *supra* note 43, at 27-29.

46. Deborah Ware Balogh et al., *The Effects of Delayed Report and Motive for Reporting on Perceptions of Sexual Harassment*, 48 SEX ROLES 337, 344-46 (2003).

47. See generally Barbara A. Gutek, *How Subjective is Sexual Harassment? An Examination of Rater Effects*, 17 BASIC & APPLIED SOC. PSYCHOL. 447, 454-59 (1995).

48. Kelley, *supra* note 43, at 549.

49. *Id.*

50. *Id.* at 555-56.

51. *Id.* at 559-60.

52. Sandra S. Tangri et al., *Sexual Harassment at Work: Three Explanatory Models*, 38 J. SOC. ISSUES 33, 33-35 (1982). Other models concerning sexual harassment have been proposed. For example, one model says sexual harassment is caused by a combination of social, situational, and personality factors, and it shows that harassment is more likely to occur in situations where it is perceived to be socially acceptable. See generally John B. Pryor et al., *A Social Psychological Model for Predicting Sexual Harassment*, 51 J. SOC. ISSUES 69 (1995). It has also been suggested that sexual harassment is caused by the combination of motives such as intimacy, domination, paternalism, and gender differentiation or stereotyping. See generally Susan T. Fiske & Peter Glick, *Ambivalence and Stereotypes Cause Sexual Harassment: A Theory with Implications for Organizational Change*, 51 J. SOC. ISSUES 97 (1995).

53. Tangri et al., *supra* note 52, at 35-36.

54. *Id.* at 37-40.

this model of sexual harassment because of their hierarchical structures.⁵⁵ Third, under the socio-cultural model, social beliefs result in harassing interactions that reflect “a larger patriarchal system.”⁵⁶ For example, a society that rewards women for being passive, facilitates sexual harassment by blaming women for their victimization and by putting pressure on them to avoid conflict.⁵⁷

Billie Wright Dziech and Linda Weiner have identified five common professional roles that can characterize an academic harasser: counselor-helper, confidante, intellectual seducer, opportunist, and power broker.⁵⁸ In any of these roles, a professor can use his position to achieve sexual intimacy and control the circumstances surrounding the victim.⁵⁹ Sue Rosenberg Zalk has looked at behavior patterns that function as motivational poles reaching into four dimensions: the public versus the private harasser, the seducer/demander vs. receptive non-initiator, the untouchable versus the risk taker, and the infatuated versus the sexual conqueror.⁶⁰ These classifications all contain “underlying theme[s] of power and control.”⁶¹ Zalk states that the harasser will have a specific motivational stance depending upon “how he feels about himself and how he views women.”⁶²

IV. EXAMINATION OF DISCRIMINATION IN THE SCIENCES

A. Statistics

Far fewer women earn advanced degrees in the physical science and engineering fields than in other academic fields. For example, in 2001, women received 47% percent of the social sciences PhDs awarded that year, 67% of psychology PhDs, and 46% of biological sciences PhDs.⁶³ However, in the same year, women earned only 25% of PhDs awarded in the physical sciences, 23% of PhDs in computer science, and 19% of PhDs in engineering.⁶⁴

55. *See id.*

56. *Id.* at 40-42.

57. *Id.*

58. BILLIE WRIGHT DZIECH & LINDA WEINER, *THE LECHEROUS PROFESSOR: SEXUAL HARASSMENT ON CAMPUS* 122-24 (1984).

59. *Id.* at 124.

60. *See generally* Sue Rosenberg Zalk, *Men in the Academy: A Psychological Profile of Harassers*, in *SEXUAL HARASSMENT ON COLLEGE CAMPUSES: ABUSING THE IVORY POWER* 81, 89-105 (Michele A. Paludi ed., 1996).

61. *Id.* at 89.

62. *Id.* Zalk also emphasizes that there are many men who do not sexually harass women and who are more comfortable empowering female students than having control over them. *Id.* at 108.

63. NAT'L SCIENCE BD., *SCIENCE AND ENGINEERING INDICATORS 2004* (2004), <http://www.nsf.gov/statistics/seind04/append/c2/at02-26.xls>.

64. *Id.* The sciences are strongly competitive. Nationally, large research universities enroll only about one-fifth of all students continuing on to higher education, but they produce the most engineering degrees and a substantial percentage of all natural and social science degrees. *See* NAT'L SCIENCE BD., *SCIENCE AND ENGINEERING INDICATORS 2002* (2002), <http://www.nsf.gov/statistics/seind02/c2/c2h.htm>. Nationally, about one-third of all entering undergraduate students plan to major in science or engineering, but fewer than fifty percent of those actually complete a science or engineering degree within five years. *Id.*

History shows that when enough women enter a field in great numbers, some will eventually reach the highest levels of achievement in their profession. This process has been analogized to a pipeline that transports people to their ultimate career destinations.⁶⁵ However, in the sciences, reports suggest that there are “leaks” in the pipeline that prevent women from being promoted beyond the lowest rungs of power.⁶⁶

In the chemistry and physics fields, significant gender disparities exist in (1) the ranks of professors and the emphasis on research or teaching at their institutions,⁶⁷ (2) the yield of PhDs,⁶⁸ and (3) the number of female department chairs.⁶⁹ For example, an examination of the top fifty research universities shows that in the 2004-05 academic year, women represented 12% of the total chemistry faculty.⁷⁰ Overall, women primarily occupy associate and assistant

65. See Madeleine Jacobs, *Challenges Await Women Chemists in the New Millennium*, CHEMICAL & ENGINEERING NEWS, Sept. 21, 1998, at 43-44 [hereinafter Jacobs, *Challenges*].

66. For example, in the 1993-94 school year, women made up half of the students in high school computer science classes, but they held only 5.7% of full computer science professorships at universities. Wendy Grossman, *Access Denied*, SCI. AM., Aug. 1998, at 38. Presently, women members comprise only 8.9% of the prestigious National Academy of Sciences. E-mail from Jenny Mun, Assistant Director, National Academy of Sciences Membership Office, to Ellen Sekreta, Student, The City University of New York School of Law (Mar. 4, 2005, 08:55:18 EST) (on file with author).

67. See generally Corinne A. Marasco, *No Change in Numbers of Women Faculty*, CHEMICAL & ENGINEERING NEWS, Sept. 27, 2004, at 32 [hereinafter Marasco, *No Change*]; Corinne A. Marasco, *Numbers of Women Nudge Up Slightly*, CHEMICAL & ENGINEERING NEWS, Oct. 27, 2003, at 58; Janice R. Long, *Women Still Lag in Academic Ranks*, CHEMICAL & ENGINEERING NEWS, Sept. 23, 2002, at 110-11 [hereinafter Long, *Women Still Lag*]; Valerie J. Kuck, *Women Physicists and Chemists Make Slow Progress in Academe*, CSWP GAZETTE, FALL 2001, at 13-14; Alison Byrum, *Women's Place in Ranks of Academia*, CHEMICAL & ENGINEERING NEWS, Oct. 1, 2001, at 98-99; Janice R. Long, *Women Chemists Still Rare in Academia*, CHEMICAL & ENGINEERING NEWS, Sept. 25, 2000 at 56-57 [hereinafter Long, *Women Chemists*]; Kenneth G. Everett et al., *Women in The Ranks: Faculty Trends in ACS-Approved Departments*, 73 J. CHEMICAL EDUC. 139, 139-141 (1996). In 1993, women were more than twice as likely to hold professorships at institutions granting only B.S. degrees than schools granting PhDs. See *id.* at 139. In the same year, women made up 49% of instructors of all ranks, but only 4% of full professors. *Id.* at 140. Furthermore, the annual percentage of women earning chemistry PhDs has remained almost constant since 1989. *Id.* The “leaky pipeline” is evident considering that between 1973 and 1993, the number of women professors becoming full professors increased by only 72% while the number of women obtaining chemistry PhDs nearly quadrupled. Jacobs, *Challenges*, *supra* note 65, at 44.

68. Kuck, *supra* note 67, at 13-14. In 1999, women made up 6% of physics faculty at universities and colleges, while women constituted 14% of physics graduate students. *Id.* at 14. At the top ten research universities for physics, 9% of the faculty was female, resulting in an average of only 3.5 women per school. *Id.* at 13. Kuck found that in the top twenty-five ranked schools, there were huge differences in the PhD yields among women, which ranged from 108% (including student transfers) to 13%. *Id.* at 14. These differences point to varying “institutional environments” at different schools. *Id.* The fact that only 1 in 8 women at the University of Pennsylvania succeed in obtaining an advanced degree leads to a detrimental learning experience for women in general. *Id.* According to Kuck's data, a male is 4 times more likely to earn a PhD at the University of Pennsylvania than a female. *Id.*

69. See Jacobs, *Challenges*, *supra* note 65, at 45. In 1998, no top twenty-five PhD-producing research university had a woman as chair of the chemistry department. *Id.* Out of the top forty-two universities that produced the most chemistry graduates, only one had a woman as chair of its department. *Id.*

70. Marasco, *No Change*, *supra* note 67, at 32-33.

faculty positions.⁷¹ Despite the fact that women students earned about one-third of chemistry PhDs granted since 1989 at the top fifty research institutions, in the 2000-01, 2001-02, and 2002-03 academic years, women professors of all ranks represented only 10%,⁷² 11%,⁷³ and 12%,⁷⁴ respectively, of the faculty. Furthermore, the 12% representation has remained constant for the last three years.⁷⁵ Thus a generous estimate is that it will take ten to fifteen years for the population of women professors at these institutions to reach a "critical mass," or the estimated 25-35% population necessary to create an environment in which women can be successful and be treated equally as scientists.⁷⁶

The sciences are a highly stratified field. A small number of scientists contribute disproportionately to progress in the sciences and also reap a disproportionately large amount of the awards.⁷⁷ Awards, publications, and getting credit for discoveries and citations are critical to obtaining and maintaining one's position in the social hierarchy of research.⁷⁸ Because there are fewer awards than there are qualified people, criteria such as personal relations, social origins, and social status are often used to judge a candidate.⁷⁹ These criteria are most often used early in a scientist's career to judge his or her work.⁸⁰ Thus, for a graduate student, both the specific department granting the doctorate degree and the student's advisor are critical to his or her future success.

B. Discrimination in the Physical Sciences

Professionals in the field have varied responses to the low participation of women in chemistry and physics. Like Larry Summers, many question whether the lack of women in positions of power in science reflects a lack of innate ability.⁸¹ Many also feel that sexual discrimination issues have long been

71. *Id.*

72. Long, *Women Chemists*, *supra* note 67, at 56-57.

73. Byrum, *supra* note 67, at 98-99.

74. Long, *Women Still Lag*, *supra* note 67, at 111.

75. Marasco, *No Change*, *supra* note 67, at 32.

76. Kim A. McDonald, *Many Female Astronomers Say They Face Sex Harassment and Bias*, CHRON. HIGHER EDUC. (Wash., D.C.), Feb. 13, 1991, at A11, A15; *see also* Celia M. Henry, *Women Welcome*, CHEMICAL & ENGINEERING NEWS, Sept. 23, 2002, at 106 (discussing positive environments in which female scientists can succeed).

77. Harriet Zuckerman, *The Sociology of Science*, in THE HANDBOOK OF SOCIOLOGY 511, 526 (Neil J. Smelser ed., 1988). As an example of the stratification in science, around the time the Zuckerman article was written, half of all American Nobel laureates worked at one of five major research universities. *Id.* at 527. Furthermore, half of all American Nobel laureates have studied with other Nobel Prize winners. *Id.* at 530. Moreover, scientists at ten universities accounted for half the membership of the National Academy of Sciences. *Id.* at 527. Finally, approximately thirty universities were granted two-thirds of all research funding, while the other 3,000 institutions competed for the remaining one-third. *Id.*

78. *Id.* at 526-33.

79. *See id.* at 529.

80. *See id.* at 530.

81. *See, e.g.*, Rimer & Healy, *supra* note 1, at A1, A20.

resolved.⁸² Academia has traditionally responded by developing strategies to retain women in physics and chemistry. Scholars emphasize mentoring,⁸³ survival workshops,⁸⁴ awards,⁸⁵ women's speaker's lists,⁸⁶ more gender research,⁸⁷ and improved student preparation⁸⁸ as ways to facilitate women's progress in scientific fields. So as not to discourage women, "horror stories" are not generally told,⁸⁹ and complaints about institutional bias are not passed along.⁹⁰ Thus, candid discussions of sexual harassment are more likely to occur underground.⁹¹

Recently however, the focus has been less on women and more on accountability. For example, one scientist has announced a "Title IX Challenge" to universities, demanding that universities lose their federal funding until at least one-third of their chemistry hires are women.⁹² Other scientists have

82. See, e.g., Susan J. Ainsworth, *Finding a Place in Chemistry*, CHEMICAL & ENGINEERING NEWS, Feb. 11, 2002, at 45.

83. See generally Mairin B. Brennan, *Mentoring Tenured Women Chemists*, CHEMICAL & ENGINEERING NEWS, Sept. 4, 2000, at 46-47; Henry, *supra* note 76, at 106-08; Meg Urry, *Letter from the Editor: Speeding Up the Long Slow Path to Change*, CSWP GAZETTE, Fall 2002, at 5; Monique I. Cuvelier, *CSWP Provides Mentoring and Support for Women in Physics at Berkeley*, CSWP GAZETTE, Spring 1999, at 5.

84. See, e.g., *Workshop on Survival Skills for Women Physicists*, CSWP GAZETTE, Fall 2001, at 1; *NSF Provides Funding for Professional Skills Development Workshops for Women at APS General Meetings*, CSWP GAZETTE, Fall 2004, at 1.

85. See, e.g., Kimberly S. Budil, *The CAWMSET Report and the Renewed Focus on Diversity in the Technical Workplace*, CSWP GAZETTE, Fall 2001, at 4-5.

86. See, e.g., Madeleine Jacobs, *Reasons Sought for Lack of Diversity*, CHEMICAL & ENGINEERING NEWS, Oct. 1, 2001, at 100, 103.

87. See, e.g., Nichole Dewandre, *European Strategies For Promoting Women*, 295 SCI., 278 (2002).

88. See, e.g., Meera Chandrasekhar & Rebecca Litherland, *Newton Summer Science Academy*, CSWP GAZETTE, Fall 1999, at 10; Pam Solomos, *Girls Fly High at University of Maryland Summer Physics Program*, CSWP GAZETTE, Spring 1999, at 10.

89. Laurie E. McNeil, *The Woman's Guide to Navigating the Ph.D. in Engineering & Science*, CSWP GAZETTE, Fall 2001, at 12 (reviewing BARBARA B. LAZARUS ET AL., *THE WOMAN'S GUIDE TO NAVIGATING THE PH.D. IN ENGINEERING & SCIENCE* (2001)).

90. See, e.g., Madeleine Jacobs, *More Ideas for Women Chemists*, CHEMICAL & ENGINEERING NEWS, Nov. 9, 1998, at 65.

91. See DZIECH & WEINER, *supra* note 58, at 5-6 (acknowledging a lack of realization about the magnitude of the sexual harassment problem and the secrecy with which it is cloaked in academe). See also Wolf, *supra* note 27 at 24 (where informal advice is often sought to questions such as, "My lab instructor keeps putting his hands on my body, and his mentor is on the grievance committee. I can't sleep. What should I do?").

92. Deborah Rolison, *A Title IX Challenge*, CHEMICAL & ENGINEERING NEWS, Mar. 13, 2000, at 5 (pointing out that the social conditions of chemistry departments are not consistent with modern society, and that the best way to facilitate change is by incentivizing it through federal grants). There is no private cause of action to challenge disparate impact discrimination via Title IX or regulations promulgated under Title IX. See *Weser v. Glen*, 190 F. Supp. 2d 384, 394-95 (E.D.N.Y. 2002) (extending to Title IX actions the rule from *Alexander v. Sandoval*, 532 U.S. 275 (2001), which found no private cause of action to enforce disparate impact regulations designed to effectuate Title VI of the Civil Rights Act of 1964). Thus, any action to remedy non-intentional discrimination must originate from the government or a public entity. See *id.* Furthermore, private remedies for intentional discrimination are severely limited with regard to the removal of federal funding under Title IX. See *Storey v. Bd. of Regents of the Univ. of Wisc. Sys.*, 604 F. Supp. 1200, 1201-04 (W.D. Wis. 1985) (holding that termination of federal funding was not a remedy to an isolated incident of employment discrimination, because it would not directly benefit the victim of discrimination; thus,

suggested that people who do nothing to combat discrimination are “silent accomplices to an injustice.”⁹³ Instead, universities and science departments should make clear “that behavior contributing to a hostile climate is unacceptable.”⁹⁴ Furthermore, faculty should be trained to recognize sexual harassment,⁹⁵ and departments should keep records of sexual harassment complaints against professors and make them available for prospective students to review.⁹⁶

C. The Culture of Graduate School and the Laboratory

When graduate students enter a program, they are exposed to various socialization processes that train them for professional careers.⁹⁷ In order to succeed, “students must develop the capacity to observe who commands power and authority, who is rewarded and how, who is banished and why, which groups or individuals are treated fairly, and who is tokenized.”⁹⁸ As a graduate student progresses through her doctoral program, changing to another program of study becomes difficult because investments have been made, specialized skills have been learned that are not easily transferred to other fields, and often a commitment to work for a particular professor has been made.⁹⁹

In the physical sciences, the faculty advisor is critically involved in the socialization process.¹⁰⁰ The relationship between advisor and student is “sacred”: Others in the field do not interfere with this relationship, and because of the power dynamics involved, students often do not control their own professional and academic lives.¹⁰¹ Graduate students may be treated like “slaves,” as they are expendable, vulnerable, and not unionized; moreover, universities have no incentives to change the system.¹⁰²

Congress intended the termination of funding as a last resort, and it was not meant to be a readily-available remedy to private plaintiffs). *But see* Cannon v. Univ. of Chicago, 441 U.S. 677, 724 (1979) (discussing that the Supreme Court has not explicitly proscribed the removal of federal funding as a private remedy in a Title IX action).

93. Lewyn Li, *Gender Equity in Science—Who Cares?*, 79 J. CHEMICAL EDUC. 418, 418 (2002) [hereinafter Li, *Gender Equity*].

94. Meg Urry, *The Baltimore Charter and the Status of Women in Astronomy*, CSWP GAZETTE, Fall 1999, at 5.

95. Li, *Gender Equity*, *supra* note 93, at 419.

96. *Id.* at 418.

97. *See generally* John C. Weidman et al., *Socialization of Graduate and Professional Students in Higher Education: A Perilous Passage?*, 28 ASHE-ERIC HIGHER EDUC. REPORT No. 3, at 1-112 (2001).

98. *Id.* at 3.

99. *Id.* at 17.

100. *See id.* at 58-62.

101. *Id.* at 66-67.

102. *See* Nisan A. Steinberg, *Regulation of Scientific Misconduct in Federally Funded Research*, 10 S. CAL. INTERDISC. L.J. 39, 54-55 (2000). For example, a faculty member can take away a student’s research project at any time, leaving her with less appealing research. *Id.* at 54 n.83. For example, when one former physics graduate student told her advisor that she was pregnant, her advisor’s “first reaction was to mention how it was going to interfere” with the student’s research. The student shared this story:

I worked until the very day I delivered . . . two weeks OVERDUE. To avoid any criticism from my advisor, I deliberately returned to work over the Christmas break (less than two

The organic chemistry lab of Professor E. J. Corey, a Nobel laureate at Harvard University, demonstrates that these aspects of laboratory culture are not mere postulation on behalf of graduate students.¹⁰³ In Professor Corey's lab, three students separately committed suicide.¹⁰⁴ The most recent one to have done so, Jason Alton, left a note that read, "Professors here have too much power over the lives of their grad students."¹⁰⁵ In his suicide note, he recommended a three-member faculty committee to "provide protection for graduate students from abusive research advisors."¹⁰⁶ When he was alive, no one ever heard him complain or criticize his research advisor.¹⁰⁷ His story demonstrates that power in the lab is very centralized and that this is a commonly-accepted situation.¹⁰⁸

V. SEXUAL HARASSMENT IN THE PHYSICAL SCIENCES

In *Meritor Savings Bank*, the Supreme Court held, "the gravamen of any sexual harassment claim is that the alleged sexual advances were 'unwelcome.'"¹⁰⁹ However, the Court also held that, in determining the existence of sexual harassment, courts may consider the complainant's speech or dress when evaluating the "record as a whole" and the "totality of the circumstances."¹¹⁰ This allows courts to focus on the behavior of the victim.¹¹¹ Examining the victim's behavior in this way harkens back to historical rape laws, where courts probed the resistance of the victim, instead of presuming at the outset that the fondling or penetration was unwelcome.¹¹²

This Part focuses on sexual harassment litigation in the physical sciences, where victims' behavior has been scrutinized. It also discusses federal rules and policy regarding scientific misconduct, and their relation to sexual harassment.

weeks after delivering). I was completely in the dark as to whether there would be any possible loss of income if I did not promptly return to work I was very disappointed when my advisor gave me a below acceptable rating on my fall performance review in the category of the time spent in the lab.

Christine M. Wehlburg, Letter to the Editor, CSWP GAZETTE, Fall 2000, at 5. At private universities, graduate students do not have any legal rights to form unions under federal law. See generally Sheldon D. Pollack & Daniel V. Johns, *Graduate Students, Unions, and Brown University*, 20 LAB. LAW. 243 (2004). See also Robin Wilson, *The Laws of Physics: A Postdoc's Pregnancy Derails Her Career*, CHRON. HIGHER EDUC. (Wash., D.C.), Nov. 11, 2005, at A10 (where a researcher who discovered evidence of a new subatomic particle was terminated from her job shortly thereafter when she complained about the lack of maternity leave).

103. See generally Stephen S. Hall, *Lethal Chemistry at Harvard*, N.Y. TIMES, Nov. 28, 1998, (Magazine), at 121.

104. *Id.* at 122.

105. *Id.* at 121.

106. *Id.* According to Hall's report, few women have joined Corey's lab. See *id.* at 124.

107. *Id.* at 122.

108. According to Hall's report, the graduate students had an obligation to do the research the advisor ordered (although they could do their own work secretly). *Id.* at 125. All of the researchers Hall interviewed feared reprisals from having their names or comments published. *Id.* at 128. They were paid about \$1,000 per month and worked between sixty and eighty hours per week. *Id.* at 123.

109. 477 U.S. at 68 (quoting 29 C.F.R. § 1604.11(a) (1984)).

110. *Id.* at 69.

111. Susan Estrich, *Sex at Work*, 43 STAN. L. REV. 813, 814-16 (1991).

112. *Id.* at 815-16.

A. Sexual Harassment Litigation in the Physical Sciences

P.J. Herchenroeder v. Johns Hopkins University Applied Physics Laboratory demonstrates how intensely a court can focus on the victim's behavior.¹¹³ In *Herchenroeder*, the plaintiff alleged that after she refused her supervisor's advances, he retaliated by filing plagiarism charges against her.¹¹⁴ She also alleged that her supervisor defamed her by regularly accusing her of having sex with a co-worker.¹¹⁵ The issue was brought up again during a deposition, in which the plaintiff refused to answer a question about whether she and the co-worker had ever discussed the possibility of engaging in sexual activity.¹¹⁶ The defense argued that the answer was relevant to the hostile environment claim, because it could have led the supervisor to believe that his conduct was welcomed.¹¹⁷ The court agreed that the alleged victim's past sexual behavior was an appropriate inquiry.¹¹⁸ From the court's perspective, the possibility that the plaintiff was involved in or even discussed the possibility of being involved in a romantic liaison at work could make her appear as though she was looking for trouble, thus, providing an excuse for the defendant's harassing behavior.¹¹⁹

*Reifschneider v. Regents of the University of California*¹²⁰ is another example of how courts focus on the victim's behavior. Here the issue was whether a graduate student, Diane Reifschneider, was coerced into a sexual relationship with her graduate advisor, Professor Malcolm Nicol.¹²¹ The court's opinion depicted the plaintiff as unable to get along with others.¹²² It was implied that her advisor did her a favor by allowing her into his group.¹²³ The court devoted over a page of its relatively short opinion to summarizing two psychiatrists' reports on the plaintiff's psychological state.¹²⁴ The court also discussed her need to borrow money,¹²⁵ her acceptance of gifts,¹²⁶ and the possibility of her advisor "leaving his specialized laboratory equipment to her upon his possible retirement in a few years."¹²⁷

113. See generally 171 F.R.D. 179 (D. Md. 1997).

114. *Sodergren v. Johns Hopkins University Applied Physics Laboratory*, 773 A.2d 592, 595 (Md. Ct. Spec. App. 2001) (arising out of a settlement agreement filed by Herschenroeder). Other than fraud, plagiarism is the most stigmatizing charge that can be alleged in the science fields. Zuckerman, *supra* note 77, at 521.

115. *Herchenroeder*, 171 F.R.D. at 180.

116. *Id.* In her deposition she was asked whether she had ever engaged in any type of sexual activity with her co-worker, and she answered "No." This was reaffirmed by her co-worker's deposition. *Id.* Then she refused to answer whether she and her co-worker "even discussed" having sex. *Id.*

117. *Id.*

118. *Id.* at 182.

119. See *id.*

120. Nos. B123338, BC152958, 2001 WL 1215850 (Cal. Ct. App. Oct. 12, 2001).

121. *Id.* at *1.

122. *Id.* at *3-*4.

123. *Id.* at *2.

124. *Id.* at *5.

125. *Id.*

126. *Id.* at *3.

127. *Id.*

In *Reifschneider*, the court not only put an inordinate focus on the victim, but it also seemed to spin the facts about the victim in a particularly negative way. For example, her ability to obtain good grades was attributed to her “obsessive-compulsive, perfectionist personality,”¹²⁸ rather than to her innate intelligence. The court mentioned that one faculty member believed that the plaintiff was not capable of obtaining a PhD.¹²⁹ However, the court did not refer to testimony that the plaintiff did well on her PhD qualifying exam, and that she had received an award for outstanding teaching.¹³⁰ Furthermore, the plaintiff was described as tired and emotionally depressed in the months before she had joined Nicol’s group.¹³¹

The court made no mention of why Reifschneider had never introduced Nicol to her friends and family as her boyfriend¹³² even though their social relationship lasted almost one year.¹³³ Additionally, there was no discussion of either the professor’s psychological state or why he chose to date his student.¹³⁴ Evidence of his previous sexual relationships with students was judged inadmissible.¹³⁵ No mention was made about the atmosphere of the Chemistry Department or its policy concerning faculty-student dating.¹³⁶ There was no

128. *Id.* at *5.

129. *Id.* at *2. The plaintiff had begun her graduate studies at the University of Southern California, was terminated from the research group of one professor, and then transferred to UCLA. *Id.* The court does not address why she had to transfer schools. *See id.*

130. Catherine Shepard-Haier, *Reifschneider Trial: Notes from the front Lines*, WAGE NEWSLETTER, Fall 2001, available at <http://www.wage.org/doc/text/9reif.html>.

131. *Reifschneider*, 2001 WL 1215850, at *3. Her fatigue could reasonably be due to the fact that, before joining Nicol’s group, she had already changed schools and switched between three different research groups, putting her degree on the line. *Id.* at *2. The work in her first group involved learning about unimolecular reactions, photochemistry, and photophysics. *See* <http://chem.usc.edu/faculty/Wittig.html> (last visited Nov. 23, 2005) (describing the research interests of Professor Curt Wittig, University of Southern California). In the next group, she was required to learn about atomic radical beam scattering from single crystal surfaces at ultrahigh vacuum. *See* <http://www.chem.ucla.edu/dept/Faculty/baugh> (last visited Nov. 23, 2005) (describing the research interests of Professor Delroy Baugh, University of California at Los Angeles). Then she had to study laser spectroscopy of molecular beams. *See* <http://www.chem.ucla.edu/dept/Faculty/felker> (last visited Nov. 23, 2005) (describing the research interests of Professor Peter Felker, University of California at Los Angeles). Finally, in Nicol’s group, she studied ultrahigh pressure chemistry. *See* <http://www.physics.unlv.edu/~nicol/> (last visited Nov. 23, 2005) (describing the research interests of Professor Malcolm Nicol, University of Nevada at Las Vegas). It would be unnatural not to be exhausted from having to master these techniques.

132. *See generally Reifschneider*, 2001 WL 1215850, at *1; *see also Reifschneider v. UCLA: Observations on UCLA’s Respondent’s Brief*, WAGE NEWSLETTER, Spring 2000, available at <http://www.wage.org/doc/text/13reif.html>.

133. *Reifschneider*, 2001 WL 1215850, at *3, *5.

134. *See generally Reifschneider*, 2001 WL 1215850, at *1. Nicol lent Reifschneider a lot of money, gave her expensive gifts, promised her his lab equipment, and discussed marriage and children with her. *Id.* at *3. This fits Dziech and Weiner’s descriptions of the counselor-helper or confidante roles. DZIECH & WEINER, *supra* note 58, at 122-24.

135. *Reifschneider*, 2001 WL 1215850, at *7. Instead, the court noted that the professor still loved her, even after they began having relationship problems. *See id.* at *4 (implying that harassment could not occur under such circumstances).

136. *See generally id.* at *1.

presumption that a research advisor soliciting a student for sex was engaging in inappropriate behavior or compromising academic standards.¹³⁷

In *Reifschneider*, the court's emphasis on scrutinizing the victim's behavior distracted it from focusing on the alleged harasser's behavior, the working conditions of the lab, and the hierarchical power structure of the university. Rather than examining the victim's psychological state, the court might have gained insight into the facts by examining whether the power dynamic inherent in the research advisor-student relationship lent credibility to the victim's claim that the professor's actions were unwelcome. Instead, it affirmed the trial court's ruling against Reifschneider.¹³⁸

Although the *Reifschneider* court ignored the student-professor power differential, focusing instead on the victim's character and behavior, the student-professor power differential is taken seriously in sexual harassment cases involving relationships between schoolteachers or school employees and students. In these cases, the teacher's conduct is automatically considered harassment even if the victim's conduct appears voluntary.¹³⁹ Furthermore, status, as evidenced by the age of the parties, is considered in penalties for statutory rape, which can vary, depending on the difference in age between the victim and assailant.¹⁴⁰ Courts do not directly consider the status of the parties when examining sexual harassment in cases involving adults.¹⁴¹

Although it makes sense to take sexual misconduct towards a minor more seriously than similar misconduct towards an adult, it does not mean that significant differences in age and status should not be taken into consideration by courts when looking at claims of sexual harassment by university students against their professors. In *Reifschneider*, there was a huge difference in status between Reifschneider, a twenty-seven-year-old graduate student who was in a precarious and vulnerable position, and Nicol, a world-renowned scientist who had been a professor at a prestigious research institution for almost thirty years.¹⁴² If knowledge and wisdom are viewed as sources of power,¹⁴³ professionally speaking, this difference in status should be no less distinguishable than the difference between an eighteen-year-old and a thirteen-year-old. The obvious difference between a case involving a minor and a case involving a graduate student is the ability of the graduate student to legally consent to sexual advances made by another adult. However, the Supreme Court has held that the test in determining whether sexual harassment has

137. See generally *id.* In fact, it is common for professors to act as nurturers, caretakers, or confidantes, or to use unusual circumstances in gaining intimate access to students. DZIECH & WEINER, *supra* note 58, at 122-24.

138. *Reifschneider*, 2001 WL 1215850, at *11. Reifschneider later settled with Nicol out of court. *Id.* at *2.

139. See, e.g., *Gebser*, 524 U.S. at 277; *Mary M. v. N. Lawrence Cmty. Sch. Corp.*, 131 F.3d 1220, 1225 (7th Cir. 1997).

140. See, e.g., N.Y. PENAL LAW §§ 130.25, 130.30, 130.35 (McKinney 2003).

141. See 29 C.F.R. § 1604.11(a) (2005).

142. *Reifschneider*, 2001 WL 1215850, at *3.

143. See Zalk, *supra* note 60, at 85.

occurred is not whether the victim consented, but whether the defendant's sexual advances were welcome.¹⁴⁴

In *Reifschneider*, the court wrongly ignored many aspects of the professional culture at research institutes. It should have considered that the victim was a graduate student at a top research institution who needed the professional and personal support of her advisor, a man who allegedly had a history of dating students, in order to succeed.¹⁴⁵ The court should have recognized how difficult it would have been for her to refuse or challenge him. As discussed earlier, there have been chemistry students who would rather die than complain about their advisors.¹⁴⁶ After all, exclusion from informal networking can severely limit a scientist's ability to be fully recognized in her field.¹⁴⁷ Given the very real possibility that some supervisors might get extremely angry if their advances were refused and might retaliate,¹⁴⁸ can it really be contended that Reifschneider's actions were obviously consensual? For example, in *Litman v. George Mason University*, an undergraduate who filed a complaint against her research advisor for stalking her, found that no other faculty was willing to supervise her research and that the university refused to investigate her complaint.¹⁴⁹ Similarly, in *Kadiki v. Virginia Commonwealth University*, a student who initiated criminal and administrative proceedings in response to sexual harassment was written a letter by another biology professor asking her not to file charges.¹⁵⁰ Thus, it is clear that students are under great pressure to not report professors who sexually harass them. By refusing to examine the disparity of power between advisors and researchers and how that disparity must have impacted Reifschneider's relationship with the man she accused of harassing her, the court turned a blind eye towards a very important factor in the case.

144. *Meritor Sav. Bank*, 477 U.S. at 68.

145. *Reifschneider*, 2001 WL 1215850, at *6.

146. See Hall, *supra* note 103, at 122.

147. See Bruce J. West, *Letter from the Editor: The Fading Neanderthal*, CSWP GAZETTE, Spring 2002, at 1-2.

148. Sexual harassment in science is rarely an isolated incident. Instead, it involves a series of incidents and consequences. Cases show that schools pursuing their own interests might not zealously protect those students or researchers who complain about sexual harassment. See, e.g., *Lighton v. Univ. of Utah*, 209 F.3d 1213, 1220 (10th Cir. 2000) (where a professor accused of harassment shortly thereafter was described by his chairman as a "rising star" in terms of his contributions); *Wills v. Brown University*, 184 F.3d 20, 24, 42 (1st Cir. 1999) (where a professor received a raise two months after being reprimanded for sexual harassment, and was not dismissed until at least six other students came forward with complaints against him); *Pollock v. Univ. of S. Cal.*, No. B145203, 2001 WL 1513870 (Cal. Ct. App. Nov. 29, 2002) (where a tenured behavioral sciences professor complained about pay inequity and harassment and it was alleged that as a result, she was reassigned to clinical work, her funding was blocked, and she was prevented from doing research).

149. 131 F. Supp. 2d 795, 797 (E.D. Va. 2001).

150. 892 F. Supp. 746, 748-49 (E.D. Va. 1995). The student had been "spanked" repeatedly for not performing well on a test. *Id.* at 748.

B. Science Misconduct and Federal Funding

American universities and colleges spent thirty-three billion dollars on research and development in the sciences in 2002.¹⁵¹ That year, the federal government provided fifty-eight percent of the money used to conduct this research, with academic institutions, state and local governments, industry, and other sources supplying the remaining forty-two percent.¹⁵² A major source of federal funding is the National Science Foundation (NSF),¹⁵³ an independent federal agency whose purpose is “to promote the progress of science; [and] to advance the national health, prosperity, and welfare by supporting research and education in all fields of science and engineering.”¹⁵⁴ The NSF budget is \$5.5 billion per year,¹⁵⁵ and 50,000 scientists and engineers from the national science community volunteer each year to serve on formal committees or to review grant proposals.¹⁵⁶ In addition, the NSF awards fellowships, promotes foreign exchange, fosters technological development, recommends the pursuit of national science and engineering policies, and supports affirmative action programs.¹⁵⁷

In the 1990’s, NSF regulations defined “scientific misconduct” as the:

- (1) fabrication, falsification, plagiarism, or *other serious deviation from accepted practice* in proposing, carrying out, or reporting results from activities funded by NSF; or
- (2) retaliation of any kind against a person who reported or provided information about suspected or alleged misconduct and who has not acted in bad faith.¹⁵⁸

The “other serious deviation” clause had been interpreted to include sexual harassment at least once, where a principal researcher was accused of rape and other sexual offenses.¹⁵⁹ In that instance, it was alleged that the researcher made himself and certain data more readily available to female students who yielded to his sexual demands; moreover, his graduate students’ careers would have been threatened if they had reported him.¹⁶⁰ The researcher’s funding was

151. NAT’L SCIENCE BD., SCIENCE AND ENGINEERING INDICATORS 2004 (2004), <http://www.nsf.gov/statistics/seind04/c5/c5h.htm>.

152. *Id.* at <http://www.nsf.gov/statistics/seind04/c5/c5h.htm>.

153. NAT’L SCIENCE FOUND., GRANT PROPOSAL GUIDE, NSF 04-23 (2004), available at http://www.nsf.gov/pubs/gpg/nsf04_23/nsf04_23.pdf.

154. *Id.* See also 42 U.S.C. §§ 1861–1875 (2000) (some sections as amended 2002, 2004) (codifying the duties of the NSF).

155. See NAT’L SCIENCE FOUND., NSF AT A GLANCE (2005), <http://www.nsf.gov/about/glance.jsp>.

156. NAT’L SCIENCE FOUND., GRANT PROPOSAL GUIDE, *supra* note 153.

157. *Id.*

158. See Steinberg, *supra* note 102, at 59 (emphasis added). This definition, along with the Public Health Services’ definition of scientific misconduct, provided models for policies of many individual research institutions. *Id.* at 55, 58.

159. Colleen Cordes, *Researcher Penalized After Sexual-Misconduct Inquiry*, CHRON. HIGHER EDUC. (Wash., D.C.), July 10, 1991, at A12; see also Colleen Cordes, *NSF Urged to Bar Grants to Biologist Accused of Assault*, CHRON. HIGHER EDUC. (Wash., D.C.), Dec. 19, 1990, at A14; Donald E. Buzzelli, *The Definition of Misconduct in Science: A View from NSF*, 259 SCI. 584, 585 (1993).

160. Buzzelli, *supra* note 159, at 585.

rescinded, and he was denied further NSF support for a period of five years.¹⁶¹ In deciding to terminate his funding, the NSF emphasized the importance of mentorship, stating that it was detrimental to science when students “are taught to advance themselves by submitting to a research director’s sexual demands.”¹⁶²

The NSF’s decision to pull funding from this particular investigator was not universally supported, and many suggested that the definition of “science misconduct” should never include sexual harassment. Some critics emphasized that “brilliant, creative, pioneering research often deviates from that commonly accepted by the scientific community,” and that the act of sexual harassment was separate from conducting scientific research.¹⁶³ It was also argued that the “other serious deviation” clause presented a denial of due process, because it involved situations that were not specifically defined.¹⁶⁴ Furthermore, many scientists believed that the federal government should be kept out of laboratories, and that universities should police science misconduct on their own.¹⁶⁵

In response to the lack of consensus concerning the definition of scientific misconduct, the United States Office of Science and Technology Policy (OSTP) recently implemented a misconduct definition which is limited to falsification, fabrication, and plagiarism.¹⁶⁶ Thereafter, NSF removed the “deviation from accepted practice” clause from its own regulations.¹⁶⁷

Although sexual harassment can no longer be regarded as science misconduct, a plain reading of Title IX indicates that federal funding is still conditioned on compliance with Title IX.¹⁶⁸ Thus, federal agencies may refuse to grant or terminate funding to recipients who refuse to comply with any rules

161. *Id.*

162. *Id.* at 585, 647.

163. Howard K. Schachman, *What is Misconduct in Science?*, 261 SCI. 148, 149 (1993). This article appears to excuse the harassing behavior of those scientists perceived as “brilliant.” *Id.* The author makes no mention about compliance with either Title IX or the use of federal funding. *Id.* See also COMM. ON SCI., ENG’G, AND PUB. POLICY (U.S.), PANEL ON SCIENTIFIC RESPONSIBILITY AND THE CONDUCT OF RESEARCH., RESPONSIBLE SCIENCE: ENSURING THE INTEGRITY OF THE RESEARCH PROCESS, 26-27, 29 (1992) (arguing that novel, unorthodox research methods were at risk of being labeled as “misconduct,” and that sexual harassment is “other misconduct” that does “not compromise in a direct manner, the integrity of the research process”).

164. Schachman, *supra* note 163, at 148; Sarah Glazer, *Combating Scientific Misconduct*, 7 C.Q. RES. 3, 11 (1997).

165. Glazer, *supra* note 164, at 9. Of course, this argument flies in the face of Title IX, although most universities willingly accept federal funding. However, leaving the federal government to police misconduct would require a significant amount of undesirable bureaucratic measures. See Federal Policy on Research Misconduct, 65 Fed. Reg. 76,260, 76,262 (Dec. 6, 2000) (discussing why federal agencies do not conduct all misconduct inquiries and investigations).

166. See 65 Fed. Reg. 76,262 (Dec. 6, 2000). This new policy does not supersede other government or institutional policies that may address other forms of misconduct, including sexual harassment. *Id.* at 76,260.

167. 45 C.F.R. § 689.1 (2004). There is no “other serious deviation” clause in this Code. See *id.* Other government entities are also changing their policies. See generally Public Health Services Policies on Research Misconduct, 68 Fed. Reg. 30,249-02 (May 27, 2003); Investigation of Research Misconduct, 68 Fed. Reg. 43,982-01 (July 25, 2003); Public Meetings to Obtain Input of DOE’s Implementation of Federal Policy on Research Misconduct, 66 Fed. Reg. 19,900 (Apr. 18, 2001).

168. 20 U.S.C. § 1681(a) (2000).

and regulations effectuating Title IX;¹⁶⁹ and these agencies may also induce compliance by any other means authorized by law.¹⁷⁰ However, enforcement of Title IX by federal agencies such as NSF appears weak.¹⁷¹ A recent Government Accountability Office (GAO) report showed that the NSF, NASA, and the DOE have not been performing required Title IX compliance reviews, in part due to a shortage of resources.¹⁷² Furthermore, Title IX complaints are few because scientists do not always realize that Title IX applies to discrimination within academia, not just within athletics.¹⁷³ In addition, funding recipients are not required to report Title IX complaints they receive to the federal funding agencies.¹⁷⁴

In an attempt to enforce Title IX, the NSF and other federal agencies have adopted a Title IX common rule,¹⁷⁵ which requires that applications for federal funding in education include a specific, identifiable assurance that the work will comply with Title IX.¹⁷⁶ Although the NSF uses an assurance form that all recipients of federal funding must sign, the form only explicitly refers to discrimination based on race, color, and national origin.¹⁷⁷ Sex discrimination or other types of discrimination are not mentioned. However, NSF officials

169. 20 U.S.C. § 1682 (2000). *See also Gebser*, 524 U.S. at 292 (1989) (where agencies were afforded the right to enforce their nondiscrimination regulations even if no discrimination occurs).

170. 20 U.S.C. § 1682. *See also U.S. v. Marion County Sch. Dist.*, 625 F.2d 607, 611-13 (5th Cir. 1980); *U.S. v. City and County of Denver*, 927 F. Supp. 1396, 1400 (D. Colo. 1996); CIVIL RIGHTS DIVISION, U.S. DEP'T OF JUSTICE, TITLE IX LEGAL MANUAL (2001), available at <http://www.usdoj.gov/crt/cor/coord/ixlegal.htm> (discussing the Department of Justice's methods to enforce Title IX).

171. U.S. GOV'T ACCOUNTABILITY OFFICE, GENDER ISSUES: WOMEN'S PARTICIPATION IN THE SCIENCES HAS INCREASED, BUT AGENCIES NEED TO DO MORE TO ENSURE COMPLIANCE WITH TITLE IX 8, 12 (2004).

172. *See id.*

173. *Id.* at 10-11.

174. *Id.* at 1-3, 8, 10.

175. *See generally* Nondiscrimination on the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance, 65 Fed. Reg. 52,858 (Aug. 30, 2000) (NSF's Title IX implementing regulations to be codified 45 C.F.R. pt. 618).

176. *Id.* at 52,867. *See also* 45 C.F.R. § 618.115 (2004) (NSF's Title IX assurance rule).

177. NAT'L SCIENCE FOUND., ASSURANCE OF COMPLIANCE WITH NATIONAL SCIENCE FOUNDATION REGULATION UNDER TITLE VI OF THE CIVIL RIGHTS ACT OF 1964 (2002), available at http://www.nsf.gov/pubs/manuals/gpm05_131/ex7_1.pdf. This form states that the applicant:

HEREBY AGREES THAT it will comply with *Title VI of the Civil Rights Act of 1964 (42 USC [sic] §2000d)* and all requirements imposed by or pursuant to the Regulation of the National Science Foundation (*45 CFR Part 611*) issued pursuant to *that title*, to the end that, in accordance with Title VI of that Act and the Regulation, no person in the United States shall, on the ground of *race, color, or national origin*, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Applicant receives Federal financial assistance from the Foundation; and **HEREBY GIVES ASSURANCE THAT it will immediately take any measures necessary to effectuate this agreement.**

Id. (italics added). An authorized university official must sign and certify that the form is "complete and correct," and the contract thus becomes binding on the scientist who applies for the funding. *Id.* This form can be found in NAT'L SCIENCE FOUND., GRANT POLICY MANUAL, available at http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpm (last visited Nov. 8, 2005).

maintain that the agency interprets the form as applying to all of the NSF's nondiscrimination regulations.¹⁷⁸

NSF's *Grant Policy Manual* also requires that "each NSF grant contain[], as part of the standard grant conditions, an article implementing Title IX."¹⁷⁹ This mechanism of enforcement may be problematic since there is no provision in the *Grant Policy Manual* allowing grantees to make guarantees against sex discrimination through some substitute for an assurance form.¹⁸⁰ Furthermore, both the common rule and the NSF's regulations¹⁸¹ state that the form of assurance (1) must be specifically identified and (2) include a statement that the applicant will comply with all applicable federal statutes relating to nondiscrimination, including Title IX.¹⁸² A recent Government Accountability Office (GAO) report which found that the NSF specifically requires a statement of assurance against sex discrimination, casts further doubt on whether having grants contain an article implementing Title IX is a proper mechanism of enforcement.¹⁸³

Although the NSF's assurance of compliance form does not explicitly include sex discrimination, grant recipients who have discriminated on the basis of sex are required by federal regulations to take remedial action deemed necessary to overcome the effects of the discrimination.¹⁸⁴ If the complaint has been filed in a timely manner with the NSF,¹⁸⁵ a prompt investigation will be made,¹⁸⁶ followed by attempts to informally resolve the matter.¹⁸⁷ Only when informal attempts at compliance fail may federal funding be suspended or terminated.¹⁸⁸

178. See e-mail from Ronald Branch, Director, National Science Foundation Office of Equal Opportunity Programs, to Ellen Sekreta, Student, The City University of New York School of Law (June 30, 2005, 08:07:26 EST) (on file with author). By comparison, other federal agencies include sex, disability, and age discrimination on their assurance forms. See U.S. ENVIRONMENTAL PROTECTION AGENCY, GRANTS AND DEBARMENT, available at <http://www.whitehouse.gov/omb/grants/sf424b.pdf> (last visited Nov. 8, 2005); U.S. DEP'T OF ENERGY, ASSURANCE OF COMPLIANCE NONDISCRIMINATION IN FEDERALLY ASSISTED PROGRAMS, available at <http://www.er.doe.gov/production/grants/1600-5.html> (last visited Nov. 8, 2005); NAT'L AERONAUTICS AND SPACE ADMIN., ASSURANCE OF COMPLIANCE WITH THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION REGULATIONS PURSUANT TO NONDISCRIMINATION IN FEDERALLY ASSISTED PROGRAMS, available at nova.ed.uidaho.edu/uploads/library/21.doc (last visited Nov. 8, 2005).

179. NAT'L SCIENCE FOUND., GRANT POLICY MANUAL, *supra* note 177, at § 704.

180. See *generally id.*

181. 45 C.F.R. § 618.115(a)-(c) (2004).

182. 65 Fed. Reg. at 52,867; 45 C.F.R. § 618.115(a)-(c). Similar to the Grant Policy Manual, no provision is made in the common rule or NSF's regulations to substitute for the use of an assurance form. *Id.*

183. U.S. GOV'T ACCOUNTABILITY OFFICE, *supra* note 171, at 9.

184. 45 C.F.R. § 618.110(a) (2004). The federal agency which provided the funding is typically responsible for enforcing Title IX. See *generally* U.S. DEP'T OF JUSTICE, TITLE IX LEGAL MANUAL, *supra* note 170, at Parts V-VII.

185. 45 C.F.R. § 611.7(b) (2004).

186. 45 C.F.R. § 611.7(c) (2004).

187. 45 C.F.R. § 611.7(d) (2004). Retaliation against or intimidation of complainants is prohibited. 45 C.F.R. § 611.7(e) (2004).

188. 45 C.F.R. § 611.8(a) (2004). Compliance may be also effected by "any other means authorized by law," which includes recommending to the Department of Justice to bring

Read plainly, Title IX makes sex discrimination and sexual harassment illegal at research institutes; however, the force of the law is weakened by several factors. By excluding sexual harassment from the definition of “science misconduct,” the federal government has reinforced the notion that sexual harassment affects neither the integrity of scientific research nor accepted scientific social norms.¹⁸⁹ This suggests that female researchers should be able to separate their career in the sciences from any sexual harassment they experience as a result of the hierarchal culture in their profession, despite the fact that their professional success depends on their ability to succeed within that very culture. Thus, a professor can sexually harass someone and remain a “good” scientist,¹⁹⁰ while a “good” female scientist who complains of sexual harassment and is retaliated against will likely find that her career has been derailed. In addition, universities that profit from large amounts of federal funding are motivated to dismiss, ignore, or hide sexual harassment complaints against their most powerful professors, so that the complaints do not interfere with the professors’ scientific credibility and their reputations remain secure.

The absence of any mention of sex discrimination in NSF’s Assurance of Compliance form further downplays the issue of sex discrimination. Given how dependent research institutes are upon federal funds, the government should fully utilize its leverage to prevent violations of Title IX. Thus, it is important that the NSF’s assurance form expressly state that the applicant will be in compliance with Title IX and all federal nondiscrimination statutes.¹⁹¹ Furthermore, Title IX assurance forms should require the signature of the applicant, not just a school official, indicating that they have read and understand the contract. With this notice, scientists would come face to face with a contract that provides notice that the legal consequences of sex discrimination or sexual harassment may include the termination of federal funding.

VI. CONCLUSION

At first glance, it appears that the law protects female scientists from sexual harassment. However, much evidence points to the fact that the sciences are an environment in which women can be sexually harassed with impunity. First,

proceedings against the funding recipient to enforce Title IX rights under federal, state, or local law, under a contract, or through other applicable proceedings under state or local laws. *Id.* All agencies that distribute federal educational funds must follow similar procedures. See U.S. DEP’T OF JUSTICE, TITLE IX LEGAL MANUAL, *supra* note 170, at Part VII.

189. However, it is easy to imagine a scenario in which sexual harassment might directly affect scientific results. For example, a woman who shuns a co-worker’s advances may later have to depend on that same co-worker in future research and experiments. It is easy for the other person to deliberately misread a measurement or otherwise perform sloppily to negatively influence the results. It is very difficult to calculate the effect of this phenomenon in a result.

190. In comparison, a person who falsifies or plagiarizes work absent any context of harassment is a “bad” scientist, because he violates the social norms of science. See Zuckerman, *supra* note 77, at 521. Of course, a person who falsifies, plagiarizes or fabricates a result in the context of harassing another is still liable for science misconduct. However the deterrence and stigma involved with being caught in the harassment as compared to ‘purely professional’ contexts may be lessened since sexual harassment is not considered part of science misconduct.

191. See *supra* notes 176-179 and accompanying text.

statistics in the physical sciences indicate that women are not treated as the equals of men; subsequently, women disproportionately occupy low positions of power. Second, there is no consensus in the scientific world about what constitutes sexual harassment; thus, it is not included in the definition of "science misconduct." Third, harassment is facilitated by the institutional hierarchies associated with physical science doctoral programs. Courts exacerbate this situation by failing to account for the unique conditions that exist in science. Ultimately, the behavior and characteristics of the complainant are exploited to her detriment, creating an injustice. Fourth, the government does little, perhaps less than the law requires, to make its grantees aware that their funds are dependent on compliance with Title IX.

In order to help prevent sexual harassment in science research, the many existing programs that encourage women to enter into and remain in science should include explicit discussions about sexual harassment, sex discrimination, and the law. Women should be informed of their rights and should be taught how to file complaints to address the problem procedurally.

Given the connection between abuse of power and sexual harassment, another suggestion is to decentralize professors' power over the students working in their science laboratories. A professor should not be allowed to have complete and total control over a student's research, future employment prospects, and overall career success. A student should have several active advisors, not just one, to monitor the progress of his or her research. When there is evidence of sexual harassment, professors who are accused of sexual harassment by a student should not be allowed to serve on that student's thesis committee. Furthermore, if a student has to switch research projects because of the harassing behavior of a supervising professor, that student should not have to start over with her research; instead, at least some of the work already accomplished should be credited toward her degree.

Professors at institutions should take an active role when they see a problem with sexual harassment by realizing that it is not just a personal problem between individuals; indeed, sexual harassment violates federal law, and failing to correct it could result in the institution losing important federal grant money. Harassers have power, in part, because others do nothing, not wanting to become involved.

Finally, sexual harassment should be regarded as a type of scientific misconduct. The inflexibility in the present definition of "scientific misconduct" reflects an unwillingness to support female scientists or to recognize their everyday contributions to and experiences in the science fields. Federal agencies should take a more active role in policing sex discrimination by explicitly enumerating sex discrimination and all other federally prohibited forms of discrimination on their assurance of compliance forms that serve to condition federal funding. Agencies need to better monitor the programs that they fund and develop strategies to encourage complaints, while also alleviating fears of retaliation. Scientists who commit sexual harassment undermine the integrity of their discipline, hinder the progress of scientific research, and prevent many of their colleagues from moving forward in their fields.