

TITLE IX COMPLIANCE REVIEW REPORT

Columbia University

Graduate Physics Program

Fiscal Year 2006



**U.S. DEPARTMENT OF
ENERGY**



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COMPLIANCE REPORT

COLUMBIA UNIVERSITY - GRADUATE PHYSICS PROGRAM

INTRODUCTION

In October 2005, the Department of Energy (DOE) initiated a compliance review of Columbia University in the City of New York. The review was conducted pursuant to Title IX of the Education Amendments of 1972 (Title IX), as amended, 20 U.S.C. Section 1681, et seq., and implementing regulations promulgated by DOE at 10 C.F.R. Part 1042. The review was limited to the Department of Physics Graduate Program.

BACKGROUND

Title IX provides that *[N]o 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 assistance.* 20 U.S.C. Section 1681. DOE has promulgated regulations, at 10 C.F.R. Part 1042, for the implementation of this title. These regulations set out specific requirements for compliance with Title IX, and also provide for the periodic review of DOE grant recipients. The regulations require each recipient of DOE financial assistance to designate a Title IX Coordinator, issue and disseminate information regarding its policy on Title IX, and establish and implement Title IX grievance procedures. Columbia University is a recipient of Federal financial assistance through DOE. Therefore, DOE has jurisdiction over the University pursuant to Title IX.

In July 2004, the Government Accountability Office issued a report, in response to a request from Congress, entitled *GENDER ISSUES - Women's Participation in the Sciences Has Increased, but Agencies Need to Do More to Ensure Compliance with Title IX* (GAO-04-639). Following the issuance of the GAO report, DOE and other science agencies established an Interagency Working Group to plan Title IX compliance reviews of educational institutions. DOE and the National Science Foundation (NSF) agreed to conduct a joint compliance review of two graduate schools at Columbia University. DOE would conduct a review of the Graduate Physics Program, while NSF would review the Graduate Electrical and Mechanical Engineering Program at the Fu Foundation School of Engineering and Applied Science. The two agencies would issue separate reports of their findings.



METHODOLOGY

The primary focus of DOE's review was to determine whether students in the Graduate Physics Program, regardless of their sex, had equal access to facilities, laboratories, research equipment, research opportunities, and programs and benefits offered by the University. The review also involved an evaluation of policies and procedures related to the filing of grievances under Title IX, as well as the role of the Title IX Coordinator in implementing and enforcing Title IX requirements. There were two components to the review: (1) an onsite visit, during which a review team toured several research laboratories and held interviews with faculty, students and administrative staff; and (2) the examination of statistical data, policies, procedures, and other relevant documents and information that were provided by the University.

THE ONSITE VISIT

In December 2005, a DOE review team visited Columbia University. During that visit, the review team met with the Chairman of the Graduate Physics Program, the Associate Provost for Equal Opportunity and Affirmative Action (EOAA) and her staff, and the Associate Dean of the Graduate School of Art and Science. The team also conducted a number of interviews with students, faculty and the administrative staff of the Graduate Physics Program.

During the onsite visit, an allegation was raised that female students were more likely than male students to fail a qualifying examination that is administered to first year students in the Graduate Physics Program. Therefore, the investigation was broadened to include an examination of whether female students were less likely to pass the qualifying examination than male students.

THE OFFICE OF EQUAL OPPORTUNITY AND AFFIRMATIVE ACTION

The Office of Equal Opportunity and Affirmative Action (EOAA) is responsible for performing all Title IX functions and for developing and implementing the University's nondiscrimination and affirmative action policies, procedures and programs. The office is responsible for providing information, consultation, and training to students and employees who wish to file formal complaints of discrimination, including complaints of sexual harassment under the University's sexual harassment policy.

The EOAA Office has a staff of four – a Director (the Associate Provost for EOAA), two Attorneys (one full-time and one part-time) who serve as assistants to the Director, and an Administrative Officer. The Office Director is the Title IX Coordinator for the

University. Students, faculty and staff may contact the EOAA Office to inquire about their rights, request mediation or counseling, and seek information about filing a complaint.

The University offers several options for those seeking the intervention of the EOAA Office. They include confidential guidance and assistance, informal counseling, mediation, and a formal complaint process.

GRIEVANCE AND INVESTIGATIVE PROCEDURES

1. Preliminary Review

Individuals may contact the EOAA Office to discuss issues related to an alleged Title IX violation. The Associate Provost for EOAA is the designated officer for conducting investigations. The Associate Provost, or her designee, may conduct a preliminary fact-finding review. At the conclusion of this preliminary inquiry, the Associate Provost informs the complainant of the options available. They may include a mediated solution to the problem the complainant encountered or a full investigation.

Complainants are required to contact the Associate Provost within 180 working days of the date of an alleged incident. Although the University reserves the right to proceed with an investigation on its own initiative, an individual may ask that no further action be taken on a complaint.

2. Mediation

Individuals who believe they have been discriminated against may choose to resolve their complaints through mediation by the EOAA Office. Mediation suspends the complaint process for up to thirty working days.

By mutual agreement, the parties may elect to have their concerns mediated by the Mediation Clinic at the University's Law School, rather than through the EOAA Office. A mediated agreement is final, and cannot be appealed.

The Associate Provost or either party may, at any time prior to the expiration of thirty working days, declare that attempts at mediation have failed. Upon such notice, the Associate Provost may proceed to an investigation.

3. Filing a Complaint

Any individual who is enrolled as a student or employed by the University may file a complaint with the Associate Provost for EOAA requesting an investigation. However, the Associate Provost does not have jurisdiction over complaints against students. Such complaints must be referred to the dean of the school in which the accused student is enrolled.

4. Assignment of Investigator

Within fifteen working days following the filing of a complaint, or following failed attempts at mediation, the Associate Provost must designate herself or a staff person (the “investigator”), or a committee (“the investigative body”), to investigate and hear the case. In the event of an alleged conflict of interest with the assigned investigator, either the complainant or the accused may make a written request to the Associate Provost, within five (5) working days of learning the identity of the investigator, to appoint an alternate. The Associate Provost’s decision on whether to grant such a request is final.

5. The Investigative Process

Within ten working days after being designated, the investigator must begin to interview the complainant, the accused, and any other persons with relevant information about the alleged incident. The investigator may also review personnel records and other documents deemed relevant to the complaint. The complainant and the accused may suggest witnesses whom the investigator should interview, and written information the investigator should consider. However, the investigator has complete discretion as to who should be called as witnesses and the documents that should be reviewed. It is the policy of the University that no party may be represented by legal counsel during the investigation or at a hearing, although either party may consult with counsel. The purpose of this policy is to facilitate the prompt resolution of complaints.

6. Hearing

At the discretion of the Associate Provost, a committee of three individuals may be convened to conduct a hearing on the merits of a complaint. During a hearing, both parties have the right to be present during the testimony of the opposing party or other witnesses, but not the right to cross-examine them. However, either party may suggest questions to the committee and request that the questions be asked of the committee or witnesses. Both parties have the right to review documents or other evidence considered

by the committee, and to rebut any evidence presented. The Associate Provost may assist the committee in the hearing process, but does not participate in the deliberations.

7. Findings and Recommendations

The investigator is expected to complete the investigation and submit a decision to the Associate Provost within forty-five working days from the filing of the complaint. The investigator's determination is made on the basis of the preponderance of the evidence, and considering any attendant circumstances.

If the investigator finds that there was a violation of Title IX, the decision will be accompanied by a recommendation for remedial and/or disciplinary action. In such a case, the Associate Provost forwards the determination and recommendation(s) to the complainant, the accused, and the supervisor of the accused.

8. Appeals

The complainant may file an appeal of the investigator's determination and/or recommendation of the Associate Provost. Appeals are filed with the Associate Provost. Upon receipt of an appeal, the Associate Provost designates a senior officer of the University to serve as Appeal Officer in the matter. The appeal is then forwarded to the Appeal Officer for review.

The Appeal Officer is required to render a written decision within thirty (30) working days following receipt of the appeal. A copy of the recommended appeal decision is then submitted to the Provost for approval. Once approved, the decision is sent to the EOAA Office for issuance. The EOAA Office is required to transmit the final decision to the parties within fifteen days of its receipt. A decision of the Provost is not subject to further review, other than the reserved right of the President and the Trustees of the University to review any decision affecting matters of overall University policy.

THE LABORATORIES

The reviewers toured three experimental laboratories - the Cosmology Laboratory, headed by a female assistant professor; the Astrophysics Laboratory, headed by a male professor; and the Condensed Matter Physics Laboratory, headed by a male professor. The heads of these laboratories stated that they had adequate laboratory space and equipment. They said that there was no disparity in treatment in terms of the quality and adequacy of facilities and equipment.

FACULTY PROFILE

The Physics Department has a faculty of 37 who teach and carry out research in areas such as astrophysics, high energy nuclear physics, high energy particle physics, laser and condensed matter physics, and theoretical physics. Research is carried out at on-campus laboratories, and at other laboratories throughout the country and around the world.

Thirty-two faculty members were males and five were females. Three faculty members (two females and one male) occupied adjunct positions. One female faculty member was a full professor with tenure, two were associate professors with tenure and two were assistant professors without tenure. Twenty male faculty members were full professors with tenure, four were associate professors with tenure, four were associate professors without tenure and four were assistant professors without tenure.

INTERVIEWS WITH STUDENTS

At the beginning of the spring 2005 semester, there were 110 students (81 males and 29 females) in the Graduate Physics Program. Eighteen students were randomly selected to be interviewed, of whom nine were females. Students were selected for interviews on the basis of their availability. Substitutes were also randomly selected to replace those students who did not show up for interviews. Following the onsite visit, an additional three students (one male and two females) were interviewed by telephone.

All of the students who were interviewed said they had equal access to laboratories, equipment, facilities, and research and educational opportunities. In this regard, they stated that students must have access to all the tools necessary for conducting research and experiments related to their program of study and, therefore, access to laboratory equipment has never been a problem. Some of the students observed that any difference in the quantity, type or cost of equipment in the various laboratories is a function of the nature of the research being conducted, and had nothing to do with the sex or other attributes of students.

Acceptance into the graduate program does not guarantee advancement to a postgraduate degree. Each student must pass a qualifying examination in order to advance. The examination has an oral and a written component, and is given at the end of the first semester of study.

None of the students had any awareness of the existence of the EOAA Office. They did not know how to file a Title IX complaint, although some of them said they could find out how to proceed, if they really wanted to file a complaint. Some students said they believed the equal opportunity (EO) process was publicized. One student said he may have seen a poster "vaguely advertising" the EOAA Office or the EO process. However, he could not remember when or where he saw that poster.

Some students said that they generally seek advice, counsel and guidance from their advisors or from faculty members. One student said she takes her problems to the Administrative Coordinator, while others said they would go to a certain female professor or the Dean. Most of the students said that if they had a problem, they would go to a male professor who some referred to as the Ombudsman for the Graduate School.

INTERVIEWS WITH THE FACULTY

Seven faculty members (three females and four males) were interviewed. Only one was familiar with Title IX. Another faculty member had some awareness of the existence of the EOAA Office. None of the faculty members interviewed had ever been involved in unlawful discrimination, neither as victims nor as complainants. They knew of no one within the Graduate Physics Program who had ever filed a Title IX complaint or who had been involved in a Title IX complaint.

The faculty members who were interviewed all stated that research opportunities and facilities are available equally to all students, and that students are expected to be proactive in seeking out research opportunities. Students are selected for the various areas of research by a selection committee which consists of faculty members. Once a year, the members of the selection committee decide how many students the programs they represent can support based on the amount of funding available. However, one faculty member lamented the fact that there were no women on the theory group selection committee, although she said that a female professor from another college (Barnard) is regarded as "a part of it."

When asked what mechanism is available to students for voicing their complaints, some faculty members referenced a Student Faculty Issues Committee. They said that students are invited to attend committee meetings where they are encouraged to raise issues and concerns with the faculty. An issue that was before the committee was whether the qualifying examination was more favorable to male students than female students.

According to one professor, female students score lower on the graduate records examination and are usually less qualified than their male counterparts. She noted that a female professor mentors female students to assist them in passing the qualifying examination and that there is an effort by some professors to eliminate the examination, while other professors are strongly opposed to eliminating it.

When asked whether she had adequate laboratory facilities, the faculty member said she had plenty of space but that another female faculty member had to "fight" to get what she wanted. She said, however, that she did not believe the problem was the result of discrimination.

Another faculty member said she was familiar with Title IX, but did not learn about it from the University. This faculty member is concerned about the qualifying examination and whether it had a disparate impact on female students because male students tended to do better on the examination than female students. The faculty member observed that three of the four students who did not pass the examination in 2003 were women, and that the three students who failed in 2004 were women. However, the faculty member acknowledged that in 2005 the two students who failed were males.

After the interview with the faculty member, a committee was formed to look into the qualifying examination. The committee was charged to do the following:

1. Examine the quality of the questions;
2. Examine the relevance of the questions;
3. Try to organize the examination in order to identify what undergraduates may be missing in their education.

The faculty member later informed the review team that the committee had “finally received the charge . . . to look at changes to the qualifying exam . . . and to consider . . . whether the abilities and command of the material of all groups of students are measured equally well.” The faculty member also said that the University was working on creative ways to help students pass the examination, one idea being to offer a “capstone course” directed at seniors. The purpose of the course, she said, “would be to address the problem that physics is taught in a discrete set of sub-topics, and students can lose sight of the fact that the same set of core ideas applies across sub-topics.” The capstone course would first review important ideas of major sub-topics and then choose examples which cross several sub-topics. These sub-topics would then be explored in depth. However, the faculty member pointed out that there might not be sufficient staff to offer a new course because of budgetary constraints.

INTERVIEW WITH THE CHAIRMAN

The Chairman of the Graduate Physics Program is a tenured professor in the area of Experimental Nuclear Physics. He said he believed Title IX of the Education Amendments of 1972 protected students' rights but that he had no role in the institution's Title IX program, other than to direct students to the appropriate offices, if they wanted to file a complaint. He identified appropriate offices as the Physics Department and the Office of the Ombudsman. He did not know who the Associate Provost for EOAA was, and was unaware of the existence of the EOAA Office. However, he said he supports the school's Title IX program.

The Chairman stated that both the faculty and students have equal access to research equipment and facilities. He said also that student aid is equitably awarded among all

students, and that there is no difference in compensation between male and female students.

The Chairman had never been involved in a Title IX complaint. He observed that the contributions of women graduate students are respected and appreciated, and that gender has not adversely affected female professors or graduate students. He is optimistic about the future progress of women in the sciences, but did not offer any reason for his optimism.

Regarding the qualifying examination, the Chairman believes that the current examination process is both equitable and impartial. In describing how the examination is administered, he said that candidates are given a written examination composed of questions solicited from faculty members. The answers are then evaluated by various faculty members, after which scores are tabulated. The next step in the process is an oral examination in which students are questioned by a panel comprised of members of the faculty. This examination focuses primarily on the weak points of a student's written examination. After the scores of the written and oral examinations are combined, the faculty determines which students possess the requisite level of knowledge to continue in the program.

The Chairman maintains that there is no gender bias in the questions, either in the written or the oral portion. When asked if he had any idea as to whether and why male students perform better than females on the examination, he said he did not have the answers.

Since the onsite visit in December 2005, a new Chairman has been appointed. Regarding the allegation that a female faculty member was not provided adequate laboratory space, the new Chairman said that the issue arose under his predecessor who, he said, described the space situation as follows:

... She [the female faculty member] was assigned the lab in the NE corner of the 10th floor. She then asked for more space, and this was accommodated by moving [a male professor's] lab to the 12th floor and giving [the female professor] his previous lab. [The female faculty member] later requested even more space, and this was accomplished by [another male professor] who persuaded [two other professors] to trade their laboratories for the [female faculty member's] lab.

The new Chairman noted that the female faculty member's laboratory space issue is broadly similar to that of two other junior faculty members (both males) and that the female faculty member now has more laboratory space than they. He said further that there was an issue about getting sufficient office space for the female faculty member's students, and that the issue was resolved by renovating a floor of the building where the laboratories are housed.

A male professor corroborated the statement of the new Chairman with respect to the availability of laboratory space. In that regard, he said that the lack of sufficient laboratory space is a concern, but that it is unrelated to gender discrimination. He remarked that funding is the most critical problem facing the graduate program.

FINDINGS

1. Equipment and Laboratories

The type, quantity and cost of equipment are related to the nature of the research being undertaken and the amount awarded for a particular project. Therefore, comparison between the equipment of the various laboratories is not sufficient to prove disparity under Title IX. We note, however, that there were no complaints about the equipment of the laboratories, and that both students and faculty reported that the laboratories were adequately equipped.

There was one case where a female faculty member claimed that she was initially assigned inadequate laboratory space. However, that faculty member stated that she was eventually assigned adequate laboratory space. She observed that she did not believe the delay in providing her with additional laboratory space was due to discrimination. The present Chairman of the Department of Physics provided an affidavit in which he asserted that adequate space has been a problem for most faculty members, regardless of their gender. He said also that the female faculty member who requested additional laboratory space eventually received more laboratory space than her male counterparts.

Accordingly, we find that the University is in compliance with Title IX with respect to the assignment of laboratory space and equipment in the Graduate Physics Program.

2. Benefits

No evidence of disparity with regard to the benefits and opportunities afforded students in the Graduate Physics Program was uncovered by this review. All students in the program are required to teach, and they receive a stipend that is commensurate with their services. There was also no evidence that other benefits, such as health insurance, were being provided in a disparate manner.

3. The Qualifying Examination

Records provided by the University show the following pass/fail figures for students who took the qualifying examination between 2002 and 2005:

Year	No. Taking Exam.	Failures (first time)	Failures (second time)	Retakes
2001	25 = 17 M & 8 F	2 M & 1 F ¹	0	1 M & 2 F (all passed)
2002	20 = 15 M & 5 F	4 M & 3F	1 M & 1 F	1 M & 2 F (1 M and 1 F failed)
2003	22 = 16 M & 6 F	1 M & 2 F	0	2 M & 1F (all passed)
2004	23 = 15 M & 8 F	4 F	1 F	1M (passed) 1 F (failed)
2005	23 = 11 M & 12 F	3 M	0	5 F (passed)

The data reviewed does not indicate a disparity in the pass rate between male and female students. Nonetheless, we note that the University is in the process of developing a plan of study aimed at assisting all students to pass the examination.

4. Complaint and Grievance Procedures

Regulatory Requirement: *A recipient shall adopt and publish grievance procedures providing for prompt and equitable resolution of student and employee complaints alleging any action that would be prohibited by these Title IX regulations. Each recipient shall designate at least one employee to coordinate its efforts to comply with and carry out its responsibilities under these Title IX regulations, including any investigation of any complaint communicated to such recipient alleging its noncompliance with these Title IX regulations or alleging any actions that would be prohibited by these Title IX regulations.* 10 C.F.R. Part 1042.135.

DOE has conducted a thorough review of the University's Title IX grievance and complaint policies and procedures. On the basis of this review, DOE finds that the University is in compliance with the regulations cited in this section of the report.

5. Notification

Regulatory Requirement: An educational institution that is the recipient of Federal financial assistance is required to *notify all its students and employees of the name, office address, and telephone number of the employee or employees appointed to coordinate*

¹M = male; F = female

and administer its Title IX grievance process. 10 C.F.R. Part 1042.140 (a). This information should be disseminated through newspapers and magazines operated by the recipient and by memoranda or other written communications distributed to every student and employee. 10 C.F.R. Part 1042.140(a)(i) and (ii). The recipient is also required to prominently include a statement of its policy of nondiscrimination on the basis of sex in each announcement, catalog or application form that it makes available to students and employees or which is otherwise used in connection with the recruitment of students and employees. 10 C.F.R. Part 1042.135 to 140.

During the exit interview, the review team informed the Associate Provost for EOAA that they had determined that the University was not in full compliance with the notification requirements herein stated. She offered assurances that her office would take immediate remedial action to ensure compliance.

The Associate Provost for EOAA has since informed DOE that the EOAA Office has undertaken an aggressive outreach program for disseminating the University's discrimination and sexual harassment policy. In that regard, the Director said that the Office prepared a procedures brochure which it distributed to students and employees, and to all departmental offices within the University. We have reviewed the brochure and find that it adequately outlines the requirements and procedures for filing a grievance.

The Associate Provost also informed the Department that her office would immediately do the following:

1. Appoint a group of 23 panelists to serve as counselors to any person alleging discrimination or harassment. A mass e-mail to students will inform them of this panel as well as services provided by the University's Office of Equal Opportunity and Affirmative Action;
2. Institute an on-line harassment and discrimination training program for students and employees;
3. Provide information on the functions of the EOAA Office and the programs it administers to student groups and at student orientation sessions.

The EOAA Office has provided DOE with evidence that the proposed actions have been implemented. Therefore, the University is in compliance with the notification requirements of Title IX and DOE implementing regulations.

CONCLUSION

DOE finds that the Columbia University Graduate Physics Program is in compliance with the provisions of Title IX and DOE implementing regulations. DOE further finds that Columbia University is in compliance with the notification requirements set out at 10 C.F.R. Part 1040. This determination is not intended and should not be construed to cover issues regarding compliance with Title IX or the implementing regulations that have not been specifically reviewed and evaluated herein.

The review is closed as of the date of this report. However, DOE may, from time to time, request additional information from the University to ensure continued compliance with Title IX and the regulations cited herein.