TITLE IX COMPLIANCE REVIEW REPORT

Carnegie Mellon University
School of Computer Science

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I. Introduction

The Office of Diversity and Inclusion (ODI) of the National Science Foundation (NSF) conducted a Title IX compliance review of the graduate program of the School of Computer Sciences (SCS) at Carnegie Mellon University (CMU or the University) in June 2019. ODI conducted the review pursuant to Title IX of the Education Amendments of 1972 (Title IX), as amended, 20 U.S.C. Section 1681, *et seq.*, and the NSF's Title IX implementing regulations, 45 C.F.R. Part 618.[1] During the course of the compliance review, NSF requested and obtained data from the University and gathered data from the University's website. On June 4-6, 2019, members of the ODI's compliance review team held on-campus interviews with University administrators, including the University's Title IX Coordinator, students, faculty, and staff of SCS. The facts, findings, and recommendations contained in this report are based on a review and an analysis of the data obtained from the University, including the University's website, as well as information obtained from the interviews held with students, faculty, staff, and administrators.

NSF, a federal agency, provides federal funds to more than 1,800 colleges, universities, and non-profit institutions supporting approximately 306,000 researchers, postdoctoral fellows, trainees, teachers and students each year. NSF is the funding source for approximately 27 percent of the total federal budget for basic research conducted at U.S. colleges and universities.[2]

CMU is a private research university located in Pittsburgh, Pennsylvania with approximately 14,500 students about half of which are graduate students. The Carnegie Foundation classifies CMU as a doctoral university with a status of "Very High Research Activity". CMU is one of 62 member institutions of the American Association of Universities (AAU). In FY 19, CMU received nearly 69 million dollars in NSF research awards and SCS received over 32 million dollars from NSF's Computer and Information Science and Engineering Directorate (CISE), the second largest of any university in the United States. SCS offers a wide variety of undergraduate and graduate degree programs including computer science, computational biology, machine learning, software engineering and robotics.

SCS is comprised of the following departments and institutes: Computer Science Department (CSD), Computational Biology Department (CBD), Human-Computer Interaction Institute (HCII), Institute for Software Research (ISR), Language Technologies Institute (LTI), Machine Learning (ML), and the Robotics Institute (RI).

A. Background

Title IX and NSF's Title IX implementing regulations prohibit recipients of federal financial assistance, such as universities and colleges, from discriminating on the basis of sex in any of their educational programs or activities. 20 U.S.C. § 1681(a); 45 C.F.R. § 618.

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[1] NSF Implementing regulations (45 CFR Part 618.605, incorporating by reference the NSF Title VI regulation at 45 C.F.R. 611.7 require that NSF conduct compliance reviews. NSF commits to conducting two Title IX compliance reviews annually of NSF awardee organizations.)

[2] NSF FY 2019 Performance and Financial Highlights https://www.nsf.gov/pubs/2020/nsf20003/nsf20003.pdf

In July 2004, the Government Accountability Office (GAO) issued a report (GAO-04-639) entitled, "GENDER ISSUES: Women's Participation in the Sciences has Increased, but Agencies Need to do More to Ensure Compliance with Title IX." The purpose of the report was two-fold: (1) to report on the status of women in the sciences; and (2) to evaluate the Title IX compliance activities of the four federal science agencies—the Department of Energy, Department of Education, National Aeronautics and Space Administration, and National Science Foundation. With respect to the status of women in the sciences, the GAO reported that the participation of women in the sciences at the undergraduate and graduate levels had increased over the past 30 years; however, the GAO reported that "[w]omen continue to major in the sciences and earn degrees in the sciences to a lesser extent than men." The GAO also noted that some studies suggest that sex discrimination may still affect women's choices and professional progress in the sciences. With respect to the Title IX compliance activities of the four federal science agencies, the GAO found that the agencies had taken steps, through the conduct of complaint investigations and the provision of technical assistance, to ensure that the institutions to which they provide financial assistance are in compliance with Title IX. However, the GAO noted that "[g]iven the general lack of knowledge and familiarity with the reach of Title IX and the disincentives for filing complaints against superiors," the agencies needed to do more to judge whether sex discrimination exists in the sciences. To that end, the GAO made recommendations specific to each of the four federal science agencies. With respect to the National Science Foundation, the GAO recommended that NSF ensure that compliance reviews of grantees are periodically conducted.

B. Objective

The objective of the Title IX compliance review at Carnegie Mellon University was three-fold: (1) to determine whether male and female applicants and students had equal access to the opportunities and benefits offered by the graduate program of SCS; (2) to determine whether the University was in compliance with the requirements of Title IX and NSF Title IX implementing regulations; and (3) to identify and report on any promising practices instituted by the University for promoting gender equity.

C. Scope

At Carnegie Mellon University, ODI elected to review the graduate components of SCS. To determine whether graduate applicants and students, regardless of their sex, had equal access to the opportunities and benefits offered by SCS, ODI evaluated the following areas and practices of SCS: (1) recruitment and outreach efforts; (2) student enrollment; (3) admissions policies; (4) leave of absence and re-enrollment policies; (5) financial assistance opportunities; (6) graduate examination and writing requirements; (7) the academic climate; and (8) student safety.

To determine whether the University was in compliance with the requirements of Title IX, and NSF Title IX implementing regulations, ODI evaluated the following: (1) whether the University has designated a Title IX Coordinator; (2) whether the University has taken continuing steps to notify the campus community about its nondiscrimination policies related to Title IX; and (3) whether the University has adopted and published grievance procedures providing for the prompt and equitable resolution of Title IX-related complaints, including sex discrimination and sexual harassment complaints.

II. Recruitment and Outreach

NSF Title IX implementing regulations prohibit recipients of financial assistance from discriminating on the basis of sex in the recruitment of students 45 C.F.R. § 618.310. Many if not most colleges and universities across the United States engage in a variety of recruitment activities with the goal of enrolling the students they recruit. To determine whether SCS followed this provision, ODI reviewed the recruitment and outreach activities of the SCS.

A. Recruitment and Outreach Activities

Carnegie Mellon University participates in many recruitment and outreach activities on behalf of SCS. They are documented in Table 1 below.

Table 1-Recruitment and Outreach Activities

Recruitment and Outreach Activities		
Activity Sponsor	**Outreach/ Recruitment Activity Description**	**Methods of Advertising**
University	**EXTERNAL RECRUITMENT EFFORTS:** Attendance and representation by the Assistant Vice Provost for Graduate Education (or supported designee) for the purposes of graduate student recruitment at numerous conferences and institutions. **2013-14** SACNAS; AAAS/NSF Emerging Researchers National Conference; Emerging Leaders STEM2 Workshop and Conference (HBCU Honors College Directors and Students) **2014-15** SACNAS; OSTEM Conference **2015-16** SACNAS; ORAU/ORNL Graduate Student Recruitment Fair **2016-17** SACNAS, AAAS/NSF Emerging Researchers National Conference **2017-18** SACNAS, AAAS/NSF Emerging Researchers National Conference, National Society of Black Engineers Conference (SACNAS: Society for Advancement of Chicanos/Hispanics and Native Americans in Science) **2013-18** CMU has been a member of Project 1000 (out of Arizona State University) from prior to	The Graduate Education Office developed a brochure to specifically address all computer science related programs at CMU which was distributed between 2007 and 2017, inclusive of all SCS programs. This was distributed at conferences, sent to participants of Fusion Forum and provided to representatives at other schools. Additionally, department specific brochures were taken to all conferences and provided to Fusion Forum participants.

	2013 through the date of its closure last year. The focus of Project 1000 was supporting the application process of underrepresented students to graduate programs in STEM disciplines including Computer Science. CMU has visited the University of Maryland-Baltimore County Meyerhoff Scholars program every year and participated in their recruitment opportunities for prospective graduate students from their program participants with a focus on STEM and advancing underrepresented students in PhD programs. **INTERNAL RECRUITMENT EFFORTS:** FUSION FORUM: The Graduate Education office has hosted a visitation weekend called FUSION FORUM with a focus on recruiting underrepresented students for all years identified. SCS programs have been involved every year in these activities, recommending faculty/advisors, hosting students at department meetings, participating in panels and at networking events. HOSTING SCHOLARS to visit CMU (separate from Fusion Forum): 2013-14: University of Maryland Meyerhoff Scholars 2014-15: McNair Achievement Program from Purdue-Calumet 2016-2017: McNair Achievement Program from Purdue-Calumet	

	2017-18 University of Maryland Meyerhoff Scholars GO RESEARCH SUMMER PROGRAM: The Graduate Education Office offers a complimentary program to supplement the experiences of undergraduate students who are doing research or other academic experience at CMU in the summer by providing a community housing experience with social engagement activities and advising on applying to graduate programs, the graduate school experience and what CMU can offer.	
SCS	SCS has a diverse array of activities related to outreach. Some of these activities are paired with student recruitment. Several examples of such activities are provided below: 1. Attendance of MS Program representatives (students and faculty) at the Grace Hopper Conference and the TAPIA Conference (in 2018). Recruiting is done by providing descriptions of individual programs, and through face-to-face meetings at the conferences. 2. Several of the MS Programs have active alumni outreach activities, including social networking sites, alumni gatherings, alumni newsletters. These are sometimes used to advertise programs and recruit potential students through alumni. 3. The Robotics Institute in SCS supports an all-female high school robotics team called the "Girls of Steel." This team has won several local and national robotics competitions. More information is available at http://girlsofsteelrobotics.com/.	Advertising for these outreach efforts is typically done through websites and other electronic media.

	4. The Women@SCS organization (also mentioned below in our response to question 27), though not specifically focused on recruiting or outreach related to our graduate programs, has had an impact on Women in STEM fields at CMU, and at times more broadly through events open to the public.	
Other:	**K-12 Outreach Programs** - In addition, Carnegie Mellon has many outreach programs for K-12 students that are designed to promote interest and diversity in STEM fields and higher education. Most notable at the institutional level are Gelfand Outreach (see https://www.cmu.edu/gelfand/gelfand-outreach/) and the Summer Academy for Math and Science (SAMS) (see https://www.cmu.edu/pre-college/academic-programs/sams.html). In addition, SCS offers an array of K-12 outreach programs, in computing, robotics, and AI. The programs are summarized at https://www.cs.cmu.edu/outreach/." Additional information on K-12 outreach programs is available upon request.	

SCS does not offer financial incentives (e.g., sign-on bonuses) as a means of attracting prospective students for its graduate programs.

In its December 11, 2020 response to NSF's draft report, CMU informed NSF that over the past year or so, SCS has worked to better catalogue its K-12 outreach programs and had addition programs of note at https://www.cs.cmu.edu/outreach.

Highlights: CMU conducts formal and informal recruiting activities through several venues such as the Society for Advancement of Chicanos/Hispanics and Native Americans in Science SACNAS), the American Association for the Advancement of Science (AAAS), Emerging Researchers National Conference in STEM, Out in Science, Technology, Engineering, and Mathematics, National Society of Black Engineers (NSBE), Project 1000, Meyerhoff Scholars, and McNair Achievement Program. SCS specifically recruits at the TAPIA Conference, from the student organization Women@SCS, at Alumni events, and through K-12 initiatives such as Robotics Institute HS girls team, Gelfand Outreach program, and Summer Academy for Math and Science. CMU does not collect or maintain records tracking whether participants in outreach and recruitment efforts apply for admission to a CSC graduate program. NSF recommends that CMU develop and implement a plan to

strategically focus to recruit more women into CSC as NSF observed many of the national recruitment efforts were more generalized recruitment and outreach efforts to underrepresented groups. NSF also recommends that the plan utilize benchmarks and consistent evaluation to understand progress in recruiting women.

FINDING: In Compliance

III. Admissions

NSF Title IX implementing regulations prohibit recipients of financial assistance from discriminating on the basis of sex in the admission of applicants. 45 C.F.R. § 618.300. In determining whether a person satisfies a criterion for admission, or in making any offer of admission, recipients are prohibited from the following: giving preference to one person over another on the basis of sex; applying numerical limitations upon the number or proportion of persons of either sex who may be admitted; or otherwise treating one individual differently from another on the basis of sex. *Id.*

A. University Admissions Policies and Procedures

Carnegie Mellon University Admissions Policies

Carnegie Mellon University is divided into seven schools and colleges: College of Engineering, College of Fine Arts, College of Humanities and Social Sciences, Heinz College, Mellon College of Science, School of Computer Science and the Tepper School of Business. Each school has multiple graduate programs. Graduate admissions are decentralized and, as such, each school and in many cases each individual graduate program, sets its own criteria for admission to the particular graduate program. Generally, prospective students must apply directly to a specific graduate program.

Highlights: NSF observes that the graduate admissions process is decentralized and recommends that CMU put safeguards in place to mitigate unconscious bias such as third-party reviewer system, gender neutral application and funding, and annual assessment.

FINDING: In compliance

B. SCS Specific Admissions

Each PhD and MS program in SCS decides its own criteria for admission, but all typically take into account GRE test scores, TOEFL scores, statement of purpose, prior grades, recommendations, work experience, and other supporting information (e.g., papers published, description of prior work experience, patents, etc.).

Applicants are ranked by admissions committee members, based on submitted grade transcripts, GRE test scores, letters of recommendation, the applicant's statement of purpose, and any other supporting information. Criteria used to rank applicants) vary from one program to another. No specific GRE score or GPA cutoff is used by any program to eliminate

applicants. All programs include a definite cutoff for TOEFL and other English language proficiency testing results, accompanied by an exception process, both of which are consistent with CMU standards. Applicants who clearly are unqualified (poor grades or test scores) may be filtered out before the ranking is carried out.

SCS MS programs are assigned a maximum number of students that are allowed to be admitted each year. This number is determined by a SCS-wide review committee with representatives from each department, which provides recommendations to the Dean for each program's quota. The recommendations of the committee are based on a review of an annual report from each of the programs.

Admissions are done independently by each PhD program in the school. There are 7 units in the school, and some have more than one PhD program. The faculty are surveyed prior to the admissions meeting, to produce an estimate of how many new PhD positions can be funded in the coming Fall semester (typically all PhD students are supported on research assistantships, unless they have a full external scholarship). As admissions decisions are made, a running total estimate of the admitted class size is kept, based on an estimate of how likely each student is to accept. Admissions continue to be made until the expected admitted class size matches the expected number of new PhD positions.

Highlights: NSF notes that SCS does not have a standard form for ranking applicants for admission and the criteria to rank applicants from program to program varies. Letters of recommendation are used to evaluate a wide range of applicants' attributes and qualities during admissions. NSF did not observe effective rubrics and training to assess these letters, especially for non-cognitive attributes. NSF recommends that CMU evaluates the SCS admissions policies and criteria so ensure they are neutral, fair, and valid predictors of success. NSF also recommends that all forms of evaluation be standardized to reduce the influence of unconscious bias in the admissions process.

FINDING: In Compliance

C. Applicant-Admitted-Matriculated Data

Table 2 below, show the number and percentage of students by gender, who applied to the graduate SCS programs from AY2013-14 to AY2017-18. The tables also show the number and percentage of male and female applicants who were admitted to the respective graduate programs, as well as the number and percentage of male and female applicants who matriculated in the program for the same time period.

Table 2-SCS Applicant-Admitted-Matriculated Data

SCS Applicant-Admitted-Matriculated Date							
Year	Degree	Status	Total	Male	%	Female	%
2013-2014	PhD	Applicants	1985	1637	83	328	17
		Admitted	258	200	78	56	22
		Matriculated	68	56	82	12	18
2013-2014		Applicants	2601	1928	74	673	26
		Admitted	615	429	70	186	30

Year	Program	Status	Total	Men	%	Women	%
	Masters	Matriculated	397	279	70	118	30
2014-2015	PhD	Applicants	2113	1729	82	381	18
		Admitted	289	227	79	61	21
		Matriculated	62	48	77	14	23
2014-2015	Masters	Applicants	3598	2561	71	1036	29
		Admitted	803	547	68	255	32
		Matriculated	549	389	71	160	29
2015-2016	PhD	Applicants	2446	1958	80	487	20
		Admitted	300	222	74	78	26
		Matriculated	87	62	71	25	29
2015-2016	Masters	Applicants	5254	3828	73	1426	27
		Admitted	922	608	66	314	34
		Matriculated	548	373	68	175	32
2016-2017	PhD	Applicants	2804	2223	79	581	21
		Admitted	346	246	71	100	29
		Matriculated	83	63	76	20	24
2016-2017	Masters	Applicants	6875	4934	72	1941	28
		Admitted	943	622	66	321	34
		Matriculated	520	344	66	176	34
2017-2018	PhD	Applicants	3533	2871	81	662	19
		Admitted	397	289	73	108	27
		Matriculated	100	77	77	23	23
2017-2018	Masters	Applicants	8051	5835	72	2216	28
		Admitted	1021	642	63	379	37
		Matriculated	586	372	63	214	37

Highlights: NSF observed that men generally comprise 2/3 to 3/4 of the applicant pool, while women comprise 1/3 to ¼ of the pool in each year of the 5-year analysis period in both the M.S. and PhD programs, yet the percentage of women offered admission was higher than the percentage of women who applied in each year. While the percentage of women offered admission compared to applicants is laudable, especially in a field where women are consistently underrepresented in admissions and enrollment, NSF recommends that SCS examine their recruitment, admission, and enrollment processes to determine if there are any gender-related barriers negatively affecting the number of female applicants and enrolled students in order to increase the number of females applying, admitted and matriculating in SCS.

FINDING: In Compliance

IV. Financial Assistance

NSF Title IX implementing regulations state that in providing financial assistance to any of its students, a recipient shall not, on the basis of sex, provide different amounts or types of such assistance, limit eligibility for such assistance, apply different criteria, or otherwise discriminate. 45 C.F.R. § 618.430. ODI evaluated the different types of financial assistance made available by the respective Departments to its students, including financial recruitment incentives, to determine compliance with this provision.

Graduate Students

    A.   Assistance by Degree and Gender

    Tables 3—7 SCS Financial Assistance

SCS Financial Assistance 2013-2014		
	# of Students	**Avg. Amount Received**
Male MS	32	64,142
Male PhD	292	63,188
Total	**324**	**127,330**
Female MS	4	64,460
Female PhD	88	63,188
Total	**92**	**127,648**

SCS Financial Assistance 2014-2015		
	# of Students	**Avg. Amount Received**
Male MS	55	65,670
Male PhD	319	64,652
Total	**374**	**130,322**
Female MS	10	62,596
Female PhD	90	64,652
Total	**100**	**127,248**

sCS Financial Assistance 2015-2016		
	# of Students	**Avg. Amount Received**
Male MS	82	58,319
Male PhD	238	66,461
Total	**320**	**124,780**
Female MS	11	66,425
Female PhD	58	66,461
Total	**69**	**132,886**

SCS Financial Assistance 2016-2017		
	# of Students	**Avg. Amount Received**
Male MS	90	59,128
Male PhD	271	68,090
Total	**361**	**127,218**
Female MS	25	67,942
Female PhD	64	68,090
Total	**89**	**136,032**

SCS Financial Assistance 2017-2018

	# of Students	Avg. Amount Received
Male MS	78	59,859
Male PhD	268	68,863
Total	346	128,722
Female MS	21	67,773
Female PhD	70	68,863
Total	91	136,636

Highlights: NSF observes no pattern of gender-based discrimination based on the data provided to the agency.

FINDING: In Compliance

B. Positions by Gender

Table 8- Assistantship Positions by Gender

SCS Assistantships							
		RA		**TA**		**Total**	
		#	%	#	%	#	%
2013-2014	**M**	282	78%	42	75%	324	78%
	F	78	22%	14	25%	92	22%
2014-2015	**M**	331	80%	43	75%	374	79%
	F	85	20%	15	25%	100	21%
2015-2016	**M**	272	84%	48	75%	320	82%
	F	53	16%	16	25 %	69	18%
2016-2017	**M**	304	82%	57	75%	361	80%
	F	69	19%	20	25%	89	20%
2017-2018	**M**	285	80%	61	75%	346	79%
	F	71	20%	20	25%	91	21%

Note. M stands for Male and F stands for Female. RA stands for Research Assistant and TA stands for Teaching Assistant.

Highlights: NSF observes disparities in the ratio of male to female graduate students that receive assistantships, even when compared to the number of women and men that matriculated at CMU each year. NSF suggests that SCS conduct an in-depth review of its Graduate Assistantship programs to fully determine if SCS provides different amounts of compensation, types of positions, limit eligibility for certain positions, or apply different criteria based on gender.

FINDINGS: In Compliance

V. Student Enrollment, Retention and Degree Completion

The NSF Title IX implementing regulations at 45 C.F.R. 618.400 provide that no person shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected

to discrimination under any academic, extracurricular, research, occupational training, or other education program or activity operated by a recipient. . To determine whether SCS followed this provision, ODI reviewed the student enrollment policies, procedures, and data of SCS.

A. SCS Enrollment Data Comparison

Table 9- SCS MS Enrollment Data Comparison

SCS Enrollment – Master's Only						
Semester	**Status**	**Total #**	**Male**		**Female**	
			#	%	#	%
Fall 2013	**Full Time**	551	398	72%	153	28%
	Part Time	74	61	82%	13	18%
Spring 2014	**Full Time**	424	300	70%	124	29%
	Part Time	62	53	86%	9	15%
Fall 2014	**Full Time**	709	513	72%	196	28%
	Part Time	71	59	83%	12	17%
Spring 2015	**Full Time**	556	397	71%	159	29%
	Part Time	70	61	87%	9	13%
Fall 2015	**Full Time**	827	593	72%	234	28%
	Part Time	75	63	84%	12	16%
Spring 2016	**Full Time**	630	445	71%	185	29%
	Part Time	57	44	77%	13	23%
Fall 2016	**Full Time**	814	560	69%	254	31%
	Part Time	72	55	76%	17	27%
Spring 2017	**Full Time**	611	411	67%	200	33%
	Part Time	49	41	84%	8	16%
Fall 2017	**Full Time**	907	608	67%	299	33%
	Part Time	61	45	74%	16	26%

Spring 2018	**Full Time**	675	448	66%	227	34%
	Part Time	38	25	66%	13	34%

Table 10- SCS PhD Enrollment Data Comparison

SCS Enrollment – PhD Only						
Semester	**Status**	**Total #**	**Male**		**Female**	
			#	**%**	**#**	**%**
Fall 2013	**Full Time**	421	323	77%	98	23%
	Part Time	21	17	81%	4	19%
Spring 2014	**Full Time**	383	293	77%	90	24%
	Part Time	26	23	89%	3	12%
Fall 2014	**Full Time**	436	332	76%	104	24%
	Part Time	22	20	91%	2	9%
Spring 2015	**Full Time**	417	323	78%	94	23%
	Part Time	20	20	100%	0	0%
Fall 2015	**Full Time**	453	353	78%	100	22%
	Part Time	24	20	83%	4	17%
Spring 2016	**Full Time**	427	336	79%	91	21%
	Part Time	19	16	84%	3	16
Fall 2016	**Full Time**	482	384	78%	98	20%
	Part Time	21	14	67%	7	33%
Spring 2017	**Full Time**	460	368	80%	92	20%
	Part Time	19	15	79%	4	21%
Fall 2017	**Full Time**	538	424	79%	114	21%
	Part Time	20	15	75%	5	25%
	Full Time	520	408	79%	112	22%

Spring 2018	Part Time	15	11	73%	4	27%

Table 11- SCS PhD Degree Completion By Gender

SCS DEGREE COMPLETION RATES						
Semester	**Degree**	**Total**	**Male**	**% of Total**	**Female**	**% of Total**
Fall 2013	Master	139	108	77.7%	31	22.3%
	PhD	29	23	79.3%	6	20.7%
Spring 2014	Master	59	50	84.7%	9	15.3%
	PhD	9	9	100.0%	0	0.0%
Summer 2014	Master	188	114	60.6%	74	39.4%
	PhD	14	11	78.6%	3	21.4%
Fall 2014	Master	167	126	75.4%	41	24.6%
	PhD	21	11	52.4%	10	47.6%
Spring 2015	Master	65	49	75.4%	16	24.6%
	PhD	28	26	92.9%	2	7.1%
Summer 2015	Master	197	112	56.9%	85	43.1%
	PhD	22	14	63.6%	8	36.4%
Fall 2015	Master	222	177	79.7%	45	20.3%
	PhD	29	19	65.5%	10	34.5%
Spring 2016	Master	110	85	77.3%	25	22.7%
	PhD	24	20	83.3%	4	16.7%
Summer 2016	Master	209	129	61.7%	80	38.3%
	PhD	21	16	76.2%	5	23.8%
Fall 2016	Master	243	177	72.8%	66	27.2%
	PhD	18	10	55.6%	8	44.4%
Spring 2017	Master	99	76	76.8%	23	23.2%
	PhD	29	26	89.7%	3	10.3%
Summer 2017	Master	202	117	57.9%	85	42.1%
	PhD	14	12	85.7%	2	14.3%
Fall 2017	Master	281	205	73.0%	76	27.0%
	PhD	25	20	80.0%	5	20.0%
Spring 2018	Master	98	71	72.4%	27	27.6%
	PhD	32	27	84.4%	5	15.6%
Summer 2018	Master	247	134	54.3%	113	45.7%
	PhD	22	19	86.4%	3	13.6%

Highlights: NSF notes that while there is a disparity between the number of female Ph.D. and MS recipients and the number of male Ph.D. and MS degree recipients, the percentage of women enrolled is roughly comparable to the percentage of women admitted into the Ph.D. and MS programs. While there is no evidence of gender discrimination, NSF's recommendation is to evaluate the completion rates annually to look for barriers to completion for female master's and

doctoral students to assist the overall efforts to increase the percentage of female students in and graduates of SCS degree programs.

FINDING: In Compliance

B. Leave of Absence and Re-Enrollment Policies

As previously stated in this section, NSF Title IX implementing regulations state that "no person shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any academic . . . or other education program or activity operated by a recipient" of financial assistance (45 C.F.R. § 618.400). ODI evaluated SCS's leave of absence, re-enrollment, and maternity/paternity leave policies to determine whether they comply with this general provision of nondiscrimination on the basis of sex.

Carnegie Mellon University Student Leave Policy

A student may leave CMU by either withdrawing from the university (leaving with no intention of returning) or by taking a leave of absence (leaving temporarily with the stated intention of returning). A Leave of Absence Form must be completed by all students requesting a leave of absence. A Withdrawal Form must be completed by all students who are withdrawing. After completion of the form, students must take it to their home department and dean's office for appropriate signatures. After the Leave of Absence or Withdrawal Form is received by the University's Registrar's Office, it will be reviewed for the appropriate tuition refunds and grade implications. Students on leave are not permitted to live in university housing, attend classes or maintain employment as students at Carnegie Mellon while their leave is in effect.

Doctoral Student Status Policy

The Doctoral Student Status policy covers time limits on doctoral degree student status, a definition of All But Dissertation status, a definition of *In Residence* and *In Absentia* status for doctoral students and the tuition and fees charged for students *In Residence* and students *In Absentia*. This policy was originally approved by the President's Council on November 13, 1996. It was most recently amended in February 2004. Administrative changes were made on November 26, 2019.

Master's Student Statute of Limitations

NSF found that students will complete all requirements for the master's degree within a maximum of seven years from original matriculation as a master's student, or less if required by a more restrictive department, school or college policy. Once this time-to-degree limit has lapsed, the person may resume work towards a master's degree only if newly admitted to a currently offered master's degree program under criteria determined by that program.

Under extenuating circumstances, such as leave of absence, military or public service, family or parental leave, or temporary disability, a college/school may, upon the relevant department's recommendation and with the written approval of the dean (or designate), defer the lapse for a

period commensurate with the duration of that interruption. Students who are pursuing the master's degree as part-time students for all semesters of their program, as approved by their program, may also appeal to their program or department for extension of the time to degree limit.

Graduate Student Re-Entry Procedures

When an individual entirely separates (that is, full separation, not just a leave of absence) from a SCS graduate program, the individual is informed in writing that re-entry will require being formally readmitted through the normal graduate student admissions process. There is no policy documenting this requirement, but practice has been consistent for some time.

Highlights: NSF requests that CMU develop a policy that documents the Graduate Student Re-Entry Procedures.

Finding: In Compliance

VI. Academic Climate

A. Family Friendly Policies

Faculty Parental and Family Leave

NSF found that faculty may take paid parental leave or family leave. In order to be eligible for faculty parental leave, the faculty member must be a regular faculty member[3], the parent of a newborn child or the adoptive parent of a child of pre-school age, and the primary care-giver of the child. Under this policy, eligible faculty members are entitled to a one semester paid leave of absence with regular salary and benefits.

To be eligible for faculty family leave, the individual requesting the leave must be a faculty member and the primary caregiver of a child or other dependent during the period of leave. Faculty family leave may be taken for up to one year. And the family leave is usually taken for one semester or one year. Faculty family leave may be taken on a "full" or "partial" basis. Faculty on "full" family leave have no teaching, research, or administrative duties and receive no salary. Faculty on "partial" family leave have a reduced workload and receive a comparable reduction in salary.

Staff Parental and Maternity Leave Program

Effective July 1, 2019, CMU implemented the Staff Parental and Maternity Leave Program for eligible staff members. Under this program, CMU provides paid maternity leave that allows for four consecutive weeks of 100% paid leave to be used immediately following the birth of a child. The paid parental leave allows for two consecutive weeks of 100% paid leave that can be used

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[3] Regular faculty at CMU are defined as persons with the ranks of instructor, assistant professor, associate professor and professor and are eligible for tenure. Faculty members who are not "regular" faculty are teaching, research or special faculty that are not eligible for tenure.

within 12 months of the birth or placement of a child for adoption, foster care or legal guardianship. This policy also provides that leave for the birth or placement of a child for adoption, foster care or legal guardianship that occur on or after July 1, 2019 will be eligible for maternity and/or parental leaves. This type of leave will run concurrently with Family Medical Leave (FML).

Student Parental and Family Leave

NSF found that students can use the Student Leaves Policy for parental leave. In addition, CMU has Student Maternity Accommodation Protocol that provides two options for student maternity accommodations: The Short-Term Maternity Accommodation and formal leave of absence under the Student Leaves Policy. The short-term maternity accommodation permits a short-term absence for up to a maximum of six (6) weeks, with a two-week extension under medical necessity. The formal leave of absence policy falls under the Student Leaves Policy. Generally, the Student Leave Policy permits students to take a leave of absence for a full-semester, mini-semester, or for the time remaining in the semester during which the leave is taken. Prior to the absence students must work with relevant university faculty and staff to adjust their course work, research, teaching and other academic responsibilities during the period of absence.

Tables 12-14 SCS Graduate Student & Faculty Leave Requests

SCS Graduate Student & Faculty Leave Requests For Childbearing/Dependent Care				
	Male		**Female**	
	Student	**Faculty**	**Student**	**Faculty**
2013-2014	Not available	3	Not available	4
2014-2015	Not available	5	Not available	3
2015-2016	0	2	1	0
2016-2017	0	5	2	2
2017-2018	0	5	1	3
2018-2019	0	7	2	0
2019-2020	0	3	2	0

SCS Graduate Student & Faculty Approved Leave Requests For Childbearing/Dependent Care				
	Male		**Female**	
	Student	**Faculty**	**Student**	**Faculty**
Year-Year 13-14	Not available	3	Not available	4
Year-Year 14-15	Not available	5	Not available	3
Year-Year 15-16	0	2	1	0
Year-Year 16-17	0	5	2	2
Year-Year 17-18	0	5	1	3
Year-Year 18-19	0	7	2	0
Year-Year 19-20	0	3	2	0

SCS Graduate Student & Faculty Denied Leave Requests For Childbearing/Dependent Care				
	Male		**Female**	
	Student	**Faculty**	**Student**	**Faculty**
Year-Year 13-14	Not available	0	Not available	0
Year-Year 14-15	Not available	0	Not available	0
Year-Year 15-16	0	0	0	0
Year-Year 16-17	0	0	0	0
Year-Year 17-18	0	0	0	0
Year-Year 18-19	0	0	0	0
Year-Year 19-20	0	0	0	0

Highlights: During the onsite phase, interviewed students, faculty and staff did not report encountering any problems or issues with getting maternity, parental or family leave or such leave having adverse effects on meeting degree requirements, completing research projects or other terms of employment. NSF highlights CMU's interest free maternity loan program as a best practice.

As detailed in Charts 12-14 above, NSF found that during the review period plus the 2018-19 and 2019-20 academic years[4], eight female student, 12 female faculty and 30 male faculty requested and were approved for childbearing or dependent care leave. However, no male students requested this leave during the review period. NSF found that the Student Maternity Accommodation protocol is for women only and there is not a clearly identified parental leave policy for men. In its December 11, 2020 response to the Draft Report, CMU confirmed to NSF that the Student Maternity Accommodation Protocol provide two options for maternity leave as detailed above. CMU informed NSF that the Short-Term Maternity Accommodation is available only to students who give birth to a child (which excludes men from requesting and using this accommodation). CMU informed NSF that the absence must be taken following childbirth as it is intended to be used to medically recover from childbirth, since this accommodation functions as a short-term medical leave of absence for the gestational parent. CMU also clarified that the Short Term-Maternity Accommodation does not apply to adoptive mothers, foster mothers, or to any other situation where the mother does not give birth to a child.

The second option under the Student Maternity Accommodation Protocol is for a student to take a formal leave of absence under the Student Leaves Policy. The Student Leaves Policy is a general leave of absence policy that permits all students to take a leave of absence for a wide

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[4] NSF requested that CMU provide two years of additional data because student date was not available for the first two years of the review period as well as other information pertaining to the Student Leaves Policy. This information was provided in its December 11, 2020 response to the Draft Report and is included in this section.

variety of reasons (e.g. financial, academic, personal, etc.). In its December 11, 2020 response to the Draft Report, CMU informed NSF that "the Student Leaves Policy is gender-neutral and applies equally to male and female students. In this respect, the Student Maternity Accommodation Protocol is merely referencing the existence of the university's general leave of absence policy – the Student Leaves Policy – as a means of taking maternity leave. Male students have the same rights to use the Student Leaves Policy for paternity leave." CMU also explained that "As such, a male student who wishes to take paternity leave may do so by taking a personal leave of absence under the Student Leaves Policy. Likewise, a female student may take maternity leave by taking a personal leave of absence under this policy. For female students who are not the gestational parent (and therefore, not eligible for the Short-Term Maternity Accommodation), a personal leave of absence under the Student Leaves Policy is the only option for maternity leave."

CMU further explained in its December 11, 2020 response that "As mentioned above, the gestational parent may take an absence of up to eight weeks to recover from childbirth via the Short-Term Maternity Accommodation. If the gestational parent wishes to take a leave of absence beyond the eight-week maximum needed for medical recovery from childbirth, the student must take a personal leave of absence under the Student Leaves Policy". NSF has determined that based on the above information provided by CMU, these policies and practices provide both male and female students equal opportunities to take leave for childbearing and do not appear to violate NSF's Title IX regulations.

FINDINGS: In Compliance

B. Classroom, Laboratory and Field/Remote Site Experiences

Graduate Student Interviews: Most of the graduate students indicated that they chose CMU because of the institution's international reputation, expert faculty in various research areas, and program research offerings. Most of the students indicated that they did not know who or what office was responsible for implementing the Title IX policy on campus, had not personally experienced or observed gender discrimination or harassment in the program, and did not know how to report sexual misconduct. There was no significant trend in awareness of any subtle gender biases in the programs observed or experienced by most of the students. An overwhelming number of the students described their relationship with their advisor as very effective and positive. The students generally described the climate in the department as very welcoming toward women. Many of the students believe that the ratio of men and women in classes did not have a negative impact on student learning outcomes. When asked to describe their experience as far as gender on study or research teams, most of the students believed that there is equal access to equipment and other resources, that women were given the same opportunities as men, and there was equity in the participation of men and women in assignments. Many students mentioned that training for Teaching Assistants is not required. Most of the students were not aware of any improper or lack of response to allegations of sexual harassment. The majority of the students confirmed that the campus was safe and they were aware of the safety programs such as blue lights and campus police escorts.

Highlights: No recommendations noted in this area.

Findings: In Compliance

Faculty Interviews: Most faculty members indicated that they have seen an increase in the number of female faculty hires and in the number of female undergraduate students. Most faculty noted that the desire to increase the number of female graduate students exists and is discussed often, however, no formal plan exists. Most male and female faculty members interviewed by NSF reported that they have not observed or experienced subtle gender bias. However, NSF learned that one female faculty member filed a gender-based harassment complaint against a male faculty member in February 2020 that is pending as of this writing of this report (see Page 35). Most of the faculty had received sexual harassment training in the last 4 to 5 years prior to the onsite visit. There were positive responses regarding gender diversity on the admissions or search committees.

Highlights: NSF recommends that CMU create a formal strategic plan on how to increase female graduate student numbers in SCS. NSF also recommends that all faculty in SCS receive annual training on Title IX, that also covers prevention of sexual and gender-based harassment and discrimination and how to report sexual/gender-based discrimination and harassment.

FINDINGS: In Compliance

C. Research Groups/Projects Composition

Table 15-SCS Research Group/Project Composition

SCS Research Groups/Projects Composition						
Group / Project	Gender of Faculty Advisor(s)	Total Students	Male	Male % of Total	Female	Female % of Total
Acar	Male	2	2	100%	0	0%
Acar / Blelloch	both Male	1	1	100%	0	0%
Admoni / Simmons	1M + 1F	1	0	0%	1	100%
Agarwal	Male	2	2	100%	0	0%
Agarwal / Fredrikson	both Male	1	1	100%	0	0%
Akoglu	Female	1	1	100%	0	0%
Aldrich	Male	2	1	50%	1	50%
Aldrich / Crane	both Male	1	0	0%	1	100%
Aldrich / Myers	both Male	1	1	100%	0	0%
Aldrich / Sunshine	both Male	1		0%	1	100%
Aleven	Male	2	2	100%	0	0%
Amvrosiadis	Male	1	1	100%	0	0%
Amvrosiadis / Virginia Smith (ECE)	1M + 1F	1	1	100%	0	0%

Andersen	Male	8	8	100%	0	0%
Apostolopoulos, Dimi	Male	1	0	0%	1	100%
Atkeson, Chris	Male	1	0	0%	1	100%
Balcan / Talwalkar	1M + 1F	1	1	100%	0	0%
Balcan, Nina	Female	3	3	100%	0	0%
Balcan, Nina / Sandholm	1M + 1F	1	0	0%	1	100%
Bar-Joseph, Ziv	Male	4	2	50%	2	50%
Bauer / Co-Advisor in ECE	Male	1	0	0%	1	100%
Beckmann	Male	1	1	100%	0	0%
Beckmann / Lucia	both Male	1	1	100%	0	0%

Highlights: NSF observes no pattern of gender-based discrimination based on the data provided to the agency.

FINDINGS: In Compliance

VII. Title IX Regulation Compliance

NSF Title IX implementing regulations require awardee institutions: 1) designate at least one employee to coordinate its efforts to comply with and to carry out its responsibilities under Title IX and disseminate the Title IX Coordinator's contact information to the recipient's academic community. 45 C.F.R. § 618.135(a). The regulations also require that awardee institutions 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 regulations (45 C.F.R. § 618.135(b)) and notification to the public that the recipient will not discriminate on the basis of sex (45 C.F.R. § 618.140).

A. Title IX Coordinator Designation and Title IX Program Administration (or enforcement)

Below is a list of the names and contact information for the University's current Title IX Coordinator and Deputy Coordinators.

- Title IX Coordinator and Director of the Office of Title IX Initiatives: Elizabeth Rosemeyer, erosemey@andrew.cmu.edu, 412-268-4926, 140 Cyert Hall;
- Deputy Title IX Coordinator for Students: Jamie Edwards-Pasek, jaedward@andrew.cmu.edu, 412-268-7125, 142 Cyert Hall
- Deputy Title IX Coordinator for Faculty: Amy Burkert, Vice Provost for Education, ak11@andrew.cmu.edu, 412-268-5865, 513 Warner Hall
- Deputy Title IX Coordinator for Staff: Gloria Gruber, Assistant Vice President for Human Resources, People & Organizational Effectiveness, 412-268-9685, 206 Whitfield Hall

- Deputy Title IX Coordinator for Athletics: Kimberly Kelly, Athletics and Physical Education, kakelly@andrew.cmu.edu, 412-268-2193, Skibo Gymnasium

Highlights: NSF observed that CMU has a designated Title IX Coordinator. The person filling that position has the appropriate background and training to fulfill the responsibilities of the Title IX Coordinator. NSF also observed that the Deputy Title IX Coordinators are highly qualified and SCS has a close, collaborative and productive working relationship with its Deputy Title IX Coordinator. NSF would like to highlight having highly trained and qualified Deputy Title IX Coordinators spread throughout the campus as a best practice.

FINDINGS: In compliance

B. Dissemination of Contact Information

Information regarding the contact information for the Title IX Coordinator and/or the Office of Title IX Initiatives is disseminated in many ways. By way of example, contact information for the Title IX Coordinator is included in the following documents, communications and trainings:

- The University's Policy Against Sexual Harassment and Sexual Assault, available at https://www.cmu.edu/policies/administrative-and-governance/sexual-harassment-and-sexual-assault.html.
- Office of Title IX Initiatives website at https://www.cmu.edu/title-ix/.
- Annual Security and Fire Safety Reports, available at https://www.cmu.edu/police/annualreports/.
- Title IX Resource Guide provided to anyone who reports an incident of sexual assault, sexual harassment, sexual violence, dating violence, domestic violence, or stalking, available at https://www.cmu.edu/title-ix/title-ix-resource-guide-10-8-2018.pdf;
- Title IX Basics Guide https://www.cmu.edu/title-ix/title-ix-basics.pdf and the Graduate Student Resource Guide: Title IX Basics, https://www.cmu.edu/title-ix/graduate-student-resource-guide---tix-basics.pdf developed for graduate students who wish to report discrimination and harassment, including sexual harassment and assault. Provides overview of the reporting, resolution and investigative processes.
- Undergraduate Student Orientation.
- Graduate Student Orientation.
- New Employee Orientation.
- Preventing Workplace Harassment Training for employees, available at https://www.cmu.edu/hr/career/new-employees/onboarding/pwh.html.
- Sexual Assault Prevention Training (mandatory for undergraduate students, optional for graduate students) available at https://www.cmu.edu/health-services/alcohol/AlcoholEdu.html.
- An annual email regarding Preventing and Responding to Sexual Misconduct sent by the Vice President for Student Affairs and Dean of Students to all faculty, staff and students.

A copy of the message sent in August 2018 is attached as Exhibit 33.

- Contact information for the Title IX Office is included on a campus-wide CMU Cares (https://www.cmu.edu/student-affairs/dean/assets/cmu-cares-folder.pdf) resource folder,   which is distributed each fall to all faculty, staff, and graduate student instructors.
- Many of the student handbooks for graduate programs in SCS include information about the University's Policy Against Sexual Assault and contact information for the Office of Title IX Initiatives. Representative examples handbooks are provided at the URLs below:

    o Computer Science (CSD): p. 30:
      https://www.csd.cs.cmu.edu/sites/default/files/CSD-PhD-Handbook-2017-18.pdf
    o Robotics Institute (RI): p. 29: https://www.ri.cmu.edu/wp-content/uploads/2018/08/THE-ROBOTICS-DOCTORAL-HANDBOOK-2018-19.pdf
    o Language Technologies Institute (LTI): p. 21:
      https://lti.cs.cmu.edu/sites/default/files/Handbook-PhD-15June2018%20-%202018-2019%20REF%20%281%29.pdf
    o Software Engineering Program (ISR/SE): p. 31: http://se-phd.isri.cmu.edu/Student%20Resources/docs/se-phd-program-plan.pdf
    o Societal Computing Program (ISR/SC): p. 24:
      http://sc.cs.cmu.edu/images/documents/student_documents/SC-Handbk-Working.pdf

Highlights: Despite the wide dissemination of Title IX and sexual-misconduct, non-discrimination policies and procedures, most of the faculty and graduate students interviewed did not know what office was responsible for implementing the University's Title IX policy and coordination. When asked what he/she would do if approached with a Title IX-related issue, the responses varied from talking to the Dean, Department Chair, or sending an email to appropriate University officials. Most of the graduate students interviewed did not know where to report sexual misconduct and discrimination[5]. NSF recommends that all graduate students in SCS receive annual training on Title IX and how to file complaints and make reports of sexual misconduct and discrimination consistent with CMU's Title IX and sexual misconduct policies. NSF also recommends that CMU more broadly and frequently disseminate its Title IX and sexual misconduct policies, procedures, contact information for the Title IX Coordinator and available resources. NSF should be included on the CMU website and Title IX trainings as a federal agency where complaints of discrimination and harassment can be filed. NSF highlights the publication of the *Title IX Basics Guide* and the Graduate Student Resource Guide: *Title IX Basics*, as a best practice of providing information to CMU's graduate students. However, this guide does not provide information on the types of situations involving sexual misconduct that

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[5] This lack of knowledge is corroborated by the 2019 Association of American Universities (AAU) Survey on Sexual Harassment in Academia, in which CMU participated. For CMU specific survey results, 37 percent of graduate students reported being aware of the existence of the Office of Title IX Initiatives, compared to approximately 81 percent of undergraduate students and 69 percent of graduate women report being "a little" or "not at all" knowledgeable about what happens when a student reports an incident of sexual assault or other sexual misconduct at CMU compared to 49 percent of undergraduate women.

graduate students can be subjected to. [6] NSF recommends that this resource provide information on sex discrimination and sexual misconduct that can occur in the graduate student environment.

FINDINGS: In Compliance

C. University Policy Related to Title IX

NSF found that due to the US Department of Education's (ED's) revised Title IX regulations (34 CFR 106) that went into effect August 14, 2020, which required substantial changes to Title IX and sexual misconduct policies of ED recipient institutions, CMU adopted an interim Sexual Misconduct Policy (the Interim 2020 Policy) that was approved by the CMU President on July 28, 2020, effective August 14, 2020. The Interim 2020 Policy supersedes the policy that was in effect at the time of NSF's onsite visit, which was the Policy Against Sexual Harassment and Sexual Assault, originally adopted on April 11, 2013 (the 2013 Policy) and last updated in December 2018 to reflect changes in personnel. According to the CMU's Title IX website, "a full review and comment period of the University's Sexual Misconduct Policy will take place throughout the 2020-21 academic year. This process will involve multiple opportunities for community members to provide verbal and written feedback before a Final Policy is adopted."

In its response to the December 11, 2020 draft report, CMU informed NSF that the Interim 2020 Policy covers a broad range of sexual misconduct that is well beyond the minimum required by the Department of Education's revised Title IX Regulation. CMU also advised NSF that the Interim 2020 Policy classifies the misconduct covered under the Department of Education's Title IX Regulation as a subset of the broader range of misconduct prohibited by the Interim 2020 Policy.

As indicated in the 2013 Policy, the specific procedures for handling allegations of sexual misconduct against a student are set forth in the Community Standards section of the Carnegie Mellon Student Handbook, known as The Word. This report discusses these procedures in greater detail in Section G below.

Table 16-CMU Policy and Procedures related to Title IX

Policy/Procedure Document	Web Link / Exhibit	Date of Last Update	Update Frequency	Administrative Reviewer/Updater

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[6] In the 2019 AAU survey, the AAU found that graduate and professional students were most likely to be subject to sexually harassing behavior by a faculty member or instructor. For example, 24.0 percent of incidents of sexual harassment experienced by graduate and professional women were by a faculty member or instructor. This compares to 5.5 percent for undergraduate women. Similarly, 18.2 percent of graduate and professional men were sexually harassed by a faculty member or instructor compared to 4.3 percent of undergraduate men.

Interim Sexual Misconduct Policy	https://www.cmu.edu/policies/administrative-and-governance/sexual-misconduct/index.html	August 14, 2020	Final Policy to be developed and implemented in the 2020-21 Academic Year	Provost's Office, Title IX Coordinator, Student Affairs, Human Resources and General Counsel's Office
Policy Against Sexual Harassment and Sexual Assault	https://www.cmu.edu/policies/administrative-and-governance/sexual-harassment-and-sexual-assault.html	December 17, 2018 (Superseded by the Interim Sexual Misconduct Policy	As needed based on changes in law, regulation, and personnel.	Title IX Coordinator; Vice President for Student Affairs and Dean of Students; Chief Human Resources Officer
The Word: Community Standards Provisions	https://www.cmu.edu/student-affairs/theword/community-standards/	August 16, 2018	Annually	Vice President for Student Affairs and Dean of Students / Office of Community Standards and Integrity
Guidelines for Sexual Misconduct Case Management		January 2018	As needed based on changes in law, regulation, and personnel.	Title IX Coordinator

Highlights: NSF recognizes the extensive policy and guidance provided to the institutional community as a best practice. Clear policies and guidelines are the first step in creating a safe and healthy community free from discrimination and gender bias. NSF recognizes that CMU must develop and implement sexual misconduct policies that comport to ED's revised Title IX regulation. NSF notes that a number of universities, including CMU have also developed policies and procedures for sexual misconduct and other sex-based misconduct that may not be covered by (and may go beyond the requirements of) the new Education Department Title IX regulations (that could also be covered under NSF's Title IX regulations).

FINDINGS: In Compliance

D. Title IX Policy Dissemination

Information regarding (1) the requirements of Title IX, (2) the right of an individual to file a Title IX complaint, and (3) the Title IX complaint process is disseminated in many ways. By way of example, such information is included in the following documents and communications:

- The University's Policy Against Sexual Harassment and Sexual Assault, available

at https://www.cmu.edu/policies/administrative-and- governance/sexual-harassment-and-sexual-assault.html.
  - • Superseded by the Interim Sexual Misconduct Policy effective August 14, 2020, available at https://www.cmu.edu/policies/administrative-and-governance/sexual-misconduct/index.html.
- The Word, Community Standards Provisions, available at https://www.cmu.edu/student-affairs/theword/community-standards/hearing-boards.html#tix.
- Office of Title IX Initiatives website at https://www.cmu.edu/title-ix/;
- Annual Security and Fire Safety Reports, available at https://www.cmu.edu/police/annualreports/;
- Title IX Resource Guide provided to anyone who reports an incident of sexual assault, sexual harassment, sexual violence, dating violence, domestic violence, or stalking. Available at https://www.cmu.edu/title-ix/title-ix-resource- guide-10-8-2018.pdf;
- Student Support – University Resources Guide, available at https://www.cmu.edu/student-affairs/resources.html;
- Undergraduate Student Orientation.
- Graduate Student Orientation.
- New Employee Orientation.
- Preventing Workplace Harassment Training for employees, available at https://www.cmu.edu/hr/career/new-employees/onboarding/pwh.html.
- Sexual Assault Prevention Training (mandatory for undergraduate students, optional for graduate students) available at https://www.cmu.edu/health-services/alcohol/AlcoholEdu.html.

An annual email regarding Preventing and Responding to Sexual Misconduct sent by the Vice President for Student Affairs and Dean of Students to all faculty, staff and students.

Highlights: NSF should be included on the CMU website and in Title IX related trainings as a federal agency where complaints of discrimination and harassment can be filed.

FINDINGS: In Compliance

E. Self-Study

Table 17-CMU Self-Evaluation

Date of Self-Evaluation	Responsible Administrator/Office	Review

Spring 2015	Written and Administered by the Office of Institutional Research and Analysis informed by university wide advisory committee	The sexual assault and relationship violence study (SARV) was developed to measure students' attitudes, experiences and behaviors related to sexual assault and relationship violence. The study also addressed awareness of campus resources and university stance. The study was administered to Pittsburgh-based students (graduate and undergraduate) with a total response rate of 34%.
Spring 2016	Written and Administered by the Office of Institutional Research and Analysis informed by university wide advisory committee	The discriminatory and sexual harassment study (DASH) expanded the previously administered SARV study by addressing multiple types of bias- based harassment including sexual harassment as well as incidents of stalking which were not previously studied. The study was administered to Pittsburgh-based students (graduate and undergraduate) with a total response rate of 35%.
Fall 2017	Written and Administered by the Office of Institutional Research and Analysis informed by university wide advisory committee	Re-administration of the sexual assault and relationship violence study (SARV). SARV was developed to measure students' attitudes, experiences and behaviors related to sexual assault and relationship violence. The study also addressed awareness of campus resources and university stance with a total response rate of 30%.

Spring 2019	Written and administered by Westat in collaboration with AAU	CMU is participating in a multi-campus research project through the AAU to investigate student experiences and perceptions related to sexual assault and sexual misconduct. This is the second administration of a Westat developed instrument in collaboration with AAU but the first time that CMU will participate.

Highlights: NSF recognizes CMU's utilization of the sexual assault and relationship violence study (SARV) in 2015 and 2017, the AAU collaboration, as well as the discriminatory and sexual harassment study (DASH) in 2016 as a promising practice.

FINDINGS: In Compliance

F. Title IX Training

The list of topics generally included in Title IX Training programs at CMU are as follows:

- University Policy Against Sexual Harassment and Sexual Assault, University Policy Against Retaliation, and University Statement of Assurance
- Definitions and examples of sexual misconduct (sexual harassment, sexual assault, dating violence, domestic violence, and stalking).
- Consent, including the definition of consent, intoxication and incapacitation.
- Options for reporting violations.
- Reporting expectations for responsible employees.
- How the University responds to reports of sexual misconduct, including safety and support measures.
- University procedures for investigating and resolving complaints, including the student and employee disciplinary procedures, standard of evidence, and the range of possible sanctions.
- Bystander intervention.
- Gender identity and stereotypes.
- The impact of trauma.
- Information regarding the Title IX Coordinator, Deputy Title Coordinators, and Office of Title IX Initiatives.
- Resources available through the Office of Title IX Initiatives.
- Healthy relationships.
- External resources for survivors of sexual violence, intimate partner violence,

and stalking.
- Resolution options that may be available externally, including civil and criminal justice options.

Table 18 -Types of Title IX Training

Types of Title IX Training				
Session Title	**Audience**	**Mandatory**	**Description**	**Weblink**
Preventing Workplace Harassment	Faculty & Staff	Mandatory	Mandatory online training for new employees. As of 2013, existing employees were required completed this training or an equivalent in-person training session.	https://www.cmu.edu/hr/career/new-employees/onboarding/pwh.html;
New Employee Orientation	Faculty & Staff	Expected	Employee orientation includes training on the university's Policy Against Sexual Harassment and Sexual Assault. The session is presented by staff from the Office of Title IX Initiatives.	
Comprehensive Title IX Training	Faculty & Staff	Optional	Training on Title IX and related laws; university policy, definitions, process; types of sexual misconduct, including prevalence and example behaviors; employee expectations including reporting expectations and how to support students	

Undergraduate Student Orientation	Undergraduate students	Mandatory	Mandatory Title IX training presented by Health Services' Health Promotion Team, TIX, Office of Community Standards & Integrity, and other Student Affairs staff. It covers many topics relevant to Title IX including healthy relationships, consent, Title IX Office and resources, and bystander intervention.	
Graduate Student Orientation	Graduate Students	Optional	Attendance at graduate student orientation is not mandatory. Otherwise the Title IX covers the same topics covered in Undergraduate Orientation.	
Sexual Assault Prevention Training for Undergraduates	Undergraduate students	Mandatory	First year students are required to complete this training prior to starting school, with an online follow-up training during their first semester.	https://www.cmu.edu/health-services/alcohol/AlcoholEdu.html;

Sexual Assault Prevention Training for Graduates	Graduate Students	Optional	Graduate students are encouraged, but not required, to complete this training.	https://www.cmu.edu/health-services/alcohol/AlcoholEdu.html;
Green Dot Bystander Intervention Training	Employees and Students	Optional	Currently, students, staff and faculty members opt into this training. The goal is for 15% of the student population to complete Green Dot training.	
Labor Day Title IX Training	Student- Athletes	Mandatory for "Plaidvocates"	Title IX training for student-athlete leaders in Athletics (known as Plaidvocates).	

Consent	Students	Optional	This program is provided as an opt-in or as-requested basis. It provides an overview of ways to help students to think, talk about and understand consent, including information about common pitfalls in the "hook up" context, and practical tips avoiding those pitfalls	
Intensive Title IX Training	Title IX Coordinators; Sexual Harassment Advisors; Student Affairs Staff; Human Resources, and University Police	Optional	Two day optional program which covers topics including: Title IX legal framework; in-depth examination of each area of sexual misconduct; university policy; university response to reports; and working with transgender & gender non-conforming individuals.	
Vendor Title IX / Sexual Harassment Training	Employees of contract food vendors on campus	Mandatory	This program has been presented on a mandatory basis to employees of third-party food vendors operating on the CMU campus	

| Student-Athlete Sexual Violence Prevention Training | Student- Athletes | Mandatory | A sexual violence training program for student-athletes based on the NCAA Sexual Violence Prevention Tool Kit | |

Highlights: NSF recognizes the extensive Title IX related training offerings at CMU as a best practice. While not included in the table above, interviewed SCS student and faculty provided positive feedback on the Bias Busters training that is offered in SCS by the student group SCS4ALL and is modeled on Google's Bias Busting@ Work program. NSF recommends that all SCS students, faculty, and staff receive required annual Title IX training that also covers the prevention of sexual and gender-based harassment and discrimination given the lack of awareness among graduate students and faculty that NSF interviewed during this compliance review.

FINDINGS: In Compliance

G. Title IX-Related Complaint Investigations and Resolution

Note: The following is a description and analysis of CMU's Title IX-related complaint investigation procedures prior to the effective date of the Interim Sexual Misconduct Policy and related procedures on August 14, 2020. ODI will not make an assessment or a compliance determination on the Interim Sexual Misconduct Policy at this time but will review the application of the 2013 Policy to investigations in the five-year period reported to NSF. The 2013 Policy was in effect at the time of the onsite visit in June 2019

NSF found that the 2013 Policy provided for different procedures for addressing complaints depending on who has allegedly violated the policy. Where the respondent individual (against whom an allegation is made) is a student, cases are handled through the University Student Community Standards Process outlined in the Student Handbook (known as The Word). Where the respondent is a faculty or staff member, cases are handled through the Sexual Harassment Process. Where the respondent has dual status (e.g., more than one status), or where there are multiple respondents with varying statuses, the University has discretion to determine whether to pursue the matter through the Student Community Standards Process or the Sexual Harassment Process, depending on the circumstances of the case. Where the respondent is a vendor/contractor or visitor, CMU reserves the right to determine what process to follow and is not required to adhere to any of the procedures outlined in either the University Student Community Standards Process or the Sexual Harassment Process below. In cases involving vendors/contractors and visitors, the University reserves the right to take summary action.

NSF found that the following CMU personnel are tasked to sexual misconduct complaint resolution:

- **Title IX Coordinators**, who are responsible for overseeing the complaint resolution processes and identifying trends that may arise from the complaints. The coordinators include the lead Title IX Coordinator and the Deputy Title IX Coordinators for students, faculty, staff and athletics.
- **Sexual Harassment Advisors**, who are faculty, staff and administrators trained to deal with incidents of sexual harassment and provide sexual harassment advising. NSF found that none of the SCS faculty and staff serve as Sexual Harassment Advisors.
- **Sexual Harassment Process Coordinators,** CMU's Provost and Chief Human Resources Officer are the two CMU executives who are tasked with coordinating formal complaints against faculty or staff.

Under the Policy CMU provides for both informal and formal complaint resolution processes. The Policy describes the informal process as follows:

> "In cases where the respondent is faculty or staff (not a student, vendor/contractor or visitor), one of the Title IX Coordinators or Sexual Harassment Process Coordinators will promptly endeavor to thoroughly review the matter with the person making the allegations to determine whether sexual harassment or sexual assault appears to have occurred and proceed to take or recommend appropriate action. Such action may include an informal agreement or mediated resolution. These terms of an informal agreement or mediated resolution necessarily include an agreement to stop the behaviors at issue, but often include other terms/measures that may be appropriate in the circumstances and necessary to protect the complainant and safeguard the campus community."

NSF found that there is no set timeframe for the informal resolution process to be completed. NSF found that in a review of submitted documentation, the completion of informal resolutions can range from several days up to 1 to 3 months in length.

The Policy states that "At any time during the informal process, the complainant has the right to end the informal process and proceed with a formal complaint." The formal complaint resolution process is described as follows:

> "A person who believes that she or he has been subjected to sexual harassment, including sexual assault, may choose, either initially or after having sought an informal resolution, to lodge a formal complaint. Victims are encouraged to lodge a formal complaint (if they intend to do so) as soon as possible, but at least within one year after the most recent conduct alleged to constitute sexual harassment. Although the University does not impose a limitations period for reviewing internal complaints of alleged sexual harassment/sexual assault, the University recognizes that to conduct a meaningful investigation of allegations of sexual harassment or sexual assault and to take prompt remedial action as appropriate, a timely complaint is important. The lodging and processing of a formal complaint does not preclude the possibility of an informal or mediated resolution of the matter.

Anyone considering lodging a formal complaint should contact one of the individuals identified in

the "Resources" section (in the Policy). Merely discussing an intended complaint with one of these individuals does not commit one to actually lodging the formal complaint, although the University may be required in cases where the welfare of the broader community is at issue to proceed with an investigation and lodging its own complaint even if the victim chooses not to file a complaint."

Under the formal complaint resolution process, the appropriate Sexual Harassment Process Coordinator (the Provost if the respondent is a faculty member, and the Associate Vice President of Human Resources if the respondent is a staff member) convenes a committee of investigation, informs the complainant and the respondent of the committee's identity and charge, and provides the respondent with a copy of the formal complaint. The committee of investigation is to conduct a thorough investigation of the allegations in the complaint, with a view to determining: 1) whether any conduct alleged in the complaint did occur in the manner and circumstances alleged or otherwise; and 2) to the extent that the alleged conduct did occur, determining whether this conduct constitutes sexual harassment or sexual assault. With respect to any sexual harassment or sexual assault found by the committee of investigation to have occurred, the committee shall make a considered recommendation regarding appropriate action consistent with the applicable university policies. The committee of investigation will review all available and submitted evidence submitted by the complainant and respondent and hold a hearing. After concluding its investigation, the committee of investigation shall make findings and recommendations by a majority vote. These findings and recommendations will be documented in a written report which will be submitted to the convening Sexual Harassment Process Coordinator. The Sexual Harassment Process Coordinators will review the report and make a recommendation, which will be communicated in writing to the President and the timing of that submission shall be communicated to the complainant the respondent and the members of the committee of investigation. The President will then render a decision based on both the recommendation of the Sexual Harassment Process Coordinator as well as the underlying findings and recommendation of the committee of investigation. The President's decision to accept or reject the recommendation of the Sexual Harassment Process Coordinator as well as the basis for that decision shall be communicated in writing to all involved parties.

Unlike the informal complaint resolution process, the Policy proscribes the following case processing timetable:

- Selection of committee of investigation: 5 working days following receipt of the complaint.
- Scheduling of hearing: 5 working days.
- Committee investigation and hearing: At the time of scheduling the hearing the Coordinator, after consulting the complainant, the respondent, and the committee of investigation, shall in each case set in writing a reasonable time period for the committee's investigation and the hearing with a view toward prompt resolution.
- Preparation of committee report: 10 working days following the conclusion of the hearing.
- Sexual Harassment Process Coordinator's evaluation and decisions or recommendations: 10 working days.

According to the Graduate Student Resource Guide "The University's response is largely driven by the wishes and preferences of the reporting party (complainant). The Office of Title IX Initiatives will make all reasonable attempts to comply with the individual's wishes regarding confidentiality, investigation, and resolution, consistent with the University's obligation to protect the broader campus community." However, the Policy provides for CMU, in cases of sexual assault or violence " to pursue an investigation, make a complaint and take disciplinary action directly, even if a victim chooses not to pursue the matter internally at the University in order to safeguard members of the University community."

Please note that the CMU's Office of Title IX Initiatives tracks reports on a yearly basis. The data below regarding university-wide Title IX complaints includes informal and formal complaints, as well as reports received by the Office of Title IX Initiatives where the reporting party did not wish to proceed with an investigation, complaint or resolution.

Data for 2018 includes fourteen (14) pending matters at the time CMU provided NSF with complaint information, which were included in the total number of complaints but were not counted for purposes of calculating the average days to resolution.

Table 19-24-University-Wide Title IX Related Complaints

University-Wide Title IX Related Complaints					
Sexual Harassment					
	2014	2015	2016	2017	2018
# of Complaints	33	18	41	83	60
Avg. # Days to Resolution	66.4	22.5	20.7	24	22.2

University-Wide Title IX Related Complaints					
Sexual Assault					
	2014	2015	2016	2017	2018
# of Complaints	30	55	43	53	40
Avg. # Days to Resolution	45.3	30.4	42.1	56	13.9

University-Wide Title IX Related Complaints					
Dating and Domestic Violence					
	2014	2015	2016	2017	2018
# of Complaints	12	24	26	26	24
Avg. # Days to Resolution	29.9	6.8	38.9	19.4	26.4

University-Wide Title IX Related Complaints					
Stalking					
	2014	2015	2016	2017	2018
# of Complaints	15	14	27	19	19
Avg. # Days to Resolution	61.7	32.1	34.5	15.3	19.9

University-Wide Title IX Related Complaints					
Discrimination Based on Sex, Gender, Gender Identity, Gender Expression					
	2014	2015	2016	2017	2018

# of Complaints	0	0	9	8	6
Avg. # Days to Resolution		0	44.4	19.5	31

University-Wide Title IX Related Complaints					
Retaliation					
	2014	2015	2016	2017	2018
# of Complaints	0	0	0	0	1
Avg. # Days to Resolution	0	0	0	0	101

CMU provided summaries for all Title IX Complaints from January 1, 2014 to December 31, 2018, 82 in total, where the Complainant or Respondent is affiliated with SCS as a faculty member, staff member or student. While many of these cases do not involve SCS programs, CMU provided them to NSF because one of the parties involved in the incident is affiliated with SCS. This data includes informal and formal complaints NSF found that only one of these complaints resulted in a finding of insufficient evidence to support a violation of the Policy. Complaints were resolved informally with supportive measures such as no contact orders, while complaints that were investigated under the formal process resulted in actions taken against the respondents. There were a number of complaints where the complainants did not wish to pursue informal or formal resolution processes.

Highlights: NSF notes that CMU appears to have followed University policy and procedures when processing the Title IX related complaints involving SCS students, faculty, and staff. Many of the complaints where actions were taken to protect complainants and hold respondents accountable for violations of the Policy were resolved through informal means without being adjudicated through the formal process. It should be noted that in the May 6, 2020 Final Rule version of ED's Title IX regulations, ED has stated that recipient institutions may use informal resolution of sexual misconduct complaints as long as the institutions provide complainants the opportunity to use formal investigation processes, although some instances of sexual misconduct, such as sexual violence or assault, may not be appropriate for informal resolution.

NSF has not learned of any student complaints against other students, faculty or staff outside of the information provided by CMU. As previously stated on page 18, NSF did learn of a formal complaint filed with the Office of Title IX Initiatives in February 2020 by an SCS faculty member alleging gender-based harassment by a colleague. In its December 11, 2020 response to the draft report, CMU informed NSF that upon receiving this complaint, the Office of Title IX Initiatives had initiated an investigation, including interviews with multiple witnesses, and is following standard policy and procedures towards resolution of the complaint. The matter is pending as of this writing of this report.

Findings: In Compliance

VIII. Conclusion

The National Science Foundation recognizes the effort that Carnegie Mellon University has put forth in order to comply with Title IX of the Education Amendments of 1972 and NSF

regulations. The Title IX compliance review team acknowledges the following best practices at CMU:

- CMU's interest free maternity loan program
- Highly trained and qualified Deputy Title IX Coordinators spread throughout the campus
- Extensive policy and guidance provided to the institutional community
- Utilization of the sexual assault and relationship violence study (SARV) as well as the discriminatory and sexual harassment study (DASH)
- Variety of Title IX related training offerings
- The Title IX Basics Guide and the Graduate Student's Title IX Basics Guide

While in overall compliance, NSF has identified some areas in which further action could enhance and strengthen CMU's implementation of the Title IX regulatory requirements and compliance posture. NSF recommends the following:

- Develop and implement a plan focused on the recruit of more women into SCS
- Utilize benchmarks and consistent evaluation to understand progress in recruiting women
- Put safeguards in place to mitigate unconscious bias such as third-party reviewer system, gender neutral application standardized evaluation and funding, and annual assessment
- Evaluate the SCS admissions policies and criteria to ensure they are neutral, fair, and valid predictors of success
- Examine SCS's recruitment, admission, and enrollment processes to determine if there are any gender-related barriers negatively affecting the number of female applicants and enrolled students
- Conduct an in-depth review of its Graduate Assistantship programs to fully determine if SCS provides different amounts of compensation, types of positions, limits eligibility for certain positions, or applies different criteria based on gender
- Evaluate the completion rates annually to look for barriers to completion for female master's and doctoral students
- Provide all SCS students, faculty, and staff required annual Title IX training, including the prevention of sexual and gender-based harassment and discrimination.
- Include NSF on the CMU website and in Title IX trainings as a federal agency where complaints of discrimination and harassment can be filed
- Update the Graduate Student's Title IX Basics Guide to include situations where graduate students may be subjected to sexual misconduct
- Develop a policy that documents the Graduate Student Re-Entry Procedures.