

**Departmental BPC Plan
Computer Science Department
Wellesley College**



Effective dates of Plan: 07/05/2023 - 07/05/2025

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1. Context

Wellesley College is a liberal arts women's college with about 2300 students. The Computer Science Department was established in 1982 and the first majors graduated in 1983. The department currently has 18 faculty (12 tenured or tenure-track). Enrollment in Computer Science (CS) has been steadily increasing since 2011. The department currently serves 220 students who major or minor in computer science, as well as 84 majors in Media Arts and Sciences (MAS), and 40 Data Science (DS) majors.

Racial/ethnic diversity within our CS students is an area of concern for the department. CS majors in the last 5 years include (the college-wide percentage of each group is shown in parentheses): 11.63% (12.64) Hispanic, 0.39% (0.10) Native/Indigenous, 3.87% (6.45) Black; and 14% (15.7) first generation college students.

Considering this context, we define the target population of this BPC plan as students from historically underrepresented racial/ethnic groups (**HURG**) in computing (Hispanic, Latinx, Black, African American, Native American, Native Alaskan, Native Hawaiian and/or other Pacific Islander) in addition to low-income and first-generation students (**LIFG**). In the class of 2023, CS first-generation students are disproportionately from **HURG** (55% of CS first-generation students are from **HURG**, whereas 38% of all first-generation students are from **HURG**). Survey and focus groups with computing-related students indicate that students from **HURG** feel a weaker sense of belonging than their White counterparts in the CS department.

2. Goals, Activities, and Measurement

Rationale:

This BPC plan is aligned with Wellesley College's strategic plan¹ which elevates inclusive excellence - "when every person feels included, we create the conditions that make it possible for all to excel." This approach encompasses students, faculty, staff and administration working together so that each person in the community feels that they belong and are valued, and have equitable access to resources, which in turn empower them to fulfill their potential and make a difference.

G1: Build faculty awareness of inclusive excellence so that annually at least 80% of the CS faculty participate in BPC-focused training.

A1a: Create a storytelling workshop to highlight belonging and community. [Lee]

A1b: Organize two faculty book clubs per year on BPC-related content. [Lee]

A1c: Select topics related to inclusive excellence in computing, plan and lead the discussion during faculty meetings (e.g. course redesign, mentorship tips, student research). [Shaer, Lee, Metaxas]

M1: Number of faculty participating in BPC-focused training.

G2: The department will annually collect and discuss quantitative and qualitative data - focusing on participation, retention, and satisfaction of students from **HURG**.

A2a: Collect data on enrollment and retention in our introductory course sequence and in computing-related major completion (CS, MAS, and DS). [Turbak]

A2b: Conduct a senior exit survey to collect data on satisfaction and belonging of CS majors.

¹ <https://www.wellesley.edu/sites/default/files/assets/departments/about/files/strategicplan2021.pdf>

[Sandu, C. Anderson]

A2c: Oversee the administration and marketing of CERP's Data Buddies survey participation [Shaer]

A2d: Collect student demographics on participation in research and conference activities. [Shaer]

M2: Data collected on the representation and experience of students from **HURG** in computing-related majors in our courses as well as extracurricular activities; Data shared and discussed with faculty at department meeting

G3: The CS department will provide and ensure equitable access to research opportunities for students from **HURG**.

A3a: Participate in Wellesley College's Science Center (SC) programs for inclusive excellence², which provide research funding and training for students from **HURG** (including the First-Year Apprenticeship Program, Sophomore Early Research Program³, Claire Boothe Luce and McNair mentoring, and SC Summer Research Program. [Shaer and CS Faculty]

A3b: Organize a faculty research seminar series (at least one seminar per semester) to ensure that all students are well-prepared to access research opportunities. Seminars will: 1) expose students to the research done within the department, 2) offer guidance for students to get involved in research, and (3) encourage their interest in pursuing a graduate degree. [Bassem, Brubach]

A3c: Host, or join a team that regularly hosts, a regional Women in CS conference (for example, ACM Massachusetts Gender Inclusive Computing Celebration). [Bassem, Brubach]

A3d: Organize a community CS research event, invite students from **HURG** who participate in inclusive excellence research opportunities, advise student presentations. [Mustafaraj]

M3: Number of faculty participating in Science Center programs; # of research seminars organized; faculty participation in regional Women in CS conferences; # of students from **HURG** participating in research; # of students from **HURG** presenting research in an annual CS research event.

G4: The CS department will eliminate demographic differences in perceptions of climate by 2025 for computing students from **HURG**.

A4a: Create an inclusive and accessible space in the L Wing of the Science Center for all computing related students to foster a community of support and peer mentorship with posters highlighting alum mentors from **HURG & LIFG** populations. [Bassem, Delcourt, Tynes]

A4b: Oversee the hiring and mentoring of two CS student fellows a year who are not affiliated with any particular course. The student fellows will organize, with advisement from faculty, at least three community-building activities each semester. [Shaer]

A4c: Host two open AMA (Ask Me Anything) sessions with faculty and students, where faculty share their journeys, including setbacks and failures, to build community. [Kakavouli, Lee]

A4d: Revamp the tutor recruiting and hiring process to be more equitable and transparent so that students apply instead of being tapped by faculty; prioritize hiring tutors from **HURG & LIFG** groups as visible role models. [Sandu]

A4e: Lead workshops on inclusive teaching practices that the teaching staff (faculty and tutors) will be invited to attend. Tutors and faculty will discuss selected readings on inclusive teaching practices as well as specific interventions that could benefit students from **HURG**. [Mawhorter]

M4: Improvements to L Wing space; fellows hired/activities held; attendance at AMA events; # of tutors hired from **HURG & LIFG** groups; attendance at inclusive teaching practices workshops; students' sense of belonging and community as reported on climate and exit surveys.

² <https://sites.google.com/wellesley.edu/ieinitiatives/home>

³ <https://sites.google.com/wellesley.edu/ieinitiatives/35?authuser=0>