

Application Form

CHERYL WALL FACULTY FELLOWSHIPS

Cheryl Wall Faculty Fellowships have been established to recognize full-time faculty who have demonstrated a commitment to working on issues faced by the University's diverse student population. These fellowships, in the form of a course release, shall be awarded to full-time faculty, pursuant to the application process described below, for mentoring, advising, and outreach to support the University's efforts to promote diversity, equity, and inclusion, including, but not limited to, the development and implementation of high-impact educational practices; curricular redesign intended to improve student access and success; service to the department, school, University, or community that exceeds the normal expectations for faculty; assignment to courses where increases to enrollment have demonstrably increased workload; and other extraordinary forms of service to students.

- All Rutgers full-time AAUP-AFT faculty are eligible for Cheryl Wall Faculty Fellowships, of up to one course release per academic year.*
- Faculty applicants must submit all materials for consideration to their Chancellor, or Chancellor designee (contact information noted below), by **March 4, 2024**.
- Chancellors, or their designee, shall review all applications for Cheryl Wall Faculty Fellowships and submit their recommendations to the University Committee on Diversity, Race, and Gender (UCD) via Box at [Cheryl Wall Faculty Fellowships](#) no later than **March 20, 2024**.
- Eligible faculty may receive a fellowship only ONCE during the term of the 2022–2026 collective negotiations agreement between the University and the AAUP-AFT beginning in Fall 2024 and continuing through June 30, 2026.
- The UCD shall make final recommendations as to the award of Cheryl Wall Faculty Fellowships to the EVPAA. The EVPAA, or their designee, shall make final determinations and announce recipients on **April 15, 2024**.

Name of Candidate: **Ana Paula Centeno**
(faculty member)

Title (if appropriate): **Associate Teaching Professor**

Department: **Computer Science**

Academic Unit: **School of Arts and Sciences**

Campus Address: **110 Frelinghysen Rd
Piscataway, NJ 08854**

Email: **anapaula@cs.rutgers.edu**

* Since these fellowships are not applicable to most RBHS faculty, who have no teaching load, the University and Rutgers AAUP-AFT are discussing a similar initiative and process for these RBHS faculty, which will be announced as soon as discussions complete.

Please prepare an application packet that contains this form and all the information requested below in a single PDF file.

- a. A letter from the applicant providing an overview of their past and ongoing commitment to working on issues faced by the University's diverse student population and the extent to which the candidate has engaged in mentoring, advising, and outreach to support the University's efforts to promote diversity, equity, and inclusion. The letter should include confirmation that the work previously performed will continue in the semester of the course release. If the applicant will be performing work not previously performed to support the University's efforts to promote diversity, equity, and inclusion in the semester of the course release, then the overview should include information on such new work.
- b. A current curriculum vitae.

Faculty submissions may be sent to the following contacts:

- Camden – Naomi Marmorstein, marmorst@camden.rutgers.edu
- Newark – Jennifer Bucalo, jennifer.bucalo@rutgers.edu
- New Brunswick – Victoria Banyard, nbfacultyaffairs@echo.rutgers.edu
- RBHS – Meredith Mullane, mmullane@rbhs.rutgers.edu

Please include this completed form with the application packet.

* * * * *

Statement

Ana Paula Centeno - March 2024

During my tenure at Rutgers I have become more than a professor, I became a role model that instills in students a sense of belonging in the computing field and a mentor that fosters interest in computer science.

Of the Rutgers computer science graduating student body, 18% are females. According to research, one of the top reasons female students leave computer science is the preception that they do not belong in the field. Therefore, it is of utmost importance to create an environment in CS courses and student gathering places that is welcoming to all students regardless of gender.

Incoming students have not been equally exposed to computing and females tend to have even less computing background than their male peers. In addition to nurturing a sense of belonging, it is equally important to provide students with the academic support they need to succeed.

For the past 5 years I have been working to (a) make the CS culture at Rutgers more welcoming and supportive and (b) increase the quality and quantity of academic support that the computer science major introduction course sequence offers to our students. Students achieve higher grades when they feel supported in their academic career. To increase student's sense of support I have created additional course content (over 100 learning objective videos) and a tutoring program for the introductory sequence.

Following is a summary of my diversity, equity and inclusion activities:

- I have been one of the **leaders in the Advancing Women in Computer Science (AW-iCS) CS/DIMACS/Douglass Initiative that has brought in \$490K** from the Khoury Center for Inclusive Computing at Northeastern University.
- As one of AWiCS leaders at Rutgers, I am responsible for coordinating curricular revisions for the introduction course sequence and co-curricular programming.
- I have been instrumental in the complete redesign of the **01:198:111 (Fall 2019)** and **01:198:112 (Spring 2021)** curricula, as part of an effort that has been directly supported by the Rutgers Chancellor's Office and Northeastern Grant.
- 01:198:111 and 01:198:112 **course coordinator** responsible for synchronized course content across lectures, the organization of 50 Learning Assistants and 40 graders. Current enrollment is 3600 students per Academic Year.
- I have been working with the CS department and SAS leadership to introduce a 3-course introduction to CS sequence to the major that will benefit students without computing background.
- I have created a **High School outreach program** to promote diversity and inclusion. Students from minority serving high schools spend a day at the New Brunswick campus learning about the computer science major and what is to be a student at Rutgers.
- Created a mentorship program for freshman, Assignment Guru, that gives students the opportunity to gain skills while creating assignments that demonstrate the positive social impact of computing. Over 30 mentees per year. <https://assignment-guru.cs.rutgers.edu>
- Submitted NSF grants to support the CS education research that I have been conducting.

- High student ratings: considering the reviews for both courses my weighted mean for each question presented to the students is higher than the corresponding course's, department's and level's weighted mean.

The previous activities are ongoing activities. On Spring 2024 I have started mentoring 4 undergraduate students in conjunction with Margaret Cozzens (DIMACS). This research group aims to have a deeper understanding of the outcomes of our DEI efforts.

The Cheryl Wall fellowship course release will enable me to continue to mentor undergraduate students and lead the creation of the 3-course introductory sequence for the department.

I have been recognized by my efforts to increase diversity, equity, and inclusion at Rutgers:

- Presidential Employee Excellence Recognition Award - Rutgers Gateway Award for Service to Students, 2023.
- Provost's Award for Excellence in STEM Diversity, 2021.

ANA PAULA CENTENO

anapaula@rutgers.edu

Department of Computer Science ◇ Rutgers University ◇ Piscataway, NJ 08854

EXPERIENCE AT RUTGERS UNIVERSITY

Fall 2014 - present

Awards

- Presidential Employee Excellence Recognition Award - Rutgers Gateway Award for Service to Students, 2023.
- Provost's Award for Excellence in STEM Diversity, 2021.

Teaching

- CS-LLC Great Ideas in Computer Science Seminar, Spring 2019 - present.
- Introduction to Computer Science, Fall 2015 - present.
- Data Structures, Fall 2015 - present.
- Computer Architecture, Fall 2014, Spring 2015.

Proposals

- Increasing the percentage of Women CS majors through changes in early CS courses. January 2024. Pending.
- Characterizing and Improving Students' Resource Use and Study Approaches Across Introductory Undergraduate Mathematical and Physical Science Courses. July 2023. Not funded.
- MLiSS: A Machine Learning Student Behavior Model to Identify Struggling Students in Introductory CS Courses. August 2020. Not funded.

Student Advising and Research

- *Computer Science Education Research*: mentoring 4-6 undergraduate students in conjunction with Margaret Cozzens (DIMACS). This research group aims to have a deeper understanding of the outcomes of our DEI efforts.
- *Assignment Guru Program*: created the mentorship program in Summer 2023. It involves mentoring students to create course assignments that demonstrate the positive social impact of computing. One of the assignments was accepted as a **Nifty Assignment on SIGCSE 2024**.
- *Computer Science Living and Learning Community Advisor*: the mentoring role to the CS-LLC includes one seminar per academic year and review sessions during exams, Fall 2018 - present.
- *Women in CS (WiCS) club Advisor*: mentoring the club several coordinated initiatives with the CS department, including CS High School Ambassador and Grace Hopper Celebration.
- *Member of the CS Academic Advising Team*: this role includes 2 hours of academic advising to students per week, Spring 2016 - Fall 2023.

Women in Computer Science Initiative

- Member of Rutgers Women in Computer Science Initiative partnership between DIMACS, the Department of Computer Science, and the Douglass Residential College aimed at increasing the percentage of undergraduate women majoring and minoring in Computer Science at Rutgers and elsewhere.
- Lead of the coordinating committee.

Academic Administrative Activities

- *Coordinator of the Introduction to Computer Science course*: responsible for the (a) organization of lecture and recitation material, assignments and exams, (b) coordination of 20 Learning Assistants, and 20 graders, and (c) exam coordination, Spring 2018 - Spring 2021, Fall 2023 - present.
- *Coordinator of the Data Structures course*: responsible for the (a) organization of lecture and recitation material, assignments and exams, (b) coordination of 20 Learning Assistants, and 20 graders, and (c) exam coordination, Spring 2021 - present.
- Team lead for the *modernization and standardization* of the Data Structures course, Fall 2020.
- Team lead for the *modernization and standardization* of the Introduction to Computer Science course, Summer 2019.

EDUCATION

- **Ph.D.**, Computer Science, Rutgers University, Piscataway, NJ 2019
- **M.S.**, Computer Science, Stony Brook University, Stony Brook, NY, 2003.
- **M.S.**, Computer Science, Federal University of Rio Grande do Sul, Porto Alegre, RS, Brazil, 1999.
- **B.S.**, Computer Science, Catholic University of Pelotas, Pelotas, RS, Brazil, 1997.