



The NSF-CREST Center for Cellular and Biomolecular Machines (CCBM) was established with a \$5 million Centers of Research Excellence in Science and Technology (CREST) grant in 2016 from the National Science Foundation (NSF). The CCBM brings together more than 30 faculty members from multiple units across campus, including bioengineering, physics, chemistry and chemical biology, biomaterials science and engineering, cell and molecular biology, and applied mathematics. The center received an additional \$5 million in 2021 for another 5 years of funding. Researchers are studying how biological matter like proteins or cells come together to perform specific tasks, in hopes of eventually being able to engineer and develop innovations ranging from designer cells and tissue to novel diagnostic and therapeutic devices. The CCBM also hosts an integrated, interdisciplinary training program for graduate students that emphasizes physical and biological components, research and training experiences for undergraduate and high school students to enhance the recruitment of underrepresented groups into STEM research, and outreach experiences for the local community and beyond.

Opportunity for UC Merced Graduate Students in STEM: CCBM Outreach Fellowship

Open - 1-2 CCBM Outreach Fellowships - to start immediately

Overview:

The NSF-CREST Center's outreach programming focuses on integrating exciting and challenging topics of relevance and interest to diverse students in an inclusive atmosphere. The CCBM Outreach Fellow will actively contribute to these outreach programs.

We will continue to focus on general STEM topics as well as Center research areas and on broadening participation of UR groups in STEM, particularly Latina/Hispanic, women, low-income, and/or first-generation students. We will continue with both in-person, hands-on and virtual sessions, with a goal of 80% of participants being women, those from UR groups, low-income, first generation, or those with disabilities. Annual programs will include: 1) CCBM Open House, 2) school and campus visits, 3) CCBM Virtual Sessions, 4) Science and Technology Enrichment Program/high school research program, 5) week-long K-12 programs, 6) Science for Humanity Series (public talks), 7) teacher professional development workshops, and 8) development of STEM education / outreach and science communication resources.

We will continue to refine programs based on participant surveys and feedback from our External Evaluator.

The CCBM Outreach Fellow will gain outreach and leadership experience by leading, developing, and managing STEM outreach activities. The role will promote training for a career in research/mentorship/education/outreach. The Fellow will contribute to the integration and active participation of Center affiliates in activities, expand the outreach and education capacity of the Center, and serve as a motivating role model for program participants and attendees. The role will enhance the professional development and training of the graduate student, with a focus on development of outreach leadership, development, and management; oral and written communication skills; and organizational skills.

Fellowship Qualifications: UC Merced M.S. or Ph.D. student or postdoctoral researcher in a STEM field, in good standing, with advisor approval.

Funding: Provide a small stipend as a fellowship (\$1000 or \$2000) upon completion of term (prorated for late start) - not intended to replace an assistantship

Timeline: 2-3 or 4-7 hours per week (average) depending on program needs, with flexible hours (except for events). It is expected that the Fellow will serve multiple semesters for continuity of center programs, depending on availability, student status, and positive performance.

Focus Areas: • Participate in and lead outreach programming • Contribute to management of programs • Organize information related to outreach • Develop and plan specific sessions for center STEM K-12 and community outreach opportunities and plans • Recruit and train volunteers for outreach programs • Collect feedback from participants and volunteers • Mentor, guide, and advise volunteers • Share best practices and experiences regarding outreach

Outcomes:

1 page report (reflection on program experience) per semester and a presentation in a center meeting

Applications open until filled. Fellowship to begin immediately.

Send your CV, contact information for 1-2 references, advisor name, and 1/2 page statement of interest (and direct any questions) to CCBM Executive Director Carrie Kouadio (ckouadio@ucmerced.edu).



ccbm.ucmerced.edu

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UC Merced • 5200 North Lake Road • Merced, CA 95343

