Dear Researchers:

Four years ago, mcbUSA, a UC Berkeley Molecular and Cell Biology student organization, started a program called the "Summer Undergraduate Research Program" (SURP). Last summer, with over 500 student applications and the participation of over 40 faculty researchers throughout the Bay Area, the program has been incredibly successful. The program's objective is to provide undergraduates with the opportunity to begin work in a research laboratory during the summer term with the possibility to continue through the following academic year. These efforts are designed to enrich the academic experience through allowing eager students to explore laboratory research under the tutelage of willing professors/research professionals. To achieve this, the program once again requires the participation of UCB faculty and other life science researchers in the Bay Area.

**Procedure**

- Faculty mentors/Researchers submit to us descriptions of available summer research opportunities in their lab.
- We distribute the descriptions and applications to the student population.
- We collect these applications and return them to the appropriate faculty.
- Decisions and interviews will be at the faculty member's discretion.

This program is very similar to the Undergraduate Research Apprentice Program (URAP). It differs in that students **begin their lab work in the summer**, giving them more initial time to dedicate their attention to their lab experience. **The program will not provide academic credit or stipends.** However, faculty participants may do so through the usual means (MCB 199, grants, etc).

**Timeline**

- Interested professors will submit their projects by **FEBRUARY 11th**.
- The projects and applications will be displayed on our web page and distributed in hard copy beginning **FEBRUARY 12th**.
- Applications are due by **MARCH 15th**.
- Applications will be delivered to faculty by **MARCH 22nd**.
- Faculty arrange interviews and start dates with the student(s) they select. Selected students should be notified by **APRIL 18th**.

If you are interested in participating in this program, please complete and submit the enclosed form electronically to our email account at mcbusa@gmail.com by **JANUARY 25th**.

If you have any questions, suggestions, or concerns please email us at mcbusa@gmail.com. Best wishes as we look forward to another successful year of student/professor collaboration.
Project Submission deadline: *January 25th 2015*

**Faculty Name:** John P. Kane, M.D., Ph.D.

**Email:** john.kane@ucsf.edu

**Phone Number:** 415 476-1517

**Department/Organization Affiliation:** Cardiovascular Research Institute

**Preferred Method of Contact:** e-mail

**Project Name(s):** Discovery of Previously Unknown Molecular Species of human High Density Lipoproteins

**General Topic (Keywords):** Lipid transport, heart disease, molecular structure

**Project Description(s):** Human HDL play very important roles in the control of disease (African sleeping sickness, viruses, septic shock), inflammatory conditions, heart disease and stroke (protective). We have developed techniques that allow us to isolate individual molecular species with distinct functions. We have identified two more that the student can isolate. We have collaborating labs for protein and lipid mass spec, so that the student can isolate the species in a summer and they can be characterized. The student will participate in all phases of the study. The student will get to do some original human genetics as well

**Desired Skills or Experience:** Ability to learn and integrate techniques of protein isolation

**Time Commitment:** Full time for the summer

**Preferred Starting Date:** When available