To: Potential Industry Mentors of Senior Design Projects for UCSD Bioengineering (2022-2023)

COVID-19: We assume we are "over the hump" and that UG students can work freely in your laboratories. However, last year we "turned on a dime" to convert to other projects, typically more computational.

Who does the work? Exceptionally bright and dedicated Bioengineering Seniors. Typically four to a team.

Why do you benefit? They will enrich your laboratory, both by providing new points of view and by tackling projects that you wish you could dedicate a graduate student or a staff member to.

Why are they so strong? Popularity of the bioengineering major gives us students whose and GPA and test scores are likely the highest on campus and who are destined for for many exciting entry level positions in the expanding biomedical industry, or graduate, medical or business school. Regardless, you and UCSD will be exceptionally proud of them as they become leaders in biotechnology.

Quick summary: you propose a project and we assign students (Spring 2022); students do background research (Summer 2022); design their approach (Fall 2022); implement a prototype (Fall 2022 to Winter 2023); and report (Spring 2023).

Student Commitment: Students take 3 credit courses in Fall and Winter Quarters, which translates to 9 to 12 hours per week of effort on your project. They also take 1 credit courses from me in Spring/Fall/Winter/Spring dealing with formal design proposal writing and reporting and background issues such as patents, ethics, FDA, animal and human subjects.

My responsibility: manage the overall process, interact with project mentors, and instruct as to formal design procedures, reporting, social issues, etc. I will interact with you as much as possible/appropriate to smooth the process – especially in making matches of expectations and talents.

Your responsibility: a mentor should meet with students regularly – perhaps one hour per week -- advising them on the project; providing opportunities to implement whatever you wish to have prototyped. Inspire them!

Intellectual Property: We respect Intellectual Property! Talk to me.

Want to see more: Try our not-so-sexy website http://beweb.ucsd.edu/courses/senior-design/projects/
Two Examples;
Machine Learning Algorithms to Solve the Neuronal Cell Type Matching Problem
https://sites.google.com/eng.ucsd.edu/group3/home
An Automated Bioreactor for Maintaining ... Organoids
https://sites.google.com/eng.ucsd.edu/2021-group1/

Please Submit a Project http://beweb.ucsd.edu/courses/senior-design/sponsors/
Simpler: Just email me. I'll work with you to do the submission.

Contact: Prof. Wheeler: bcwheeler@ucsd.edu. Cell: 217 714 7189. Zoom works. Email me.

Timing: I am looking now (April) for projects and look to complete assignments by early June for implementation October 2022 to March 2023.

Bruce Wheeler: Adjunct Prof. BioE UCSD. https://jacobsschool.ucsd.edu/faculty/profile?id=398
229 Powell-Focht Bioengineering Hall, 9500 Gilman Drive #0412, La Jolla CA 92093-0412.
I welcome zoom!