

## **To: Potential Mentors of Senior Design Projects for UCSD Bioengineering (2019-2020)**

**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 to.

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

**Quick summary:** you propose a project and we assign students (Spring 2019); students do background research (Summer 2019), design their approach (Fall 2019), and implement a prototype (Fall 2019 to Winter 2020) and report (Spring 2020).

**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, advising them on the project; providing opportunities to implement whatever you wish to have prototyped. Inspire them! Grad students and postdocs are excellent in mentoring (I did this when I was a grad student).

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

### **Want to see more:**

Projects at our not-very-sexy website <http://beweb.ucsd.edu/courses/senior-design/projects/>

Two examples from our recent past:

#### **Biosignal Prosthetics:**

[http://beweb.ucsd.edu/courses/senior-design/projects/2016-2017/project\\_6/bspprosthetics.github.io.html](http://beweb.ucsd.edu/courses/senior-design/projects/2016-2017/project_6/bspprosthetics.github.io.html)

#### **Defining the Last 25% of Life:**

[http://beweb.ucsd.edu/courses/senior-design/projects/2015-2016/Website\\_Group\\_6/index.html](http://beweb.ucsd.edu/courses/senior-design/projects/2015-2016/Website_Group_6/index.html)

**Please Submit a Project** <http://beweb.ucsd.edu/courses/senior-design/sponsors/>

**And/Or Contact Prof. Wheeler:** [bcwheeler@ucsd.edu](mailto:bcwheeler@ucsd.edu); 858-534-6458

**Timing:** Best if very soon (at the latest early May) so we can make assignments this spring for fall.

### **Bruce Wheeler**

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