The following is a set of guidelines and expectations for undergraduate and graduate students working in the O'Connell Lab at UC Berkeley. Components of this guideline have been adapted from Professor Kristofer S.J. Pister at UC Berkeley.

Collaboration, sharing ideas, etc.
Talk about your ideas. Help your colleagues work out their problems. Talk to students in the O'Connell Lab, students within the other Biomechanics labs (Keaveny, Pruitt, and Shadden) as well as students in other departments. Pay attention to what other people are doing, and see if you can learn something, or if you can contribute.

Graduate Students:
You are in graduate school to push back the frontiers of knowledge, which is done by generating and exploring new ideas. There is no way that you will ever be able to explore all of the ideas that you generate, but some of those ideas that you discard might be just what some of your colleagues are looking for.

Potential for Advancement
Undergraduate Students.
Undergraduate students can work in the lab under the mentorship of Dr. O'Connell or a graduate student. Students must complete one semester of ME98 or 199 as a pass/fail course (required time in the lab 5-10 hours per week). Students that demonstrate progress in their training and capabilities in the laboratory will be able to take a second semester course for research credit (ME194H, minimum time 10 hours per week). Summer internship opportunities may also be available for students that demonstrate progress in the laboratory.

Really productive and excellent students that have a strong understanding of their current research project may be given an opportunity to run their own independent project. These students will be encouraged to submit their findings to undergraduate student paper competitions at national conferences (ie. Biomedical Engineering Society Meeting (BMES) or the Annual ASME Summer Bioengineering Meeting). In addition, these students will have an opportunity to understand the research process from an idea to publication.

Master's students
Master's students can complete research in the laboratory under the guidance of Dr. O'Connell (minimum 20 hours per week). Productive students will have the opportunity to submit their research projects to national conferences and MS/PhD students that

Purchasing Equipment and Supplies
Undergraduate students:
If you have a list of supplies for a project, it should be submitted through your graduate student mentor or directly to Dr. O'Connell.

Graduate students:
General lab supplies can be submitted for approval by Dr. O'Connell through BearBuy. Common use lab supplies can also be purchased through the Stanley Hall Stockroom.

Publication
A research university exists to train students and to discover and disseminate. Traditionally dissemination has taken the form of publication.

Conference publication serves to expose a particular research community to your ideas and results. A few hundred people will see your paper within the first few months of its appearance. Very few copies of the conference proceedings will exist after a decade has passed.

Journal publication (sometimes known as archival publication) serves to preserve your ideas and results indefinitely. Hundreds or thousands of libraries will keep copies of your paper for decades. Conference publications should work towards being full research papers that are submitted to peer-reviewed journals.

It's NOT ok to submit the same ideas to two conferences in the same field.

It's absolutely NOT ok to submit the same ideas to two journals, same field, and different field, whatever. Your ideas should be archived once only.

Author lists for publications
There are no simple guidelines for who should go on the author list, or in what order. If someone is involved in the creation of the ideas that are in the paper, then they should definitely be on the author list. If they helped out with some of the testing, or helped you debug a design, or edited a version or two of the paper, then they deserve a mention in the acknowledgements for sure, but not necessarily inclusion in the author list. In general, adding another person to the author list doesn't "cost" you anything in terms of credit, so it's ok to err on the side of inclusion.

Attending conferences
Publishing your work and attending national conferences are a great way to receive exposure of your work. It also provides an opportunity to discuss your research with other people in the field and to learn what new advances are being achieved at other universities. This can be a great opportunity for undergraduate and graduate students. The two main conferences that we submit are the Annual Orthopaedic Research Society Meeting and the Annual Summer Bioengineering Conference.

While conferences can provide a great opportunity to present your research, they do require a lot of preparation time and travel time. Therefore, you should plan on submitting to only one conference per year and prioritize publishing your work in archival journals.

Highest goal (for publishing)

Publish something that other people find so useful that they start doing it themselves.

Writing conference abstracts

Be absolutely brutally honest. Describe carefully what you have done, what you haven't done, and what you expect to do by the conference date.

Give clear reasons why your work is important
- best performance so far (cite specific examples)
- completely new capability
- completely new idea
