How to develop Broader Impacts components of grants in collaboration with the UCSC Science & Justice Research Center

This document describes some of the options and conditions for collaborating with the SJRC on the Broader Impacts component of National Science Foundation grants, or similar ethics and society programming components required by other funding agencies. Science & Justice aims to build collaborative and interdisciplinary research environments around common concerns about science and society. We support the development of research practices that are both empirically robust and responsive to the ethical and social components of knowledge production. Our vision of ethical research emphasizes open-ended responsiveness to the broader conditions and consequences of scientific knowledge rather than the punitive, closed, and institutionalized model of ethics that is most commonly supported in scientific and engineering contexts.

The Science & Justice Research Center is hosted by the UCSC Division of Social Sciences, and further supported by the School of Engineering, the Division of Physical and Biological Sciences, the Office of Research, and the Center for Biomolecular Science and Engineering. We also have active research and pedagogy projects in collaboration with departments from across all the university’s divisions.

We have space in Oakes (rooms 231, 233, and 235) that includes a common room for meetings and events, an admin office, and a visiting scholar’s office.

What is Science & Justice?

The following can be used in any grant text to describe S&J:

Science & Justice brings together scientists, engineers, humanists, social scientists, and artists to re-imagine what robust, curious and responsible forms of scientific and engineering knowledge could look like. As new forms of science and technology mediate more and more of contemporary life, this kind of collective effort is of growing importance. With the assistance of the U.S. National Science Foundation, the University of California, and other funding agencies, we offer a variety of internationally-recognized training programs, research projects, and academic events aimed at developing collective engagements with science and engineering.
Science & Justice has multiple infrastructures for supporting these activities. The Research Center is the hub of our community, providing support for grant writing, developing interdisciplinary collaborations, and working with science and engineering departments directly to improve ethics pedagogy. The Working Group hosts biweekly colloquia on science and society issues. The Training Program is a NSF sponsored intensive graduate training program.

What we do (and don’t do)

Science & Justice is not intended to provide in-house ethics guidance for scientists and engineers. We also do not offer ‘plug-and-play’ ethics education lectures. Rather, we have substantial (and unique) expertise in bringing together disciplinarily diverse audiences to discuss issues of common concern. Any proposal to include Science & Justice in a project should aim from the beginning to be collaborative, interdisciplinary, and site-specific. Importantly, such collaborations take at least a little time to develop, so it is necessary to contact the Director and begin planning well in advance of grant deadlines (we recommend at least 6 weeks).

Suggested formats for collaborations:

• *Create student directed programming.* Working with the PI’s grad students and postdocs, we can help develop programming that addresses or represents students’ ethical and social concerns in an open-ended manner. Public conversations between members of their field and experts in the ethics and sociology of science are a good format for this. The way we have done this in the past is solicit from students what topics they would like to discuss and then organized seminars or colloquiums with experts from their fields in conversation with experts from social sciences and ethics (see [http://scijust.ucsc.edu/ethics-in-practice/](http://scijust.ucsc.edu/ethics-in-practice/)). We try to avoid the model of inviting a scholar to give a disposition on a topic. Instead we aim to generate discussion that opens up the complexities of a problem.

• *Participation in our Graduate Training Program.* Our Training Program brings together graduate students from every campus Division in one classroom, and includes seminars about research methods, mentoring, and research support. Students develop research projects that broaden their empirical work to account for social and ethical conditions while still fitting coherently within their dissertation projects. Outputs can include published material, reworked dissertation chapters, and hosted events. How students come to identify and intervene in the ethical and social conditions and consequences of their research is often unanticipated and remarkable. We can work with PIs to build in a case study of how this process relates to their proposed research.

• *Symposia and Workshops.* We have hosted a number events that were planned in concert with science and engineering faculty. Typically these work best as workshops with significant discussion time and minimal formal academic
presentations. An emphasis on shared, on-going problems and case studies rather than finished research works well for generating interdisciplinary conversation. Once there is a consensus about what questions are mutually interesting, we can assist with identifying and inviting relevant experts.

- **Coordinating with community groups.** Science & Justice can assist with programs that create connections outside of the university community. We would be particularly interested in collaborations between scientists and engineers and communities who have stakes in knowledge production practices.

- **Diversity in science and engineering.** Science & Justice has a strong commitment to diversity in the sciences and engineering, particularly around race and gender. The intersections of race, gender, and knowledge practices are a central focus of Working Group programming. We have connections to a number of campus and off-campus organizations that can help facilitate diversity-related programs.

**Forms of support we need from grants**

Below are some funding options that can be included as line items in grants in order to support these activities.

- **Contribute to the Assistant Director’s salary.** The Assistant Director will have a lead role in conceptualizing and organizing whatever collaborative work is planned. Their salary is one of the Center’s primary expenses. Because they do not have other faculty commitments the Assistant Director is able to take lead coordinating these projects.

- **Fund events.** We can also collaborate through the Working Group on academic events, such as colloquia or half-day symposia that can be co-planned with science and engineering faculty and students around their ethical and social interests. The travel costs of guests, entertainment expenses, and advertising are all appropriate contributions.

- **Support Training Program courses.** The SJTP Training Program courses often need money for buying out teaching time in addition to collaborators or co-teachers from science and engineering faculty.