

## II. Science Studies Curriculum and Program Development

One of our primary aims in developing the Science Studies Network has been to explore the potential for developing a coordinated interdisciplinary science studies program at the University of Washington that could bring together the separate initiatives of those already teaching science studies at the undergraduate and graduate level. In our plans for the first year of the Network, we proposed to begin by undertaking a comprehensive audit of science studies offerings at UW, and by reviewing models of existing science studies programs at other institutions. This phase of background research was to culminate in a Town Hall meeting, early in the Winter quarter, in which we would present our findings and chart a course forward. The graduate assistant supported by our Simpson Center project grant, Brandon Olsen, was to play a central role in collecting this background information and orchestrating the planning process. In the event, the enormous response to SSNet colloquia, the immediate demand for a functional website, and the planning and logistical support required by our two co-sponsored conferences, has dominated our attention and that of our graduate assistant. We have not been able to develop as comprehensive catalogue of science studies courses as we had hoped; nonetheless, we have made significant progress on a number of fronts.

Early last Fall a number of SSNet participants urged us to set up an on-line list through which they could distribute information about their current and projected science studies course offerings. We have invited postings several times through the year and now host a growing list of science studies courses. In addition, we have been struck by how frequently curriculum issues came up in SSNet colloquia, even when it was not the focal topic of discussion; we learned a great deal, in the course of the year, about current and emerging programs in which SSNet participants are involved, and we compiled an ambitious list of proposals for courses and curriculum development. When we held a dedicated meeting on curriculum issues at the first of the Spring quarter (on April 7<sup>th</sup>), we were in a position to provide thumbnail sketches of four undergraduate programs either in place (the major History and Philosophy of Science, Arts and Sciences, UW-Seattle; and the Minor in Medical History and Ethics, School of Medicine, UW-Seattle), or under development (the BSc in Integrated Sciences, Arts and Sciences, UW-Seattle; and the Integrated Arts and Sciences program in Science Technology and Society, UW-Bothell); to report on meetings with graduate student participants in SSNet (who have formed their own working group) and affiliated with the Forum on Science, Ethics and Policy; and to outline half a dozen quite specific recommendations for curriculum development that had emerged in feedback from SSNet participants and in colloquium discussions (see Appendix II for the summary we circulated at this meeting as a basis for discussion). At this meeting there was a great deal of useful exchange about existing or emerging programs—their design, the constituencies they serve, faculty experience teaching in them—but little was added to the list of initiatives we outline and we quickly reached broad consensus on the central questions about goals and priorities that we posed.

The upshot is that, in this second year of the Science Studies Network our aims are: (1) to lay the foundation for developing an interdisciplinary graduate certificate in science studies and to seek NSF funding for a “small research and training grant” that could serve as a platform for developing a more ambitious IGERT grant proposal and consortium graduate program in the longer term; (2) to take on the role of developing a catalog of existing courses and a suite of new courses at the undergraduate level that can serve a navigational and integrative role for students interested in science studies, especially students coming to the field from the humanities and social sciences. The specific activities we propose are as follows.

### *Navigational Tools*

In the next year we would like to take up, in earnest, the project of developing a comprehensive catalog of existing curricular resources in science studies and guide to faculty involved in teaching or developing curriculum in science studies at the University of Washington. Although we have a good foundation for this, in the form of the SSNet participants' on-line listing of current offerings in the area, we have learned that relevant courses are to be found across the whole of the university making this a more demanding project than we originally anticipated. Such a catalog will serve a number of purposes. It will bring together the separate initiatives of FoSEP at the graduate level and of the four separate undergraduate programs now in place or in prospect, providing students already at the university a ready

means of finding and building portfolios of STS courses. As participants in the Town Hall meeting pointed, such a catalog would also serve as a recruiting tool for graduate students considering programs in the various fields in which science studies is taught at UW; it would showcase the strength of STS offerings across departments at UW. And it will be a crucial basis for identifying specific niches in which SSNet participants might most usefully develop new course offerings. Funding for a GRA position that will allow our current graduate assistant to build on the foundation he has laid will be absolutely critical to success in this project.

#### *Undergraduate Initiatives*

Given what we have learned about existing programs and courses, the area in which we believe SSNet can make its greatest contribution at the undergraduate level is in the development of interdisciplinary courses that introduce humanities and social science-centered approaches to STS; our goal would be to develop courses that complement the more science-centered offerings of existing programs and that serve as a point of entry to STS for humanities and social science students. For example, the existing Major in History and Philosophy of Science requires a significant number of science credits, on the principle that science cannot be studied adequately without a substantial grounding in scientific knowledge and practice. Students who wish to pursue the study of science as a major component of their studies are well served by this program, and will no doubt find attractive the proposed BSc in Integrated Sciences, but there remain many science students who seek one or two courses to give them a humanities perspective on science, and humanities students who seek a basic understanding of contemporary scientific issues through an STS course. Continued funding for the existing GRA position will enable us to set up and provide support for a task force charged with developing plans for two to three interdisciplinary undergraduate courses designed to meet these needs.

#### *Graduate Program Initiatives*

There was strong consensus that the area in which SSNet stands to make its most distinctive contribution to science studies at UW is in the development of a strong interdisciplinary graduate program in science studies. We have begun to assemble information about models for such a program through meetings with visiting speakers who direct well established programs at other institutions (Epstein on the Science Studies Program at UC-San Diego; Cartwright on History and Philosophy of Science at LSE), and discussions among ourselves (collectively SSNet participants have direct experience as students or faculty in virtually all the major graduate programs in science studies). While we still have much to learn, it is increasingly apparent that, as a long-term goal, an ideal model for science studies at UW is most likely the consortium model best exemplified by the program at UC-San Diego. On this model students apply for graduate study through participating departments; the program offers them partial funding and they pursue a course of study that includes a core of required Science Studies seminars as well as the courses from their home department and Science Studies-related courses from across the campus.

As a point of departure for developing such a program at UW, we propose to lay the foundations for a graduate certificate in Science Studies. To this end we have three projects in view for the coming year that are designed, first, to support the development of interdisciplinary courses at the graduate level that could serve as core seminars in a prospective Science Studies certificate and, second, to explore the potential for establishing the necessary infrastructure to sustain a graduate program.

##### *1. Pilot Graduate Core Courses: Micro-Seminars on "Democratizing Science"*

We would like to give graduate students interested in the various topics central to the SSNet seminar on "Democratizing Science" the option of registering for a 2-credit (C/NC) "micro-seminar" in each of the quarters in which we plan to run the three segments of this seminar next year. These would be taught by the faculty involved in organizing the seminar. In addition to attending the bi-weekly SSNet seminar meetings, students registered in these micro-seminars will participate in two additional graduate seminar meetings each quarter and will be expected to develop a series of short discussion papers. Depending on the response to these micro-seminars, they could (collectively, or individually) serve as the basis for developing one component of the core curriculum of an interdisciplinary graduate certificate.

## *2. Graduate Colloquium and Working Group*

In the course of this last quarter Simon Werrett has organized an ongoing series of meetings with graduate students from several disciplines (Anthropology, Communication, English, Education, History, and Philosophy), initially as a forum for discussing how an STS program might benefit graduate studies. We envisage developing these meetings into a regular forum for graduate students to discuss seminal readings in science studies, to present their work, to learn new research methods, and to build a community of interest. In the context of an interdisciplinary graduate program these meetings would constitute the central point of connection among graduate STS students based in different cognate departments. In the next year we will look to these informal meetings as a source of advice from current graduate students about the areas in which we might most usefully develop seminars that will complement their disciplinary programs of study.

## *3. Pacific Northwest Summer Institute for Graduate Studies in STS*

In our initial, 2007-2008 proposal we outlined plans for a retreat to be convened in the early Fall 2008. This was to be a meeting of the projected curriculum planning group the purpose of which was to take stock of what we had learned in our first year about the prospects for developing a coordinated Science Studies curriculum at UW and to chart a course forward. Although we have done less than we had hoped by way of compiling background information, we have achieved much more where establishing a clear agenda for curriculum development is concerned. Consequently, rather than a Fall retreat to review the situation, we propose to convene a Pacific Northwest Summer Institute for Graduate Studies in STS which we hope will become an annual tradition.

We envision a five day workshop in July 2009 designed to bring together four or five faculty and 10 to 12 graduate students with interests in science studies, drawn from graduate programs at universities in the Pacific Northwest. SSNet faculty in a number of areas of science studies have strong ties to colleagues in the region, especially those teaching in graduate programs at the University of British Columbia and Simon Fraser University: the philosophers of science regularly organize a one day conference together; the historians support a long-standing tradition of regional meetings at Friday Harbor; and active cross-collaborations have developed among faculty who study the social impact of new medical and genetic technologies. There has long been an interest among the historians and philosophers of science in finding a way to bring our collective resources together for both research and teaching purposes. A summer institute in 2009 would provide graduate students and faculty alike an opportunity to learn about one another's interests, to make connections across institutions, and to articulate plans for a graduate program at the University of Washington that might ultimately be one component in a regional consortium.

For this first Summer Institute we will advertise regionally to faculty and graduate students working in any area of science studies, with the aim of recruiting participants who represent a cross-section of SSNet interests. In future years we may want to specify a topic area and rotate topics year by year, but our aim this year is to create an environment in which, as in the first year of the SSNet colloquia, we can explore the range of interests on which such an Institute can draw in the future, and foster cross-fertilization between disciplinary subfields. The format will be workshop sessions organized around precirculated work-in-progress manuscripts and complementary readings, with substantial unstructured time for informal discussion. We expect to devote at least one session to focused discussion of the existing regional resources for graduate training in science studies, and of strategies for building an effective collaborative network among science studies scholars in the Pacific northwest.