

To Info Center

## RESEARCH AND GRANTS

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### Description

Even though the college and its facilities are so new, and our major commitment has been strongly directed toward innovative educational programs for undergraduate students, we have made beginnings in research and grant applications which indicate the direction of our thinking. Congruent with our curricular goals for placing students in touch with real-world problems and projects as undergraduates, most of our research efforts and requests for grant support are directed toward providing opportunities for students to work side by side with faculty on a particular study. In most cases, these have grown out of curricular programs or have led to the development of a curricular program closely related to the research work. Several examples will be given below. This practice represents our general faculty consensus on the proper role of research at Evergreen at this time. No official policy statements have been developed as yet, although there is strong concern that the College not become dependent upon grant money for conducting any of its normal functions.

Procedurally, all grant applications (including research) must pass across the Grants Desk, handled at this time by one of the academic deans. Budget assistance is provided by the Grants and Contracts Officer from the college business office. The new College Development Officer will soon be able to provide funding source and grant deadline information on a more reliable basis than has been possible in the past. An in-house budget and college facilities Check List has been developed to insure that all parties involved with potential supporting services for any grant are informed of the proposal and its possible impact (copy will be available for review).

Examples of grants and research projects funded and undertaken to date include:

- a.) Hood Canal Research Project (N.S.F. funded at a level of \$4,684). To provide travel, materials, and minor equipment support for an ecological study on the Hood Canal of interest to the U.S. Bureau of Sports Fisheries & Wildlife and the State of Washington Department of Fisheries. A major component of the Political Ecology Curricular Program for academic year 1971-72.
- b.) Cooper Point Citizen's Planning Commission (Office of Community of Development funded at a level of \$1,400). To provide basic support for social science research in community planning and land management in the immediate vicinity of the college. This led to development of a citizen's committee known as the Cooper

Point Association which continued the work (with continuing college support and input) through development and adoption by the County Commissioners of a new zoning plan and related ordinances for the region of Cooper Point, including the neighborhood of the college. One of the study projects developed by the Environmental Design Curricular Program for academic year 1971-72. Two study grants were also awarded to this same curricular program (one by a local community and one by the county) for an ecological study and development of plans for the design of two parks.

- c.) North Bonneville Relocation Study (Office of Community Development funded at a level of \$16,377). To provide travel and basic support for social science and ecological research in the Washington community of North Bonneville which is facing relocation due to planned construction of a new hydroelectric facility on the Columbia River. This was a major study and research project for a faculty member and group of students in the Urban Planning Group Contract during academic year 1972-73.
- d.) D.N.A. Regulation during T4 Infection of E. Coli (N.I.H. funded at a level of \$66,316 over three years, not including indirect costs). Awarded to Dr. Elizabeth Kutter (Member of the Faculty, Biophysics) for materials, equipment and support of lab assistants engaged in basic research. An advanced Group Contract in Molecular Biology was developed for academic year 1973-74 to operate alongside this research project and use both facilities and results of the project in extending laboratory opportunities and providing relevance to the study. In succeeding years, it is anticipated that students coming out of this Group Contract may wish to pursue further work related to this research on an Individual Contract basis.
- e.) The Ecology and Chemistry of Pollution. (largely college funded to date, although several grant applications are pending). An eight-quarter Coordinated Study Program for advanced students in the Environmental Sciences. Applied research using very sophisticated analytical equipment in the study of air pollution and water pollution by D.D.T., heavy metals, hydrocarbons, etc.
- f.) Student Initiated Studies (N.S.F. supported project research). Each year students are encouraged to make application for summer research support under this program. Last year, with incomplete laboratory facilities, we were unsuccessful in receiving funding. This year, we have four proposals in process:

- (1) a study of the effects of acid rainfall on plant growth (\$9,700).
- (2) a follow-up study on the Hood Canal (\$15,500).
- (3) an assessment study on conifer forest damage by the Tussock Moth (\$12,480).
- (4) a study of fluoride concentrations in an ecosystem bordering an active aluminum plant (\$9,790).

g.) A number of additional proposals of a similar nature have been submitted, some still pending, some awarded and others not; however, this should give an adequate view of the type of research and project work undertaken to date and the style by which these are associated with the undergraduate curriculum. In addition, a number of more conventionally pedagogically oriented grant proposals have been submitted to various granting agencies and several of these have been awarded or are still pending.

We do not have specialized facilities per se for research activities. However, the decision was made early by the faculty to use a considerable amount of the laboratory capital equipment budget for research-quality equipment in the sciences, as a means of insuring our capability to continue project-oriented research for and with undergraduate students. Thus, we have essentially "state of the art" equipment such as: a scanning electron microscope; a Fourier-transform Infra-red Spectrophotometer; high quality NMR and EPR equipment; low background, liquid scintillation equipment; etc. (see section on equipment for more details.)

The college encourages research in two ways at this time: through the flexibility and adaptability of its curriculum in accommodating Group Contracts or project work within Coordinated Studies which have research as their basis; through a Seed Grant Program which provides support costs and up to one month of summer salary for several faculty and staff members each year to develop grant proposals for submission to funding agencies to support either research or curricular development projects.

Funding levels for the type of activities described above, by academic years, is as follows:

	<u>1971-72</u>	<u>1972-73</u>	<u>1973-74</u>
Awards granted	\$9,053	\$24,048	\$34,642
Grants pending	---	---	80,800
Grants not awarded	---	88,030	---

#### Analysis

In the mode in which research activity has been introduced at Evergreen, it seems to play a strong positive role for faculty and undergraduate

students alike. It provides a means for making the curriculum relevant and in touch with the real world of the social and natural sciences (and may later play similar roles in the arts and humanities.) No release time is granted for research activities outside the teaching function, and this does pose some difficulty for a number of the faculty. However, the price of release time for some is increased class size for others, and we have generally considered this too high a price at this stage of our developmental history. We have no experience to date with sabbatical leaves, although the first will become available during the 1974-75 academic year and we will be particularly eager to support faculty who are interested in pursuing both basic and pedagogical research activities. The general tone of both our faculty and our students favors research activities in the social and the ecological sciences at this time, although we expect to broaden our base in research activities as time progresses.