

**ENHANCING UNDERGRADUATE PARTICIPATION IN  
OCEANOGRAPHIC RESEARCH WITH A FOCUS ON HISTORICALLY  
BLACK COLLEGES AND UNIVERSITIES/MINORITY INSTITUTIONS**

Dr. John W. Farrington  
Woods Hole Oceanographic Institution  
MS #31

Woods Hole, MA 02543

phone: (508) 289-2200, fax: (508) 457-2188, e-mail: jfarrington@whoi.edu

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**LONG-TERM GOAL**

To significantly enhance participation of underrepresented groups in careers in ocean sciences and ocean engineering.

**SCIENTIFIC OBJECTIVES**

To provide more opportunities for participation of underrepresented undergraduate students in ocean sciences and ocean engineering research experiences at Woods Hole Oceanographic Institution. With a focus on recruitment of undergraduates from Historically Black Colleges and Universities and Minority Institutions (HBCU/MI).

**APPROACH**

The proposed method will enhance the participation of undergraduate students in both Woods Hole Oceanographic Institution Summer Student Fellowship Program and the Minority Traineeship Program. These are established programs with a record of accomplishment of involving undergraduate science and engineering majors in research in ocean sciences and ocean engineering.

We will initiate the process of establishing joint research projects between faculty and students in Historically Black Colleges and Universities and Minority Institutions, and Scientific Staff and Senior Technical Staff at Woods Hole Oceanographic Institution. The initial phase will involve visits by a few WHOI Scientific Staff to HBCU/MIs selected in concert with the ONR Program Manager.

**WORK COMPLETED**

Please see tables in "results" section outlining 1997 recruitment efforts. Four trainees were selected and information concerning their school affiliation and projects are listed under results. Plans are being made for faculty visits to selected universities and colleges in conjunction with the current application period.

**RESULTS**

Participation in the Woods Hole Oceanographic Institute has been enhanced by the following additional minority trainees:

1. *ONR Supported Minority Trainees, 1997:*

- a) Sharat Gadde: Yale University, Biology Major, Junior, Advisor: Dr. Donald M. Anderson, WHOI Biology Department, Project: Development of an ELISA assay to quantify brown tide *Aureococcus anophagefferens* cells in field samples.

# Report Documentation Page

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Minority	5%	14%	12%	10%	17%		0%	19%	8%	18%	4%
International	17%	15%	14%	12%	6%		32%**	8%	14%	7%	17%

\* We note that we have experienced increased competition with other REU and Minority in Marine Sciences programs for an overlapping pool of applicants. A small, but increasing number of our offers are not accepted because the applicant has already been recruited elsewhere prior to our offer.

\*\* Anomalous year - atypical of the past ten years.

### IMPACT/APPLICATION

Increasing the opportunities for participation of undergraduates in the nation's ocean sciences and ocean engineering research efforts significantly strengthens the overall research effort and is a wise investment for the future.

### TRANSITIONS

Through national meetings, workshops and personal contacts we share our experiences with faculty and administrators of other academic institutions with "Research Experience for Undergraduate" type programs and graduate programs in ocean sciences and ocean engineering. We introduce students to career opportunities at our own institution, other institutions, government agencies and industry.

### REFERENCES

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### WEB SITE:

Woods Hole Oceanographic Institution that describes the institution educational/internship opportunities: <http://www.whoi.edu>.