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Research in an Undergraduate Physics Department¹

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In the 1970's, a decision was made at Tennessee Technological University to emphasize nuclear physics as a research specialty in the department. Shortly thereafter, two of the department's faculty began to include undergraduates in their experimental work, and such inclusion became a point of emphasis in the department. By the early 1990's the department had nine faculty members, each with a background in nuclear physics. Six faculty had external funding from DOE, and including undergraduates in the research process was an important component in most of those grants. Today four of seven faculty are active in nuclear physics, and most of our majors (admittedly a small number) will have a summer research experience either through one of our own programs or through an REU program elsewhere before they graduate. I will discuss both positive and negative aspects of this choice to concentrate on a single subfield and offer my views on what it has meant for research in our department, for our students during their undergraduate years, and for future manpower in the field of nuclear physics.

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