

Executive Summary:

The Nuclear Science and Engineering Institute (NSEI) at the University of Missouri-Columbia is requesting five fellowships to educate and train graduate students in the area of advanced modeling and simulation in Nuclear Engineering and Health Physics. An additional sixth fellowship and tuition waivers for all fellows will be provided by NSEI and the University as matching funds, enabling a substantially greater impact of the grant funds. The Nuclear Engineering Program (at NSEI) has been offering MS and PhD degrees in Nuclear Engineering, Health Physics, and Medical Physics since the 1960's. Currently, the Nuclear Engineering Program has about 56 graduate students and it has had extraordinary growth in extramural funding during the last six years. It can easily accommodate six new graduate students in the proposed area, who will be selected such that they certainly meet and possibly exceed NRC criteria of eligibility. The fellows will have the opportunity to work with faculty who have been rated number 1 in the nation based on their scholarly productivity, and they will also have access at the highest powered university research reactor in the nation for their research. The progress of the fellows will be closely monitored, and the program will be evaluated continually to ensure the success of the fellows towards their graduate degrees, and eventual participation in the nuclear community.

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