

One post-doctoral scientist will be supported in this program. His or her role will be to conduct research in.... . This will provide an opportunity for training in both the experimental and computational aspects of the program. Along with research responsibilities, an array of mentoring activities will be established for the post-doctoral scientists, that will assist them in becoming familiar with the professional skills needed for careers in academia and research. These include participation in the grant writing workshop program at Iowa State University which will teach them the intricacies of writing proposals to a variety of funding agencies. She/he will also be playing a major role in interfacing with national laboratories, companies, ...etc, as well as presenting talks at scientific meetings. The post doctoral scientist will also be involved in assisting Prof xxxx in courses on, where graduate students are given formal training for teaching materials science. Hence the post doctoral experience will truly be a traineeship in all facets of professional life for scientists: grant writing, pedagogy, scientific communication skills, interdisciplinary research and in the context of this proposal, a strong familiarity with national laboratories and different facets of ...bio/wind/solar research etc

Apart from their research and teaching responsibilities, we will have an array of mentoring activities to assist them in becoming familiar with the professional skills needed for careers in academia and research. The university offers several faculty development programs and post-doctoral scientists are encouraged to attend them. These programs include a series of workshops which teach participants about the intricacies of writing proposals to a variety of funding agencies. These workshops cover topics such as, "Getting to know the Funding Agencies", "Write Winning Grants", and "Responding to Reviews of Unfunded Proposals". This year the university will also hire consultants from Grant Writers' Seminars and Workshops to provide a half-day program for post-doctoral scientists entitled, "Essential Survival Skills for Scientists in Training". Details on other programs for post-doctoral scientists can be found at the following website: <http://www.grad-college.iastate.edu/postdoc/>.

Hence the post doctoral experience will truly be a traineeship in all facets of professional life for scientists: grant writing, pedagogy, scientific communication skills, interdisciplinary research and in the context of this proposal, a strong familiarity with inter-institutional collaborations (e.g. industry, national laboratories and academia) and different facets of instrument design research beyond the energy research issues.