

RESEARCH INFRASTRUCTURE IMPROVEMENT (RII 4) PROPOSAL DEVELOPMENT PROCESS

EDUCATION & OUTREACH WHITE PAPER

FOR DISCUSSION December 15, 2011

TITLE: PROPOSED GRADUATE STUDENT EXTERNSHIP EXCHANGE AMONG NEW MEXICO'S RESEARCH UNIVERSITIES

<u>Lead Author:</u> Rebecca Bixby (UNM), Wiebke Boeing (NMSU), David Hansen (UNM)

CONTRIBUTING AUTHORS: N/A

Proposed graduate student externship exchange among New Mexico's research universities

Rebecca Bixby¹ Wiebke Boeing², and David Hanson¹

Graduate Student Externship

We are proposing the inclusion of a multi-university supported graduate student externship to the EPSCoR RII4 proposal. This externship would be designed to enhance the graduate experience for students and encourage collaboration among the graduate-degree-granting institutions in New Mexico. This externship would be a paid research assistantship that would allow a student to spend a semester (or summer) at a collaborating New Mexican university. Activities during this exchange would include taking courses at the host institution and doing research at the host institution and interacting in the host institution's lab setting. Ideally this externship would be done during semester when classes are available but could be completed during summer if necessary.

Costs in this externship include student housing, travel costs, tuition, a graduate assistantship stipend, and a small research budget. Credit transfer for coursework will need to be verified in advance. While this externship may be targeted towards graduate student research, it is possible for undergraduates to take advantage of the opportunity. For example, this externship could be a second step after a summer REU program and could target minority undergraduates.

The exchange of students among different universities will foster overall collaboration with lab research as well. The involvement of host lab faculty as committee members on the exchange student's committee is encouraged.

Relevance to Energy-Water-Environment Nexus:

Much of the next EPSCoR proposal has included the development of complementary aspects of an overall research project by different universities. For example, in the algal biofuels subsection of the proposal, UNM has proposed to build closed, small-scale mesocosms to manipulate algal populations and communities under controlled conditions whereas NMSU has excelled at larger open systems ranging from aquaria to large scale photobioreactors and raceways. This proposed exchange of students and sharing of facilities would allow students to test hypotheses at different scales ranging from controlled lab conditions to open, outdoor facilities. This student support and exchange would also be appropriate with additional complementary facility development in other aspects of the EPSCoR proposal.

Target audience: Undergrad/grad (most likely graduate)

¹Department of Biology, University of New Mexico, Albuquerque, NM 87131

²Department of Fish, Wildlife, and Conservation Ecology, New Mexico State University, Las Cruces, NM 88003