Idaho IGEM Program
Progress Report Form

Proposal No.	IGEM13-003
Name:	Dr. Jim Alves-Foss
Name of Institution:	University of Idaho
Project Title:	IGEM Proposal: Multidisciplinary Cyber-Security Faculty Cluster Hire
Reporting Period:	August 2012 - December 2012

Information to be reported in your progress report is as follows (attach additional information as needed):

1. Summary of project accomplishments for the period just completed and plans for the coming reporting period:

Summary

The focus of this project is on the hiring of several faculty in a multidisciplinary cyber-security cluster, with the intent of expanding current faculty with a cadre of new faculty. This group will then pursue new external funding opportunities for on-campus research and also pursue collaboration with Idaho and regional industry.

To date the primary focus of the project has been on the searches for the new faculty and staff hires. The progress of these searches is as follows:

- Research Scientist staff member: This was the first search we conducted, with the search closing in September 2012. Unfortunately this search was classified as a failed search due to insufficient qualified applicants. Part of the difficulty is matching the position description, job duties to reasonable salaries. This position we reclassified as a research faculty member position, which increases the search possibilities. That search will close January 8th, 2013.
- Computer Science Associate Professor. Search closed in October 2012, but with insufficient qualified applicants. Job description was revised to allow for assistant professor applicants. This search closes January 22nd, 2013 We currently have a good pool of applicants.
- New Faculty member in Sociology: This search closed successfully in October 2012. We have made an offer to our top candidate and are waiting on a response.
- Civil Engineering and Electrical and Computer Engineering faculty positions. The searches are on-going and close in February 2013.
- Computer Science joint hire position. We have been discussing the joint hire with potential collaborators who delayed any final decisions until after congressional fiscal cliff negotiations were completed.
- Visiting scholar. We had a unique opportunity to bring aboard a visiting professor from China. Most of her pay will come from the Chinese government, we will provide $9000 in 2013 toward her salary. Her expertise in secure operating systems will be a large

benefit to this project. We anticipate working on establishing a long-term relationship with her home university.

In addition to the searches, we have been preparing for collaborative external funding for projects involving the new cyber-security cluster. Dr. Alves-Foss has travelling to Idaho Falls, Post Falls and Coeur d'Alene to give presentations to government and industry representatives and to begin the discussions for collaboration. He has also visited with representatives from INL and PNNL on the Moscow campus. He will be in Boise at the end of January for presentations and discussions there.

In addition Dr. Alves-Foss has had meetings with NSF and DARPA with specific discussions related to multidisciplinary cyber-security research and for critical infrastructure research. These discussions are leading to several proposals being submitted this Spring to expand our research in this critical areas. The program managers at NSF and DARPA are very interested in the UI's approach to the faculty cluster hire and the research directions we are proposing.

Plans for Coming Period

During the coming period we plan the following:

- Complete the hiring process for one non-tenure track faculty and four tenure-track faculty positions.
- Submit multiple proposals for external funding to support research of the current group as well as the new faculty.
- Partner with the visiting professor to set ground work for long-term relationship.
- Travel across the state to present the concepts of this IGEM project and to dialogue with potential industry partners. Will travel to Boise in January and expect another trip to Idaho Falls later in the Spring.
- Continue dialogs with potential partners for last joint-hire position as well as other joint opportunities.

2. Summary of budget expenditures for the period just completed (include project burn rate):

The following expenditures represent the current salary expenses for Dr. Alves-Foss and his travel related to IGEM and hiring expenses to date. Some additional expenditures have not yet posted. We will be expensing a lot more on the searches, moving, start-up and operating this coming semester.

Category	Expenditure	Budgeted for FY 2013	Burn Rate (% annual budget)
Dr. Alves-Foss Salary	$ 6,791	$ 17,300	40%
Group Travel Expenses	$ 2,504	$ 25,000	10%
Search Expenses	$ 4,400	$ 40,000	11%
Moving Costs	$ 0	$ 36,500	0%
Operating Expenses	$ 0	$ 20,000	0%
Faculty/Staff Salaries	$ 0	$ 251,400	0%
Startup	$ 0	$ 200,000	0%
Equipment	$ 0	$ 50,000	0%
Total	$ 15,704	$ 640,200	2.45%

We project that expenditures in all categories will dramatically increase this next budget period as we complete the hiring process.

3. Numbers of faculty and student participation resulting from the funding, including internships:

Current funded participation involves funding for Dr. Alves-Foss who is coordinating the searches and meeting with potential sponsors. Other faculty participation in the searches or with sponsor meetings have been funded directly through university funds.

4. List patents, copyrights, plant variety protection certificates received or pending:

   None at this time.

5. List technology licenses signed and start-up businesses created:

   None at this time.

6. Status of private/industry partnerships (include enough information to judge level of engagement):

   Dr. Alves-Foss travelled to Idaho Fall to discuss potential collaboration with INL involving one of the joint hire position. He has met with INL and PNNL visitors on the Moscow

campus. He has also travelled to Coeur d'Alene and Post Falls to discuss the IGEM initiative and to meet with potential collaborators. We have also had email and phone conversations with other potential partners. We are currently in early discussions with most potential collaborators, most are waiting to see who we hire.

We are active in discussion with several companies regarding support for the ECE power position. We are discussing the details of the types of funding they are willing to provide.

7. Any other pertinent information that will indicate to the council that the project is meeting satisfactory progress.

We were a bit optimistic in the hiring timetable by hoping that the funds would be made available by July 1 and that all searches would move smoothly. We are on track now for hiring a good cadre of faculty.

Potential funding agencies, especially the NSF Secure and Trustworthy CyberSpace program, are very interested in multidisciplinary cyber security research. Just this week they released an opportunity for funding joint research between computer scientists and social scientists to better improve security of the nations computing systems. This is very timely for this project.