

Idaho Incubation Fund Program

Quarterly Progress Report Form

Proposal No. HERC IF11-004
Name: Dr. Greg Hampikian
Name of Institution: Boise State University
Project Title: Biological Testing with MSM Micropumps
1/1/12 – 2/15/12

Information to be reported in your progress report is as follows:

1. Provide a summary of project goals/milestones for the period just completed, accomplishments for the period just completed, and plans and goals for the coming quarter:

Results: We constructed a new prototype pump with flexible materials that are biomimetic. This pump is currently being tested for efficiency and biocompatibility. We evaluated the elements obtained from Peter Mullner's lab at BSU and found they have a limited temperature range, when compared to the elements from Goodfellows, which have a broader temperature range. We are negotiating a bulk purchase from Goodfellows for their elements. A new Biological testing researcher, Mike Davis, has been hired to replace Laura Wendell who is on maternity leave. He is currently being trained in the MSM procedures.

Goals for next quarter: Continue to develop corporate ties with potential investors, build new pump based biomimetics, and continue biocompatibility testing. Discuss with BSU potential collaboration with academic and corporate partners in Finland.

2. Provide a summary of budget expenditures for the period just completed: Student Salaries \$930.00, Fringe Benefits \$3.96, and Operating Expenses \$6,208.09. Operating expenses include the purchase of MSM elements, laboratory supplies, pump materials, electron microscopy materials and microscope time.
3. List patents, copyrights, plant variety protection certificates received or pending:
2 Patent Applications Filed:
A. Micropump and PCR Enhancement Method— patent application filed on Nov. 16, 2011;
B. An Apparatus for Multi-Axial Actuation— patent application filed on July 14, 2011.
4. List invention disclosures, patent, copyright and PVP applications filed, technology licenses/options signed, start-up businesses created, and industry involvement:
We have submitted an article on the pump to "Lab on a Chip," a prestigious journal in the field and are awaiting reviewers comments. An abstract is being prepared for the undergraduate research conference at Boise State University by Aaron Smith. We have been approached by a manufacturer of elements which desires to use our pump in their brochures, and have brought this to the attention of university officials in the tech transfer and licensing offices.
5. Include funding burn rate: **97%**
6. Any other pertinent information: