

From: Dr. Victor Pinks II [vicp@tbc.net]
Sent: Thursday, September 25, 2003 11:50 PM
To: Holland, Michael J.
Subject: NSTC Research Business Models Comments - follow-up
Mike,

Thanks for the feedback and the guidance to the U.S. Department of Homeland Security. I am glad there is a science and technology contact there. Before I follow that lead, I would like to make an addendum to my previous e-mail to your offices. A recent development with my SBIR experience might be very telling and may expose a fundamental flaw in the existing National Innovation System. In the paragraphs to follow are excerpts from an e-mail that I sent two days ago to my congressional representative. I am glad to send these thoughts to you.

The fundamental problem that I believe that I have identified is systemic and cannot be addressed through any single federal granting agency. I am relieved to be able to ventilate my concerns with you in as an OSTP representative rather than some specific granting agency so that, if there is a general benefit, it will be disseminated properly.

----- excerpts follow

I am familiar with the status of the federal funding system for science R&D as I have made it my business since 1996 in establishing and seeking to fund my own research start up. I don't have a funding problem either. I have venture capital offers in excess of \$3M that I have actually turned down for various reasons. The concern I express here has to do with process and procedure that seems to be at the core of a national problem with the innovation funding process .

In the next few paragraphs I outline the systemic problem that I recently experienced and that I believe (based upon a few years working with this system) is a fundamental flaw.

I am currently working with Battelle through NASA-Illinois (www.nasa-illinois.org) and TRECC (www.trecc.org) to secure an SBIR grant. The Battelle employees that are assisting me also echo (emphatically) that there are systemic problems. It is important to note that I have some very significant research being proposed, yet no one currently in the early stages of the application process is sufficiently knowledgeable to know what to do with it. I believe that it would be wrong to commercialize it first only to tie it up as a trade secret whose benefits might not become readily available to society.

Here is the problem... As I go through the application process, I am assured by these organizations (NASA-Illinois and TRECC) that their job is to find SBIR funding for NASA and the Office of Naval Research respectively. That's fine and tax dollars handle the preliminary paperwork. I have spent a lot of time discussing my research with the Battelle employees and educating them is not a problem...but the next point is...

I was encouraged to contact potential collaborators and interested researchers which seemed fine at first but additional requests were made for me to examine federal listings of SBIR grants that might be appropriate. This, to me, was their job and the purpose of their mandate to assist as agencies for the federal government. I expected them to go to some federal clearinghouse computer to find relevant contacts. Regardless, I made attempts to contact various federal lab researchers with common research interests since I do not expect them to have expertise in my area. I have citations of these scientist contacts that show the relevance of their interests and our proposal. After hearing no response, not even an acknowledgement, I brought this silence up with the Battelle employees for NASA-Illinois and TRECC.

My primary contact at Battelle responded to this saying, "I'm not surprised you didn't receive a reply, as they don't normal(ly) respond to direct inquiries unless you are addressing something they requested (i.e., and SBIR/BAA solicitation, etc.) - if you have a specific project identified, they will normally have a contact phone number listed - unless the cut-off period for communications has passed."

I hope you can see that this is a circular dilemma. Stated another way; I am seeking federal help in the

SBIR process to find federal money only to be asked to assist in identifying potential collaborators. However, potential collaborators will not communicate with me because it is not protocol to do so because they respond only to research that they have requested (or solicited). The Battelle employees cannot help me identify collaborators (due to lack of expertise) and I am unable to approach relevant federal scientists for collaboration because they have not requested my research.

Here is the fundamental flaw - Federal collaborators cannot, by definition, request innovative research because they are apparently required to request the research in order for the system to work. The idea that federal monies support innovation is a ruse since such research has to be solicited. What if an independent scientist were to develop a method or technology that was innovative (not preconceived by a federal research scientist)? It basically sits undeveloped or becomes easily lost to foreign funding because the federal research scientist did not think of it first. It's nonsense but there is a lot of that happening.

Again, I have kept informed of this problem for the past few years. I know it is bold for me to assert that the current loose knit system of federal funding agencies is a federal equivalent of a special interest protectorate, however, calls for system overhaul are not new and are growing more frantic. I have more detail to substantiate my claims that I would be happy to share with you. I am not implying cause and effect - only analogy.

In an editorial in "Science" (Vol. 285, No. 27, August 1999, p 1353), Philip H. Abelson asserts that "the innovation index provides evidence that the United States may be living off assets that have not been adequately renewed. Further evidence that the individual innovator must become empowered by the federal government.

I know that I could get foreign funding but I refuse to. I am a patriot first, and I think that our government fosters the growth of new ideas better than any other in the world. There is, however, a problem bringing good research to its fruition. One of the major problems is the technical illiteracy of decision makers in the funding process. Another is the way that special interests disrupt the innovation process to the point of causing a national security problem. Foreign governments are looking for ways to attract scientists and innovators constantly (<http://www.biomedcentral.com/news/20030923/04>).

I believe that the innovation process needs to be federalized for national security and paid for with the existing R&D budgets of the recipient agencies (the monies are federally mandated to be available already in their budgets). I would refer you to a paper titled "Pathways to Innovation" by Terry M. Levinson and Thomas C. Snyder (Argonne National Laboratory) as a plan that seems to offer promise. I can provide this to you electronically also if you wish.

The solution to these problems may be difficult but necessary medicine for the United States to regain the enormous innovative power that I believe is inherent in our system of government. In fact, our very freedom of speech and expression may eventually become our saving grace to this problem. This letter is a case in point.

Thank you for taking the time to hear me out. Please let me know if I can help further by providing any supplemental citations or feedback.

Respectfully,

Vic Pinks

----- excerpts end

Before I communicate to the U.S. Department of Homeland Security, I am interested in your thoughts or feedback regarding the above 'circular dilemma'. It is certainly not the end all opinion, however it comes from the perspective of a small start-up business. I am hoping that my point of view is helpful in some way.

Thank you for your time.

Vic

Victor Pinks II, Ph.D vpinks@ildsimulation.com
Robert S. Wilson, Ph.D. rwilson@ildsimulation.com
The Institute of Liquid Dynamics Simulation
2610 Laurel Lane
Sycamore, Illinois 60178

Cell Phone: 815-739-6785
Evening Phone: 815-895-6413

Web site: www.ildsimulation.com
MUNCC Supercomputer project web site: <http://muncc.marmionacademy.org>

-----Original Message-----

From: Holland, Michael J. [mailto:Michael_J._Holland@ostp.eop.gov]
Sent: Thursday, September 25, 2003 2:15 PM
To: vicp@tbc.net
Subject: Inquiry regarding

Vic:

Thank you for your recent submission of comments to the Research Business Models Subcommittee. We appreciate your input.

Attached to your comments, you inquired (below) about a "fast track" for evaluating technologies and applications with Homeland Security relevance. My area of expertise is the NSF, DOE Office of Science and NASA Space Science portfolios. However, I talked to one of my colleagues here at OSTP who works on Homeland issues. He suggested there is an appropriate point of contact for your inquiry in the U.S. Department of Homeland Security. Please submit your information to:

science.technology@dhs.gov

This group examines each idea submitted. Individuals with interesting ideas are asked to come in for additional discussion. I hope this helps.

Mike

Michael J. Holland, Ph.D.
Senior Policy Analyst
Office of Science & Technology Policy
1650 Pennsylvania Ave, NW
Washington, DC 20502
202.456.6069, 202.456.6027 (fax)
mholland@ostp.eop.gov

Below is a correspondence that I sent on September 17, 2003. In a follow up thought, I was wondering if a fast track exists that could, at least, take a look at the software technology I am proposing. I mean, by a credible panel of scientists with expertise in molecular dynamics who have national security in mind. I am not an alarmist. I am reacting to a sluggish federal innovation system in a manner that I hope will keep this software technology from being overlooked too long when I believe that the need for a simple quick evaluation by knowledgeable evaluators is in the nations interest. Nothing else. I think a rush to commercialization would be unwise until such an

evaluation were performed.