Creating Highly Interactive Worker Training DVDs with SBIR Funding

I started New Leaf Interactive Media, Inc., in the mid-1990s, to explore the use of new media for marketing and education. I spent my first years creating media products including CD-ROMs, websites, and museum kiosks.

In 2001, the Kirkwood Small Business Development Center introduced me to Doug Feil, Kirkwood’s Director of Environmental Training. We applied for an SBIR grant to explore the interactive capabilities of DVD for worker training.

We received an award in 2002, beginning two years of intensive R & D. Using Kirkwood’s staff and facilities, we staged and filmed a series of workplace hazard scenarios, which were interspersed with instructional sequences and user choice points.

In two years, we created three DVDs:

- **Mystery Drum: 10 Steps to a Safe and Healthy Hazardous Chemical Spill Response**
- **Lockout-Tagout for Confined Space Entry**
- **Personal Protective Equipment for Brownfields Remediation**

We’ve applied for Phase II funding, to further and refine the concept of “highly interactive DVD,” including the use of web-links and a Spanish language track. To learn more about our products and services, see [http://www.newleafmedia.net](http://www.newleafmedia.net).

If you need to present your ideas or products visually—using DVD, the Web, or other media—please e-mail me at newleafmedia@southslope.net.

—Dean Rathje

Did You Know?

The eleven federal agencies that participate in the SBIR/STTR programs will have awarded approximately $2 Billion in grants and contracts for FY 2005. The Department of Defense will fund about $1.2 Billion in early stage R&D projects, making its SBIR/STTR program the largest. The Department of Health and Human Services is the next largest participant, and will have awarded approximately $650 Million in FY 2005. NASA, the third largest participating agency, will have awarded $123 Million in SBIR/STTR funds in FY05, while the Department of Energy and the National Science Foundation will have made awards worth $112 Million, and $105 Million, respectively.
Meeting Review: Fall National SBIR/STTR Conference

The Fall National SBIR/STTR Conference was held November 14-17, 2005 in Albany, NY. The meeting featured presentations by program managers from the DoD, USDA, NIH, NASA, NIST, DOT, EPA, DOE, NSF, and Homeland Security. In addition, there were presentations on intellectual property valuation, patents and licensing, business incubators, universities as a resource, and financing alternatives to SBIR/STTR.

The meeting provided a great opportunity to meet one-on-one with program managers, learn about the proposal review process, and network with other entrepreneurs, venture capitalists, as well as state representatives. This was also an excellent opportunity to learn proposal preparation tips, and differences among the various federal agencies’ SBIR and STTR programs.

Consider attending the next national SBIR/STTR conference if you are interested in learning more about how to access the SBIR/STTR program, a $2 Billion small business resource. Visit http://www.sbirworld.com/Conferences/eventDetails.asp?ConfId=1586&mnuConf=1 for details on the Spring National SBIR/STTR Conference to be held May 15-18, 2006 in Louisville, KY.

Image-Guided Cancer Intervention Program Announcement

The National Institutes of Health has issued a program announcement, Image-Guided Cancer Interventions. The National Cancer Institute is seeking SBIR/STTR applications for the development and clinical validation for image-guided cancer interventions.

Among the goals of this program is the development and optimization of fully integrated cancer imaging, monitoring, and therapy systems. Budgets of up to $150,000 total costs per year for up to two years are permitted under Phase I of this program. A maximum of 3 years of support at budgets of up to $1,000,000 total costs per year may be requested for Phase II research that includes clinical evaluation. However, Phase II applications that do not include clinical evaluation may not exceed $750,000 per year.

Additional information on these program announcements can be found at: http://grants.nih.gov/grants/guide/pa-files/PA-06-031.html.

NIH SBIR/STTR Program Announcement

The National Institutes of Health has issued a program announcement, Bioengineering Approaches to Energy Balance and Obesity. Participating institutes include the National Institute on Aging, the National Cancer Institute, the National Institute of Biomedical Imaging and Bioengineering, and the National Heart, Lung and Blood Institute. New and innovative bioengineering approaches to addressing clinical problems related to energy balance, intake and expenditure are being sought.

The objective is to increase the number of tools available to facilitate research in energy balance and health, and to ultimately facilitate therapeutic advances for problems such as weight control and obesity.

Key Solicitation Dates

- The Department of Health and Human Services (NIH/CDC/FDA) SBIR Grants application deadline is December 1, 2005.
- Department of Energy FY2006 SBIR/STTR Solicitation opened September 21, 2005. The deadline to submit applications is December 2, 2005.
- NSF SBIR/STTR Topics in Biotechnology, Chemical-Based Technologies, and Emerging Opportunities solicitation opened August 17, 2005. The application deadline is December 8, 2005.
- The Department of Education FY2006 SBIR deadline is January 6, 2006.
- The Department of Defense FY2006 SBIR/STTR deadline is January 13, 2006.
- The National Oceanic and Atmospheric Administration Phase I SBIR Deadline is January 18, 2006.
- The National Institute of Standards and Technology FY2006 deadline is January 26, 2006.

Additional information on these open solicitations and special announcements can be found at: www.sbirworld.com

Technology Spotlight

Peptide-based Inhibition of Protein Kinase C delta-Mediated Apoptosis (ISURF #3172)

Oxidative stress and apoptosis are considered important mediators of many diseases, including Alzheimer’s and Parkinson’s diseases. Caspase-3 has been shown to activate protein kinase C delta (PKCδ) through proteolytic cleavage, leading to PKCδ-mediated apoptosis of cultured neuronal cells. Researchers at ISU have developed an irreversible and competitive peptide inhibitor of the PKCδ cleavage site that demonstrates potent anti-apoptotic effects. This inhibitor has research (experimental reagent for apoptosis and oxidative cell stress research), medical (neuroprotective agent, potential therapeutic agent for neurodegenerative disorders, such as Parkinson’s and Alzheimer’s diseases), and diagnostic (measurement of caspase-3 activity) applications.

For more information on this and other technologies available for licensing, go to: www.techtransfer.iastate.edu

Who Wins SBIR Funding?

Have you ever wondered who wins SBIR awards? You may be interested in knowing that firms that are awarded grants or contacts are typically small and new to the program. In fact, about one third of the Phase I awards given each year are to first-time winners. Over 40% of DoD Phase I award winners in FY01 were companies with 2-9 employees, while 25% were companies with 10-24 employees. Just over 20% of the awards were to companies with 50-499 employees. Firms with just one employee won nearly as many awards (3.2%) as those with 250-499 employees (3.8%). In this program, small companies really can compete!

For more information on the SBIR/STTR programs, see http://www.sbirworld.com/. Proposal preparation assistance is available for Iowa companies. Contact Kris Johansen for more information:
kajohans@iastate.edu
Assisting Iowa Companies

Iowa companies have a unique resource to help them solve technical problems, create new products, and increase productivity and quality. Known as IPRT Company Assistance, this group of researchers, scientists and specialists has helped well over 1,000 Iowa companies and organizations since 1987. It’s part of the Institute for Physical Research and Technology, a network of scientific research centers at Iowa State University.

IPRT has a group of dedicated scientists to help Iowa companies, especially manufacturers, solve nonroutine problems in materials and nondestructive evaluation. Working closely with the company, these scientists use their world-class expertise, industrial experience and state-of-the-art equipment available at IPRT and elsewhere at ISU to evaluate the problem and develop a solution.

IPRT also has experts that facilitate contract research between Iowa companies and ISU scientists, faculty and staff. These projects usually focus on technical problem solving, product development and process improvement. This same group also works with entrepreneurs to start and grow Iowa companies and commercialize technology-based products. IPRT works closely with the Office of Intellectual Property and Technology Transfer and other ISU organizations to provide the services required to assist the company.

Please contact Debra Amenson at IPRT Company Assistance to learn more about the services available to Iowa companies, or visit the IPRT website at: http://www.iprt.iastate.edu/assistance

About OIPPT:

OIPPT was formed in 1990 to provide support services to the university community in matters related to intellectual property, to be the first contact related to new innovations, and to market the innovations and negotiate the agreements for transfer of the technology for the Iowa State University Research Foundation’s signature. OIPPT reports to the office of the Vice Provost for Research.

OIPPT’s mission is to serve the university as the primary resource for intellectual property and related matters and facilitate the disclosure and utilization of university innovations for the benefit of society, the university and its faculty and staff, and contribute to economic development in Iowa when possible.

Iowa State University does not discriminate on the basis of race, color, age, religion, national origin, sexual orientation, sex, marital status, disability, or status as a U.S. Vietnam Era Veteran. Inquiries can be directed to the Director of Equal Opportunity and Diversity, 3680 Beardshear Hall, (515) 294-7612.