

Technology Commercialization Program Staffing DRAFT - 27 March 2007

DRAFT *** NOT YET REVIEWED BY DEVELOPMENT COMMITTEE

Background

The SURAtch programs focus on technology commercialization for Jefferson Lab, SURA initiatives, and our members' intellectual property. These programs have been created and grown over the past several years and range across four general areas: licensing, early-stage startup funding, terahertz, and new development projects. This document provides a sampling of the successes that we have enjoyed thus far and presents the opportunities for growth in each of these areas. The thesis of this paper is that, given the foundation that has been laid in technology commercialization and the tremendous opportunities for advancing these programs that now exist, SURA should embark on an aggressive program to pursue these initiatives. This will include hiring a new staff position focused exclusively on Technology Commercialization and reporting to the Director of Business Development.

Licensing Program

SURA has enjoyed success in several new licensing deals for JLab technologies: EyeOnScience and Linde Kryotechnik, most recently, but also our ongoing success in Dillon Technologies. We are sponsors of multiple events and programs across the region and in the Silicon Valley, CA (a locus of entrepreneurial activity and available funding), including: Girvan Institute (Tech Showcases in Los Angeles, San Jose, and Boston); Venture Capital-Angel Roundtable (Silicon Valley); World's Best Technologies Showcase (Dallas, TX); COVITS (Virginia). We have key relationships with organizations from AUTM to the Aerospace Corporation among many others. All of these allow our members to promote their technologies to potential licensees and seek additional funding for their technology commercialization activities.

Licensing and Technology Transfer Opportunities

- Each of these current relationships is fairly passive: In other words, SURA provides the opportunity, but we rely on the schools to push the technologies or the interested licensing parties to approach us. There is a tremendous opportunity to promote our technologies proactively, through online sites, through direct calls, through seeking out of various technologies for partner firms; all of which could result in royalties or fee payments to SURA in addition to the licensing revenue for our members.
- We have provided "Technology Reports" to various commercial companies in the past at no fee. We are now in the midst of preparing our first report for a fee for a technology incubation company. These 20-page reports contain detailed information about a number of specific technologies, patents, research areas, centers of excellence, and startups in a given technology or market area of interest to our clients. We have not proactively marketed these services yet, and there is a

significant opportunity to market these on a regular basis. We charge between \$3000-7500 for each report, but they require time to search and compile the results.

- The Inteum Intellectual Property Management database is installed and working wonderfully on a SURA server. We manage all of the JLab invention disclosures, WFO's, CRADAs, patents, and license agreements through this system. Inventors can input their new disclosures and check on the status of past inventions in real time through the web interface. However, the Inteum system is capable of handling three orders of magnitude more data than we currently use. It is flexible and expandable. There are a number of our members, and for that matter universities across the country, who sorely lack the database capabilities that Inteum and SURA could provide for them, for a small fee. We could also use the database to enter and track other technologies from across our schools, tying it into the marketing efforts and Technology Reports described above.
- We get more and more frequent phone calls from universities, non-profit organizations, regional tech transfer groups, and the like, all looking for new ways to collaborate on technology commercialization. We have been approached recently by the Aerospace Corporation to join them in pursuing a new DOD technology commercialization initiative. Simply having someone with the time to pursue these opportunities would open up many doors to move technologies into the marketplace.
- There are a host of funding sources at the federal (NSF, DOD, DOE, NIH, DOC) and state level for unique technology transfer initiatives to get funding. SURA has never pursued these but the time is right to put such additional funding to work for us and our members.

Seed Stage Funding Background

SURA created the SURAfund program to allow startup companies that are spun out from universities to have easier access to seed stage capital. We work with a small number of VC firms from across the country who are interested in these types of investments. We began with a pilot program in Spring 2006 and are now in our second full solicitation. The response to this initiative has been extremely strong, as it represents better deal flow for our VCs and more funding opportunities for our spinouts.

Seed Stage Funding Opportunities

- While we have been more proactive in marketing this initiative, there is still more ways that it could be marketed and promoted. In addition, no program like this exists in any other area of the country, and it would be fairly straightforward (though more time-consuming) to expand it throughout the US.
- There is also more of an opportunity to serve a "company finder" role for the VCs themselves as well. They are continually looking for cutting-edge technology firms from across the region, and we have the insights and connections (but not the time) to be proactive and bring these to them for a fee.

Terahertz Program

This summer, SURA will host the Fourth Annual SURA Terahertz Applications Symposium. This unique event brings together researchers, engineers, and product developers from across academic and commercial sectors to explore the latest trends in terahertz-based products. We have seen 15% annual growth in participation in this conference and this year will be hosting speakers from six different countries. Jefferson Lab houses the world's strongest THz source at the FEL, and two unique JLab collaborations with the Air Force Research Lab and the University of Delaware have resulted directly from this symposium.

Opportunities in Terahertz:

- This annual event is organized by a single staff person at SURA and is therefore resource-constrained regarding advertising, promoting, obtaining sponsorships, and providing services.
- There are a good number of SURA members who are doing work in terahertz now (not the case five years ago) and there is an opportunity to bring them together for a cohesive, well-structure plan to obtain funding for a larger terahertz initiative.
- The commercialization opportunities are staggering in this field, and SURA is well-positioned to identify the most promising technologies, put together a leading entrepreneurial team, and obtain seed stage funding to form a new terahertz startup.

Development Background

The general purpose of the Development activities is to pursue those collaborative initiatives that represent an opportunity for new, sustainable programs of interest to SURA's members. We have seen some success in this area, most recently with the growth of the Southern Bioenergy Initiative.

Development Opportunities

- Many of the new initiatives that SURA pursues come about because another outside organization approaches us about an opportunity. However, there are myriad new initiatives and funding opportunities that arise on a weekly basis from multiple funding sources that SURA should be actively pursuing, but we are unable to do so due to a lack of resources.
- The IT and Coastal programs are continually expanding and looking for new opportunities to pursue funding. There is a need for them to have greater interaction with the private sector and to seek bigger funding opportunities, if staff support were available.
- There are also opportunities for us to be proactive about creating new initiatives by working directly with our members to identify and pursue new collaborative programs that build on our regional strengths.