

ACTiVATE

JHU Pursues Commercialization of Inventions Through the ACTiVATE Program

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The Johns Hopkins University is the first institution in Maryland to sign a technology commercialization agreement with a new company created as part of the ACTiVATE program. The Office of Technology Transfer recently completed an option agreement with TraxIon Therapeutics, Inc. for a technology entitled, “The Analgesic and Anesthetic Effects of Inhibiting the Interaction of the NMDA Receptor Subunits 2A/2B with Neuronal Nitric Oxide via PDZ Domain of PSD95/SAP90” (JHU Ref. 3699) invented by Drs. Roger A. Johns and Yuan-Xiang Tao. TraxIon Therapeutics founded by Kerrie Brady (ACTiVATE Class of 2005), will use this technology to develop novel therapeutics for treating intractable pain.

ACTiVATE is an innovative program supported by a grant from the NSF to the University of Maryland, Baltimore County (UMBC) that attempts to address one of the greatest challenges for commercializing technologies in the State of Maryland – a lack of trained entrepreneurs. With over \$2 billion in annual research expenditures by Maryland’s universities (half of which is from JHU), the State ranks among the top in the nation. This research generates over 500 invention disclosures but only about 12 start-up companies are formed each year based on these disclosures. With plenty of capital available in the mid-Atlantic region, the missing link between the number of disclosures and the number of start-up companies seems to be the availability of entrepreneurs who will create companies based on university technologies. ACTiVATE, with a particular focus on training professional women to be entrepreneurs, is providing a solution to this challenge.

The ACTiVATE program, which is currently in its second year, recruits and trains up to 30 professional women with experience in business or science who are interested in starting their own technology-based companies. The ACTiVATE program solicits 30 to 40 invention disclosures from Maryland’s research universities and federal labs, screens these technologies with the help of TEDCO (Maryland Technology Development Corporation), and ultimately selects the best 20 to 25 for the program. The participants, who are selected for the program based on their level of experience and personal interviews, form teams of 2 or 3 and each team selects one of the screened technologies as a project. In some cases, participants, a number of whom are Ph.D. scientists, bring their own technologies with them in the hope of finding assistance with starting a company. The ACTiVATE participants undergo a yearlong training program in which they learn the aspects of starting their own technology company and at the same time, work on performing a market assessment and ultimately developing a business plan for the technology that they selected.

The ACTiVATE program takes an applied approach to its training because experience is a critical success factor for entrepreneurs. The ACTiVATE participants gain experience by working on their project, but they also have the benefit of experience provided by the three entrepreneurs that teach the classes and serve as mentors for each of the projects. Outside

advisors, which often include the inventor of the technology, are also recruited to work with the teams and ultimately form advisory boards for each of the projects. While the classes, which meet Thursday evenings and one Saturday per month, are structured to be convenient for women with full-time jobs, most of the participants are very serious about starting their own company and are looking to ACTiVATE to provide the training and resources necessary to ensure their success.

The ACTiVATE program is broken into two phases. The first consists of a market assessment of the technology; the second involves the development of a business plan. Not every technology is appropriate for a start-up opportunity, so after completing the market assessment at the end of Phase I, the participants make a recommendation as to whether or not the technology is appropriate for a start-up. In the case of a positive recommendation, the technology project moves on to Phase II. When the participants do not recommend a technology for a start-up, the market assessment is shared with the institution that provided the technology and the participants select a new technology project or join another team that is moving forward in Phase II. At the end of Phase II, viable business opportunities are presented to a panel of investors. Companies are formed around the best opportunities. The new companies seek initial funding and commence negotiations for the rights to the intellectual property held by the institution that originally contributed the technology.

The ACTiVATE program provides a new mechanism for JHU and other institutions in the State of Maryland to commercialize their technologies and it seems to be working. TraxIon Therapeutics is one of four new companies formed from the first year of the ACTiVATE program, which is twice what was originally anticipated. Since some of the participants from the first year continue to work on their projects, ACTiVATE expects that additional companies could still form. While the goals of the ACTiVATE program include starting companies around university technologies provided to the program, it is the hope that women who completed the ACTiVATE program without a viable business opportunity will be knocking on the doors of technology transfer offices in the future to look for new opportunities.

The ACTiVATE Program has recently started its second year with a strong class of participants who have already selected their technologies. Of the technologies selected, two are from JHU – one from the SOM and one from APL. The Office of Technology Transfer hopes that its participation in the ACTiVATE program will lead to more opportunities to commercialize inventions following the example of TraxIon Therapeutics.

More information about the ACTiVATE program can be found at www.umbc.edu/activate or by contacting the Office of Technology Transfer.