<u>Technology Transfer & Commercialization</u> Report to the Board of Regents Master Plan Research Advisory Committee (MPRAC)

November 7, 2014

"Technology transfer" refers to a broad set of activities and agreements that help move inventions along the pathway from concept to commerce, to improve lives, support communities and enhance society. Technology transfer experts in universities work with faculty innovators to identify, protect and market inventions with commercial potential, seeking business partners to develop novel products and launch new companies based upon the novel intellectual property. As noted in a recent AUTM report, "technology transfer efforts are pursued in concert with the research institutions' core values of sharing research results, materials and know-how for the betterment of the community and society."

Research activity is a fundamental input supporting the mission of universities; new knowledge and innovation are outputs of this research activity which can be brought to market through various tech transfer activities. These outputs can be transferred through multiple channels to commercial partners, with increasing levels of complexity and interaction along the way, from internships and consulting relationships to research agreements and options or licenses to turn ideas into products. Strengthening Louisiana's research enterprise, and thus its economic impact, requires sustaining and increasing the flow of all these commercialization-related activities through this R&D "pipeline" of inputs and outputs.

In 2013, the MPRAC Task Force on Technology Transfer and Commercialization developed multiple recommendations to improve the capacity and expand the support of Louisiana's research universities in a variety of technology transfer functions (Attachment 1). In addition, the MPRAC's three cross-cutting steps to drive the state's economy through university-based research and innovation each specifically included actions related to the expansion and support of tech transfer.

While the current effort of the other MPRAC task forces was focused on developing priorities for state investment in each of the five major academic areas of strength, the technology transfer effort was turned to university practitioners in this field across the state to gain further input and insight about which one or two of the MPRAC-TTC task force recommendations of last year would have the highest impact in enhancing technology transfer as a cross-cutting function in support of their research activities. Technology transfer officers from around the State were asked for input and guidance on the 2013 recommendations; these professionals from large and small campuses across the state offered feedback to identify their highest priority recommendations

¹ Highlights of AUTM's U.S. Licensing Activity Survey, FY2013

to the Regents for broad-based, high-impact enhancement of tech transfer and commercialization activities.

The most-frequently identified highest priority activity for positive impact across all campuses, and one which could provide the most direct incentive and support for technology transfer to impact economic development, is the <u>creation of a statewide proof-of-concept fund</u>. Such a fund would provide targeted support to advance an innovation closer towards commercialization, whether through prototyping, animal studies, market studies or other similar activities. It was recommended that this new fund be established with defined guidelines, a short time frame for deliverables and clearly targeted stages of intended support for precommercialization technology development.

Recommendations for developing this funding program include leveraging state dollars invested in any new proof-of-concept fund by requiring some level of matched funding from the university and / or private donors for each competitively funded project. It was also suggested that the state could explore certain tax credits, rebates or other forms of incentive to encourage private donations to a new statewide proof of concept fund.

A current opportunity to build a larger, statewide, coordinated proof of concept program exists through building upon the **LA-EPSCOR "OPT-IN"** program, for *Opportunities for Partnerships in Technology with Industry*. This program is designed to support faculty in their efforts to collaborate with industry and has an award category specifically designed to provide short-term, high impact funding for prototype development activities in support of commercialization. These OPT-IN awards provide up to \$20,000 for one year of work to advance an invention, and faculty from across the state's institutions are eligible to apply for the competitively awarded funds. Expanding upon this OPT-IN - Category II prototyping program provides an immediate pathway to launch a high-priority statewide proof of concept fund in conjunction with the five strategic research areas also identified by MPRAC.

The second near term priority activity which was most frequently recommended by the technology transfer officers to support both enhancement of technology transfer activities and expanded relationships with industry, is support for institutions to regularly post available technologies through the **Global Technology Portal (GTP)** developed by AUTM; concurrently, it would be critical to create a **web-based "Louisiana Technology Portal**" which would link to each technology transfer office as well as to the GTP for a centralized and searchable databank of all technologies available across all Louisiana's research institutions; this Louisiana Technology Portal could be hosted by the Board of Regents on its website. Through the Board of Regents, and in conjunction with various metrics reporting requirements, this single 'gateway' to all technology transfer offices and available innovations across Louisiana could enhance the ability to make an economic impact through technology transfer and provide a critical resource support to both the universities and potential industry partners.



BATTELLE CROSS-SECTOR INITIATIVE:

Technology Transfer & Commercialization

Task Force Report to the Board of Regents Master Plan Research Advisory Committee

September 23, 2013

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BATTELLE'S CROSS-SECTOR INITIATIVES TO ENHANCE COLLABORATION BETWEEN INDUSTRY AND HIGHER EDUCATION

Technology Transfer & Commercialization

 Initiatives fostering technology transfer, commercialization and new venture development Research Capacity

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Talent

mproving talent connections
with industry



Battelle's Identified Opportunities in Technology Transfer & Commercialization

- Align university intellectual property practices with current, national best-practice standards (e.g., policies regarding market attorney rates, campus/system template agreements, and intellectual property, and copyrighted material use)
- Develop a statewide translational research and pre-commercialization fund to enhance faster prototyping and other means of commercializing university research
- Promote the use of the Louisiana Technology Commercialization Tax Credit program
- Create a database of service providers with expertise and experience working with entrepreneurs and serial entrepreneurs, and then market those services

Task Force Modifications to Battelle's Identified Opportunities in Technology Transfer & Commercialization

- 1) Assess and optimize university policies and practices on intellectual property and technology transfer, consistent with national standards.
- 2) Develop a statewide translational research and pre-commercialization fund to enhance faster prototyping and other means of commercializing university research.
- 3) Promote the use of the Louisiana Technology Commercialization Tax Credit, the R&D Tax Credit and the Angel Investor Tax Credit programs.
- 4) Create a database of service providers with expertise and experience working with entrepreneurs and serial entrepreneurs, and then market those services.



- A. Clearly identify and communicate each institution's mission relative to commercialization and tech transfer, highlighting societal and economic impact of research and invention.
- B. Regularly communicate the success stories which show how technology transfer links the university to the business world and supports economic development.
- C. Evaluate the opportunity to enhance faculty promotion and tenure policies through explicit support for and inclusion of tech transfer activity.

IMMEDIATE ACTION PLANS (3-6 MONTHS): TECH TRANSFER & COMMERCIALIZATION

- Promote the use of the Louisiana Technology Commercialization Tax Credit, the R&D Tax Credit and the Angel Investor Tax Credit programs
 - Raise awareness of this tax credit among university administrators through email, seminars, etc.
 - Ensure that incubator and business assistance organization are aware of and able to assist partnering companies with obtaining the credit
 - Responsible Parties include LED, University Licensing & Research Officers, and Directors of Incubators, Research Parks, SBDCs
- Regularly communicate the success stories which show how technology transfer links the university to the business world and supports economic development.
 - Universities should feature their research and commercialization success stories in print, electronic and social media.
 - Create a section on the LED website which features links to university research & commercialization resources.
 - Create a dashboard on the BOR website which highlights the activity in tech transfer that is reported in the Strategic Priorities reports
 - Responsible Parties include Media Relations Offices of the Universities, LED & BOR



NEAR-TERM ACTION PLANS (6-12 MONTHS): TECH TRANSFER & COMMERCIALIZATION

- Assess and optimize university policies and practices on intellectual property and technology transfer, consistent with national standards
 - Re-convene the Council of Technology Transfer Officers and establish a regular meeting schedule
 - Catalog current IP policies, practices, resources, staffing and agreements, and compare to national norms.
 - Define key metrics and create a dashboard of relevant activity from each campus (based on BOR Strategic Research Priorities reports).
 - Highlight key institutional contact persons for research and commercialization
 - Enhance capacity at the local level to best support faculty and inventions
 - Responsible parties include university leaders in research and technology transfer
- Clearly identify and communicate each institution's mission relative to commercialization and tech transfer, highlighting societal and economic impact of research and invention
 - Responsible parties include University leaders, research administrators, tech transfer officers, faculty inventors

NEAR-TERM ACTION PLANS (6-12 MONTHS): TECH TRANSFER & COMMERCIALIZATION

- Develop a statewide translational research and pre-commercialization fund to enhance faster prototyping and other means of commercializing university research
 - Develop a strategic plan and mechanism for launching, funding and administering a statewide pre-commercialization program, including clearly targeted stages of intended support for pre-commercialization technology development
 - Responsible parties include the State as the lead in planning for and providing financing for such a fund, modeled after similar ones in other states and managed in partnership with the business and academic communities
- Create a database of service providers with expertise and experience working with entrepreneurs and serial entrepreneurs, and then market those services
 - Incorporate into existing efforts and include service providers both internal and external
 to the university community, including the business development teams, university
 technology incubators and university research parks.
 - Support regular joint, university/industry conferences/workshops in targeted technology areas to promote increased university/industry interactions
 - Responsible parties include LED and BOR



MEDIUM TERM ACTION PLANS (18-24 MONTHS): TECH TRANSFER & COMMERCIALIZATION

- Evaluate the opportunity to enhance faculty promotion and tenure policies through explicit support for and inclusion of tech transfer activity.
 - Encourage active internal faculty governance discussions to assess the relative value and weight that commercialization activities might play as an explicit added component of the promotion and tenure decisions
 - Responsible parties include University faculty committees, administration and governing boards