BOARD OF REGENTS
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AGENDA
SPONSORED PROGRAMS COMMITTEE
Wednesday, June 17, 2015
1:20 p.m.
The Claiborne Building
Thomas Jefferson Room (1-136) A&B
Baton Rouge, Louisiana

I. Call to Order

II. Roll Call

III. Senior Staff Recommendations: University-Based Research and Technology Transfer Pursuant to the Study and Report of the Master Plan Research Advisory Committee (MPRAC)

IV. Conversion of Matched Endowed Professorships and Chair to Endowed Superior Graduate Student Scholarships
A. LSU Health Sciences Center – New Orleans
B. Pennington Biomedical Research Center

V. Requests for Approval of Endowed Chair Appointments
A. Centenary College of Louisiana
B. Pennington Biomedical Research Center

VI. Other Business

VII. Adjournment

Committee Members: Joseph Wiley, Chair; William Fenstermaker, Vice Chair; Raymond Brandt; Edward Markle; Gray Stream

AGENDA ITEM III

Senior Staff Recommendations:
University-Based Research and Technology Transfer
Pursuant to the Study and Report of
the Master Plan Research Advisory Committee (MPRAC)

Staff Summary

A central goal of the Board of Regents' 2011 Master Plan is "fostering innovation through research in science and technology in Louisiana." The purpose is to more aggressively engage university researchers in the State's economic development. To pursue this goal, the Regents in 2012 established the Master Plan Research Advisory Committee (MPRAC), comprised of representatives from public and private research-focused universities across the State. MPRAC's charge is to define priorities for investing in university research which show promise of leading to technology transfer and research commercialization.

Pursuant to December 2014 actions of the Board of Regents,[*] MPRAC developed a report recommending technology transfer approaches in regard to: (1) proof-of-concept/prototype funding; (2) Regents-level communication and coordination; (3) flexible standards for campuses as appropriate to their roles, scopes, and missions; and (4) statewide assessment of the state of university-based technology transfer (see Attachment II). The Senior Staff recommendations are made pursuant to the recommendations of MPRAC.

The following individuals are expected to be at the Sponsored Programs Committee meeting to comment and answer questions regarding the MPRAC recommendations:

- Les Guice: President, Louisiana Tech University; MPRAC Chair
- Michael Khonsari: EPSCoR Project Director; MPRAC Vice Chair
- Nicole Honoree: Assistant Vice Chancellor for Economic Development & Strategic Initiatives, LSUHSC-New Orleans; Member, Board of Directors, National Association of University Technology Managers (AUTM); Leader, MPRAC Technology Transfer and Commercialization Task Force

1. Proof-of-Concept/Prototype Initiative

Background

Proof of concept, as it relates to the technology transfer of university research, involves determining whether an untested but promising new idea has the potential to become commercialized as a product. Relatively small levels of targeted support, usually $50,000 or less,

[*] See Attachment I.

can make the difference in validating the innovative concept and finding a commercial development partner. Proof-of-concept funds are thus a pivotal catalyst for moving university research ideas closer to the market place. For this reason, the Board of Regents, in September 2014, approved the competitive Board of Regents Support Fund Proof-of-Concept/Prototype (PoCP)[**] initiative as a component of the Industrial Ties Research Subprogram (ITRS).

PoCP, funded at $350,000 in FY 2015-16, will provide Louisiana's academic innovators with an important mechanism for advancing novel ideas to the market for public benefit. To encourage market-focused research and development, the initiative will invite applications statewide from all disciplines to compete for awards once per year, with a very short time frame for results. The FY 2015-16 Request for Proposals will be released in July 2015.

Senior Staff Recommendation

The Senior Staff, in collaboration with the Master Plan Research Advisory Committee (MPRAC) and the Louisiana Department of Economic Development (LED), will closely monitor the level of success of awardees in the Support Fund's Proof-of-Concept/Prototype (PoCP)[**] initiative, to be inaugurated in FY 2015-16 at the level of $350,000.[***] The Senior Staff will report and make timely recommendations regarding future directions for this initiative to the Board of Regents.

2. Regents-Level Communication and Coordination

Background

Based on recommendations of external consultants, in December 2014, the Board approved the creation and funding of a new position at the Board to assist with matters related to university-based technology transfer. Pursuant to Board action, the Master Plan Research Advisory Committee (MPRAC) has suggested a job description and qualifications for the Board of Regents Technology Transfer Liaison (see Attachment III).

Senior Staff Recommendation

The Senior Staff endorses the recommendation of the Master Plan Research Advisory Committee (MPRAC) that the Commissioner of Higher Education, on behalf of the Board of Regents, proceed with hiring, as expeditiously as possible, the Board of Regents Technology Transfer Liaison in accordance with the job description and qualifications developed by MPRAC.

[**] Based on the successful but ending Louisiana EPSCoR Opportunities for Partnerships in Technology with Industry (OPT-In) Program.

[***] Previously approved by the Board, during September 2014, in the FY 2015-16 BoRSF Plan and Budget.

3. Flexible Technology Transfer Standards for Campuses Based on Roles, Scopes, and Missions

Background

The practice of academic technology transfer typically adheres to the following generally accepted common set of standards:

a. Clearly identify a contact person for faculty and industry.
b. Support at least one staff membership in the National Association of University Technology Managers (AUTM).
c. Encourage staff participation in networking and professional development.
d. Track and report key annual metrics on technology transfer and licensing activity (e.g., disclosures, patents, licenses, start-ups, surviving start-ups, etc.).
e. Develop robust faculty education, outreach, and engagement programs.
f. Use template agreements and standardized non-financial contracting terms for ease of negotiation with potential licensing partners.
g. Negotiate fixed fee arrangements, whenever possible, with patent counsel to better manage expenses and budgets.
h. Encourage interaction and partnering with small businesses, start-ups, and entrepreneurs in Louisiana whenever possible and appropriate.
i. Post available technologies in AUTM's Global Technology Portal (GTP) to widely market and advertise opportunities for licensing inventions.
j. Regularly communicate success stories and highlight positive public benefit of academic research and innovation

Senior Staff Recommendation

The Board of Regents urges each campus member of the Master Plan Research Advisory Committee (MPRAC), consistent with the campus' respective role, scope, and mission, to adapt as appropriate from the standards listed in a-j above. Each affected campus will transmit its report to all members of MPRAC by June 1, 2016.

4. Statewide Assessment of the State of University-Based Technology Transfer

Background

The Board of Regents Master Plan calls for a "…targeted statewide approach to (university) research, development and innovation." An understanding of the state of technology transfer across the universities is essential to achieving this goal. Readily available to the Master Plan Research Advisory Committee (MPRAC) are data submitted by member campuses to the

National Association of University Technology Managers' (AUTM's) Statistics Access for Tech Transfer (STATT) database; this information can be supplemented by contextual insights from commercialization-active campuses.

Senior Staff Recommendation

Based on National Association of University Technology Managers (AUTM) data and other relevant information available in campus reports, MPRAC, in collaboration with the Louisiana Department of Economic Development (LED), will assess and make recommendations regarding: (a) the state of university-based technology transfer across Louisiana; and (b) statewide/regional policy and/or funding arrangements which could enhance university-based technology transfer. The Chair of MPRAC will report MPRAC's assessment regarding a-b to the Commissioner of Higher Education by September 1, 2016.

AGENDA ITEM IV

Conversion of Matched Endowed Professorships and Chair to Endowed Superior Graduate Student Scholarships
A. LSU Health Sciences Center – New Orleans
B. Pennington Biomedical Research Center

Background Information

At its meeting of September 25, 2014, the Board of Regents inaugurated the Endowed Superior Graduate Student Scholarships subprogram. The approved policy permits campuses to convert previously matched Endowed Chairs and Professorships to Endowed Superior Graduate Student Scholarships on a non-competitive, non-punitive basis.

Staff Summary

A. LSU Health Sciences Center – New Orleans

The LSU Health Sciences Center – New Orleans requests that the five previously matched Professorships below be converted to Endowed Superior Graduate Student Scholarships:

- Frank Low, PhD Professorship in Graduate Studies
- H. Adele Spence Professorship of Graduate Studies
- Robert F. Dyer Professorship of Graduate Studies
- L. Allen Barker Professorship in Graduate Studies
- Herbert C. Dessauer Professorship in Graduate Studies

The Professorships were established through a bequest by Dr. Marilyn Zimny, formerly Interim Chancellor of the LSU Health Sciences Center – New Orleans.

LSU Health Sciences Center staff affirm that this conversion is consistent with the original wishes of Dr. Zimny, now deceased, to increase funding available for graduate students to undertake professional travel. These conversions will be considered by the LSU Board of Supervisors at its June 19, 2015 meeting; the LSU System has requested Board of Regents consideration prior to Board of Supervisors' approval to ensure the conversion is complete prior to the beginning of the fall 2015 semester.

Senior Staff Recommendation

Consistent with the subprogram policy and contingent upon LSU Board of Supervisors approval at its June 19, 2015 meeting, the Senior Staff recommends that the Sponsored Programs Committee approve conversion of the five Endowed Professorships listed above,

each with a corpus value of $100,000, to Endowed Superior Graduate Student Scholarships, as follows:

- **Frank Low, PhD Scholarship in Graduate Studies**
- **H. Adele Spence Scholarship of Graduate Studies**
- **Robert F. Dyer Scholarship of Graduate Studies**
- **L. Allen Barker Scholarship in Graduate Studies**
- **Herbert C. Dessauer Scholarship in Graduate Studies**

B. Pennington Biomedical Research Center

The Pennington Biomedical Research Center requests conversion of the Louisiana Public Facilities Authority (LPFA) Chair in Nutrition, a $1 million Chair established in FY 2001-02, into the LPFA Postdoctoral Fellowship, with a $1 million corpus. Based on the identification by its External Advisory Board of the need "to expand the number of postdoctoral fellows at the Center in order to enhance faculty productivity," Pennington approached the donor and the LSU Board of Supervisors to convert the LPFA Chair to an Endowed Superior Graduate Student Scholarship to support a postdoctoral fellow. The donor approved the proposed conversion on March 10, 2015, and the Board of Supervisors on May 8. The arrangement is fully supported by Board policy.

Senior Staff Recommendation

Consistent with the subprogram policy, the Senior Staff recommends that the Sponsored Programs Committee approve conversion of the Louisiana Public Facilities Authority (LPFA) Chair in Nutrition to the LPFA Postdoctoral Fellowship, with a corpus value of $1 million.

AGENDA ITEM V

Requests for Approval of Endowed Chair Appointments

A. Centenary College of Louisiana: Caroline and Ed Crawford Eminent Scholars Chair of Liberal Arts

B. Pennington Biomedical Research Center: George A. Bray, Jr. Endowed Super Chair in Nutrition

Background

A recent revision to the Endowed Chairs for Eminent Scholars subprogram policy, approved by the Board of Regents on March 25, 2015, provides that campuses which seek to fill BoRSF-matched Chairs without conducting a national search must submit appropriate materials for review by the Commissioner of Higher Education.

To ensure that expectations of the Chair are met, Board policy requires campuses to submit the Letter of Appointment provided to each chairholder within 90 days of appointment to the chair. The letter stipulates resources available to the chairholder as well as mutual commitments and expectations, including specific standards of continued performance.

Staff Summary

A. Centenary College of Louisiana: Caroline and Ed Crawford Eminent Scholars Chair of Liberal Arts

Dr. B. David Rowe, President of Centenary College of Louisiana, has submitted a request to fill the Caroline and Ed Crawford Eminent Scholars Chair of Liberal Arts without a national search, consistent with the donor's recently clarified preference that the Chair be used to support the work of the chief academic officer of the institution. Accordingly, Dr. Rowe indicates that Dr. Jenifer Ward, Provost and Dean of Centenary College, should be appointed to the Crawford Chair. Sponsored Programs staff notes that, according to Centenary, Dr. Ward was recruited to Centenary in June 2014 through a rigorous national search and was selected from among more than 90 candidates for the position.

Following review by an external consultant of the documentation submitted by Centenary in support of the request, Sponsored Programs staff concluded that Centenary fulfilled the requirements of the policy for appointment without a national search. Dr. Joseph C. Rallo, Commissioner of Higher Education, concurs with the staff assessment and recommends approval of Dr. Ward's appointment.

Senior Staff Recommendation

The Senior Staff recommends approval of Centenary's request to appoint Dr. Jenifer Ward, Provost and Dean of the College, to the Caroline and Ed Crawford Eminent Scholars Chair of Liberal Arts, consistent with donor wishes. As stipulated in Board policy, the Letter of Appointment of Dr. Ward to the Crawford Chair must be submitted to the Board within 90 days of this approval.

B. Pennington Biomedical Research Center: George A. Bray, Jr. Endowed Super Chair in Nutrition

The LSU System, with approval of the LSU Board of Supervisors, has submitted a request to fill the George A. Bray, Jr. Endowed Super Chair in Nutrition without a national search, consistent with the donor's intent that the Chair be used to support the work of the Executive Director of the Pennington Biomedical Research Center. Dr. William T. Cefalu has served in several leadership positions at Pennington since 2003, including Chief of Nutrition and Chronic Diseases, Director of the NIH Center for the Study of Botanicals and Metabolic Syndrome, Director of the Allen A. Copping In-Patient Research Unit, Associate Executive Director of Clinical Research, Associate Executive Director of Scientific Affairs, and Chief Scientific Officer. He was appointed Executive Director in 2013. Sponsored Programs staff notes that, according to Pennington, Dr. Cefalu was hired in 2003 as a result of a national search.

Following review by an external consultant of the documentation submitted by Pennington in support of the request, Sponsored Programs staff concluded that Pennington fulfilled requirements of the policy for appointment without a national search. Dr. Joseph C. Rallo, Commissioner of Higher Education, concurs with the staff assessment and recommends approval of Dr. Cefalu's appointment.

Senior Staff Recommendation

The Senior Staff recommends approval of Pennington's request to appoint Dr. William Cefalu, Executive Director, to the George A. Bray, Jr. Endowed Super Chair in Nutrition, consistent with donor wishes. As stipulated in Board policy, the Letter of Appointment of Dr. Cefalu to the Bray Chair must be submitted to the Board within 90 days of this approval.

ATTACHMENT I

MPRAC Actions of the Board of Regents

December 10, 2014

At its meeting of December 10, 2014, following consideration of recommendations of consultants, along with the Chair and Vice Chair of the Master Plan Research Advisory Committee (MPRAC), the Board of Regents unanimously endorsed the following:

- **MPRAC, in collaboration with the Louisiana Department of Economic Development, Technology Transfer Officers, and interested research and development organizations, develop statewide recommendations regarding the following, with an update to the Board of Regents by April 1, 2015:**
  - **Competitive Proof-of-Concept funding; and**
  - **Framework for common standards in university-based technology transfer.**

- **The Board of Regents engage a full-time research commercialization and technology transfer manager within the Sponsored Programs unit. This individual will coordinate, in collaboration with MPRAC and the Louisiana Department of Economic Development, higher education's involvement in industry-related matters pertaining to such directions as proof-of-concept funding, technology transfer, and the Regents' research priorities and portal websites.**

ATTACHMENT II

Master Plan Research Advisory Committee (MPRAC)
Proof-of-Concept Funding and Framework for Technology Transfer Standards
Report to the Board of Regents
April 30, 2015

1. Introduction

At its meeting of December 11, 2014, the Board of Regents took a series of actions related to enhancing the environment in Louisiana for university technology transfer activities. The Board unanimously requested that its Master Plan Research Advisory Committee (MPRAC) develop statewide recommendations for a ***competitive proof of concept fund*** and a ***framework for common standards in technology transfer***. This report, responsive to that request, provides a strategic pathway towards immediate implementation of these two requests. In conjunction with several related initiatives to be undertaken by the Board of Regents and its staff as called for at the same meeting, including development of a comprehensive web portal linking all university technology transfer offices around the state, the two recommendations detailed herein by MPRAC can have a significant and immediate impact in support of a more robust academic technology transfer environment across Louisiana.

Basic research is a fundamental input to a university's mission, and innovation is a frequent output of this activity that often can be brought to market to benefit the public. Innovation, in an academic environment as elsewhere, may produce tangible inventions as well as intangible creative works like novel teaching methods or software -- all are forms of intellectual property which may be protected through patents, copyrights, or trademarks. Universities typically do not actually develop products based upon their intellectual property; rather, the institutions usually seek external partners, whether new or existing companies, to assume the effort and investment necessary to attempt to produce a commercial product and a profit from an academic innovation. "Technology transfer" is a broad term referring to the diverse range of activities and agreements universities use to move their innovations along a pathway from concept to commerce, to improve lives, support economic development, and enhance society.

Such technology transfer functions are increasingly recognized as a vital component of an institution's engagement with its local, regional and national communities. The heightened interest in technology transfer over the past several years, in Louisiana and across the nation, has raised awareness of the need for understanding pertinent issues and optimizing the chance for success in pursuit of these activities. Members of the Board of Regents and the MPRAC determined that a more in-depth assessment of key technology transfer issues could lead to recommendations of great value to all interested stakeholders across the state.

The MPRAC was established in 2012 by the Board of Regents, with representation from all public and private research-focused institutions of higher education in the state, to organize the academic community's response to one of the three primary goals of the 2011 Master Plan for Public Postsecondary Education in Louisiana: *fostering innovation through research in science*

and technology in Louisiana. Since its creation, the MPRAC has pursued its work in close collaboration with the Louisiana Department of Economic Development (LED), with Battelle consultants engaged by LED to assess statewide academic research and innovation resources, and with the Louisiana Innovation Council.

Six MPRAC task forces were created to focus efforts on identifying the most promising areas of university research that would merit future strategic investment by the institutions and the state. These task forces completed initial reports in late 2013 and then provided more extensive and sharply focused recommendations in fall of 2014, leading to the identification of five high-priority targeted research fields based upon (i) significant existing capacity across all institutions and (ii) a higher relative potential for producing positive economic and social impact through commercialization of inventions. These five priority academic research areas, which were independently evaluated and ranked by external consultants, are:

1. Advanced Manufacturing and Materials
2. Life Sciences and Bioengineering
3. Digital Media and Enterprise Software
4. Coastal and Water Management
5. Clean Technology and Energy

The MPRAC also identified a sixth focal area -- technology transfer and commercialization -- as a key overarching function for supporting and maximizing the impact of all five subject matter areas. The MPRAC's Technology Transfer & Commercialization Task Force prepared an initial report in 2013, then further refined recommendations in late 2014, with guidance and input not only from MPRAC members but also from technology transfer officers around the state. These professionals -- from campuses both large and small, public and private -- offered feedback to identify their highest priority recommendations for broad-based, high-impact enhancement of technology transfer and commercialization activities.

Out of this three year initiative, two major recommendations related to commercialization have emerged that are detailed herein and, when implemented, should significantly enhance the capacity of all institutions in Louisiana to better commercialize their innovations through technology transfer: (i) development of a statewide proof-of-concept fund and (ii) definition of a framework for commons standards in the practice of university-based technology transfer.

2. A Statewide Proof-of-Concept Fund for Academic Inventions – OPT-In, Expanded

Many academic innovations are not quite ready for the market, and finding a company willing to assume the risks of development can be quite challenging for the university. Focused, applied effort is often required to prove certain technical aspects of the invention, to validate the market potential, to build a working prototype, or to conduct key animal studies; unfortunately, funding for this kind of work is usually difficult to obtain from either government or private sources. Many promising academic innovations thus languish or fail, having fallen

into a funding gap often referred to as "the valley of death," due to a lack of the relatively small level of financial support needed to prove the proposed concept.

In their 2014 review of the five MPRAC research focal areas, the external consultants observed: "Proof-of-concept and prototyping funds help generate data that will enhance applications for external funding and, for studies ready for translation to commercial use, can assist with patenting, licensing, and obtaining data needed for small companies to move forward with product development."[1] And the highest priority activity most frequently identified by the statewide network of technology transfer officers for positive impact across all their campuses, which could provide the most direct incentive and support for technology transfer to positively impact economic development, was the creation of a statewide proof-of-concept fund.[2]

A proof-of-concept fund is typically established with precisely defined guidelines, a relatively short time frame for completion of the proposed work, and clearly targeted stages of work for pre-commercialization technology development, all in the hopes of maximizing impact and keeping the focus on commercialization rather than basic research,. It is also important to note that some projects to validate a proof-of-concept will fail. Such failures of *experiment*, however, should not be regarded as a failure of the *purpose* of either the project or the fund. In the fast-paced world of commercialization and new business development, it is far better to be "fast to failure" so that future research efforts and development funding can be more quickly re-directed to projects with a higher likelihood of success.

Fortunately, the development of just such a statewide proof-of-concept program is already well underway and will launch later this year. For the past several years, with State matching funds to its Track 1 award, Louisiana EPSCoR funded a program called *Opportunities for Partnerships in Technology with Industry* (OPT-In) that was designed to support faculty in their efforts to collaborate with industry and provide awards specifically designed to provide short-term, high impact funding for prototype development activities in support of commercialization. This program was limited to funding areas of interest specific to the National Science Foundation (NSF); due to changes in NSF matching requirements, this program could not be included in Louisiana's next Track 1 proposal. Rather than allowing OPT-In to disappear, however, the staff of the Board of Regents Office of Sponsored Programs began planning to administer it as a new component of the Industrial Ties Research Subprogram (ITRS) of the Board of Regents Support Fund (BoRSF). This new, statewide OPT-In program can function precisely as the statewide proof-of-concept fund that has been called for by the tech transfer community, the business community, the external reviewers, the MPRAC, and the Board of Regents.

While the original OPT-In program was limited to disciplines that fit within the NSF framework, the newly revised and expanded OPT-In Proof-of-Concept component of ITRS will invite applications from <u>all</u> disciplines to make the strongest case that an innovation is ready for and worthy of BoRSF investment. OPT-In is expected to award grants to faculty innovators once a

[1] *Statewide Research Priorities Review Panel Report & Recommendations, November 19, 2014, pg. 12*
[2] *Technology Transfer & Commercialization Task Force report to the MPRAC, 11.7.14, pg. 2*

year, on a competitive basis, and with a very short time frame for reporting results, in order to encourage market-focused research and development.

This revamped OPT-In Proof-of-Concept initiative has already been approved by the Board of Regents and is incorporated and funded in FY 2015-16 as a component of ITRS; the Request for Proposals will be released later this summer. By creatively re-purposing an existing program, the Board of Regents and its staff have already answered the statewide call to provide a new mechanism for support of academic innovation and entrepreneurship, with no additional funding needed for the initial pilot phase of the proof-of-concept program starting this fall.

Through this new OPT-In Proof-of-Concept component of ITRS, academic innovators across Louisiana will have an important statewide mechanism for advancing novel ideas closer to market. Through targeted development projects which validate the concept, innovations will be better prepared for investment by a private partner who can develop a product that provides commercial opportunities, makes an economic impact, and benefits the public. Once results are received from the initial proof-of-concept projects funded through this first year of the new Opt-In component of ITRS, MPRAC encourages exploration of additional BoRSF funding to expand the Opt-In Proof-of-Concept program to help better prepare even more of Louisiana's academic innovations for successful commercialization through technology transfer.

3. Framework for common standards in university-based technology transfer

Many universities employ specialized technology transfer professionals who work with academic researchers to identify, protect, patent, and market innovations with commercial potential, and to seek business partners which can develop novel products or launch new companies based upon the university's intellectual property. Other institutions may not employ full-time technology transfer staff but still may have personnel designated to manage the commercialization of innovations that might arise in the course of basic or applied research. In either case, there are common standards that can facilitate the academic technology transfer process and smooth the relationships with internal (faculty and administrators) and external (business and government) partners.

The practice of academic technology transfer adheres to a generally accepted common set of standards that have developed over the 35 years since the industry was launched with the passage of the Bayh-Dole Act in 1980 (PL 96-517). This landmark federal law, which *The Economist* in 2002 called "perhaps the most inspired piece of legislation to be enacted in America over the past half-century," [3] provided universities with a clear pathway for owning and managing federally-funded inventions and incentivized institutions to engage in technology transfer. By 1986, both Tulane and LSU had each launched technology transfer offices; today this important function, that supports both basic research and economic development, is now performed at many of the universities across Louisiana. The professionals active in technology

[3] *The Economist, Technology Quarterly, December 12, 2002,*

transfer in Louisiana, the inventors they work with, and the businesses they partner with, all work more productively together toward common goals when a framework for best practices is widely disseminated and consistently implemented.

These common standards and best practices for the conduct of academic technology transfer are collected and shared through the Association of University Technology Managers, or AUTM. This non-profit international organization for technology transfer professionals has more than 3,200 members representing managers of intellectual property from more than 300 universities, research institutions and teaching hospitals around the world as well as numerous businesses and government organizations. AUTM provides access to significant resources for professional staff engaged in some form of technology transfer activity.

Following are key aspects of a framework for common standards that, if implemented in whole or in part across the research campuses of the state, should assist in creating a more comprehensive and easily-accessed environment for commercialization of inventions made at Louisiana's universities:

1. Each institution should clearly identify a contact person for faculty and industry interested in disclosing or licensing innovations which arise in the course of research activities.

2. Each institution should support at least one staff membership in AUTM, at an annual cost of just under $300, to ensure the campus's free or reduced cost access to AUTM's myriad resources in support of technology transfer, such as:
    a. an extensive electronic library of reference and training materials, including a four-volume technology transfer practice manual;
    b. template agreements for licensing and related transactions;
    c. a database of 20 years of statistics and metrics related to tech transfer activity;
    d. a database of terms and conditions from actual license agreements;
    e. active online discussion groups and message boards;
    f. discounted participation in meetings, training courses and webinars;
    g. weekly news briefs on pertinent policy and industry issues;
    h. volunteer and leadership opportunities with professional colleagues;
    i. access to the Global Technology Portal to post technologies available for license and conduct free searches for businesses interested in licensing ; and
    j. participation in the Better World Project, to highlight positive benefits of inventions to the public.

3. Ensure that each institution's staff member(s) tasked with managing innovation participates in the regular meetings of the statewide network of technology transfer officers, to engage with colleagues, identify resources for assistance, and foster collaborative opportunities for both research and commercialization in the state. Support staff participation in AUTM's professional development meetings and courses, many of which are available online to AUTM members free or at minimal cost.

4. Track and report to AUTM, institutional management, and relevant external entities, key annual metrics on technology transfer and licensing activity, to document and illustrate impact on the institution, the faculty, and the economy.

5. Develop robust faculty education, outreach, and engagement programs to increase interest and participation in technology transfer-related activities.

6. Use template agreements and standardized non-financial contracting terms for ease of negotiation with potential licensing partners. Such templates are available either from AUTM or from statewide colleagues, and can significantly reduce the time to close a deal. While there is no "one-size-fits-all" license agreement for technology transfer, there are consistent terms and conditions, used by most universities both in this state and around the country, that provide a level of standardization and uniformity so that each new license agreement does not have to be developed from scratch, and so that all potential business partners have a more clear understanding of the typical framework for licensing academic innovations.

7. Negotiate fixed fee arrangements, whenever possible, with patent counsel to better manage budgets associated with the necessary cost of protecting intellectual property.

8. Encourage interaction and partnering with small business and start-ups / entrepreneurs in Louisiana whenever possible and appropriate.

9. Post available technologies in AUTM's Global Technology Portal (GTP) to widely market and advertise opportunities for licensing inventions.

10. Tell the technology transfer success stories, through AUTM's electronic "Better World Project" (www.betterworldproject.org) and through both institutional and external media outlets. The more that is understood about the impact of academic technology transfer, the more likely the broader innovation ecosystem will be to grow and flourish.

4. Conclusion

Technology transfer functions as an important mechanism to support a university's research, economic development, and public benefit missions. Through technology transfer activities, innovations are moved toward the commercial market through a variety of relationships with both new and established businesses. Universities across Louisiana already are actively engaged in technology transfer to support their faculty and communities; all the key offices at these institutions, as well as their innovations available for licensing, will soon be accessible through a comprehensive single web portal now under development by the Board of Regents staff.

In order to further enhance the commercialization of Louisiana's academic innovations, the MPRAC has identified two strategic components that can, when implemented, increase success in university technology transfer across the state. The Board of Regents, through its staff, is already implementing a statewide proof of concept fund through a new Opt-In component of the BoRSF ITRS program, to bridge the challenging financing gap which often prevents promising academic inventions from achieving commercial development. And Louisiana's research institutions can optimize their on-campus support of innovation and entrepreneurship by implementing the framework for best practices in technology transfer recommended above.

Taken together, these two recommendations can immediately support a more robust academic technology transfer environment in the state. With the provision of important new proof-of-concept funding and the adoption of key aspects of a common framework for managing inventions, the Board of Regents, the MPRAC, and the individual institutions can provide more opportunity to move academic innovations from concept to commerce, building and strengthening Louisiana's 21st century economy based upon its research universities.

ATTACHMENT III

Board of Regents Technology Transfer Liaison
Job Description

The Board of Regents Technology Transfer Liaison shall be charged with communicating to external stakeholders about university-based technology transfer as well as assisting in making connections among stakeholders from higher education, government, and private sectors to advance Louisiana's initiatives in technology transfer and research commercialization. This position reports to the Deputy Commissioner for Sponsored Programs.

Duties include:

Communication (50%)

- Establish and maintain timely contact with public and independent campuses, the State Legislature, the Governor's Office, regional economic development organizations, and other stakeholders, to raise awareness of university-based technology transfer activities
- Assist Louisiana technology transfer officers in distributing press releases, brochures, and electronic resources to external stakeholders
- Obtain statewide metrics through Association of University Technology Managers (AUTM) databases and GRAD Act reporting to provide briefing materials, updates, data, and reports for presentation to the Board of Regents, Louisiana Economic Development, and other agencies and organizations as appropriate
- Engage with technology transfer officers on all campuses on a regular basis to communicate and interact with campus officials who are involved in technology transfer
- Provide detailed quarterly briefings on Board of Regents activities involving technology transfer to all campus technology transfer offices

Stakeholder Coordination (30%)

- Facilitate activities of the Network of Technology Transfer Professionals of Louisiana and MPRAC to address barriers to commercialization and technology development involving public and independent campuses.
- Seek competitive projects related to technology transfer and notify campuses, particularly of collaborative opportunities (State, federal, private)
- Initiate and facilitate development and organization of industry/academia workshops related to Louisiana's priority areas for investment

Strategic Resource Facilitation (20%)

- Participate in the Master Plan Research Advisory Committee's development, recommendation of statewide policies related to technology transfer, research commercialization, and intellectual property issues
- Facilitate development of strategic resource and service sharing among participating campuses and assist campuses and industries in locating appropriate expertise (e.g., campuses without technology transfer offices, industry seeking research partners and/or specific research assistance)

- Act as a liaison to enhance communication among the Regents, the Louisiana Department of Economic Development, and the Louisiana Innovation Council on statewide issues related to technology transfer, research commercialization, and intellectual property development

Minimum Qualifications:

- An advanced degree (M.A./M.S. or equivalent), preferably in a science, technology, engineering, or business discipline
- Minimum three (3) years of relevant professional experience in academia, government, or business; technology transfer or related experience may be considered in lieu of the advanced degree requirement
- Extensive knowledge of academic research and development landscapes and working knowledge of intellectual property law
- Exceptional oral and written communication skills including the ability to manage confidential information
- Demonstrated exceptional interpersonal skills and ability to work as part of a coordinated team
- Ability to build and maintain strong relationships with diverse groups, including campus faculty and administrators, political officials, non-profit organizations, and private industry
- Strong non-technical writing skills and experience writing and developing visual presentations for general audiences