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FOR
TECHNOLOGY TRANSFER AND RESEARCH COMMITTEE**

Committee Meeting: 2/11/2015

Board Meeting: 2/12/2015
Austin, Texas

Wallace L. Hall, Jr., Chairman
Ernest Aliseda
Alex M. Cranberg
R. Steven Hicks
Jeffery D. Hildebrand

	Committee Meeting	Board Meeting	Page
Convene	<i>11:00 a.m.</i> <i>Chairman Hall</i>		
1. U. T. System Board of Regents: Discussion and appropriate action regarding Consent Agenda items, if any, referred for Committee consideration	<i>11:00 a.m.</i> Action	Action	298
2. U. T. System: Report and discussion on the Institute for Transformational Learning's (ITL) program development and technology initiatives	<i>11:01 a.m.</i> Report/Discussion <i>Dr. Mintz</i> <i>Dr. Baker Stein</i>	Not on Agenda	299
3. U. T. System: Report on the U. T. System Innovation Framework 2014 initiative to create a U. T. Systemwide research experts tool to promote research collaboration	<i>11:15 a.m.</i> Report/Discussion <i>Dr. Huie</i>	Not on Agenda	311
4. U. T. System: Discussion and appropriate action regarding report and recommendations from the Task Force on Intellectual Property Issues	<i>11:30 a.m.</i> Action <i>President Karbhari</i>	Action	312
Adjourn	<i>12:00 p.m.</i>		

1. **U. T. System Board of Regents: Discussion and appropriate action regarding Consent Agenda items, if any, referred for Committee consideration**

RECOMMENDATION

The proposed Consent Agenda is located at the back of the book.

2. **U. T. System: Report and discussion on the Institute for Transformational Learning's (ITL) program development and technology initiatives**

REPORT

Dr. Steven Mintz, Executive Director of the U. T. System Institute for Transformational Learning (ITL), and Dr. Marni Baker Stein, Chief Innovation Officer, will report on the ITL's program development and technology initiatives. Their PowerPoint presentation is set forth on the following pages.

BACKGROUND INFORMATION

Established in Fall 2012 and endowed with \$50 million, the ITL has a bold mandate to make higher education more affordable, accessible, and effective by leading transformational initiatives powered by technology. The ITL seeks to dramatically increase student success through the design and delivery of breakthrough programming models that are student-centered, competency-based, and industry-aligned and through the development of the next generation learning environments and student lifecycle management technologies, analytics, and services needed to power the future of higher education at scale.

A presentation on the ITL was made to the Committee on November 5, 2014.

The Institute for Transformational Learning (ITL)

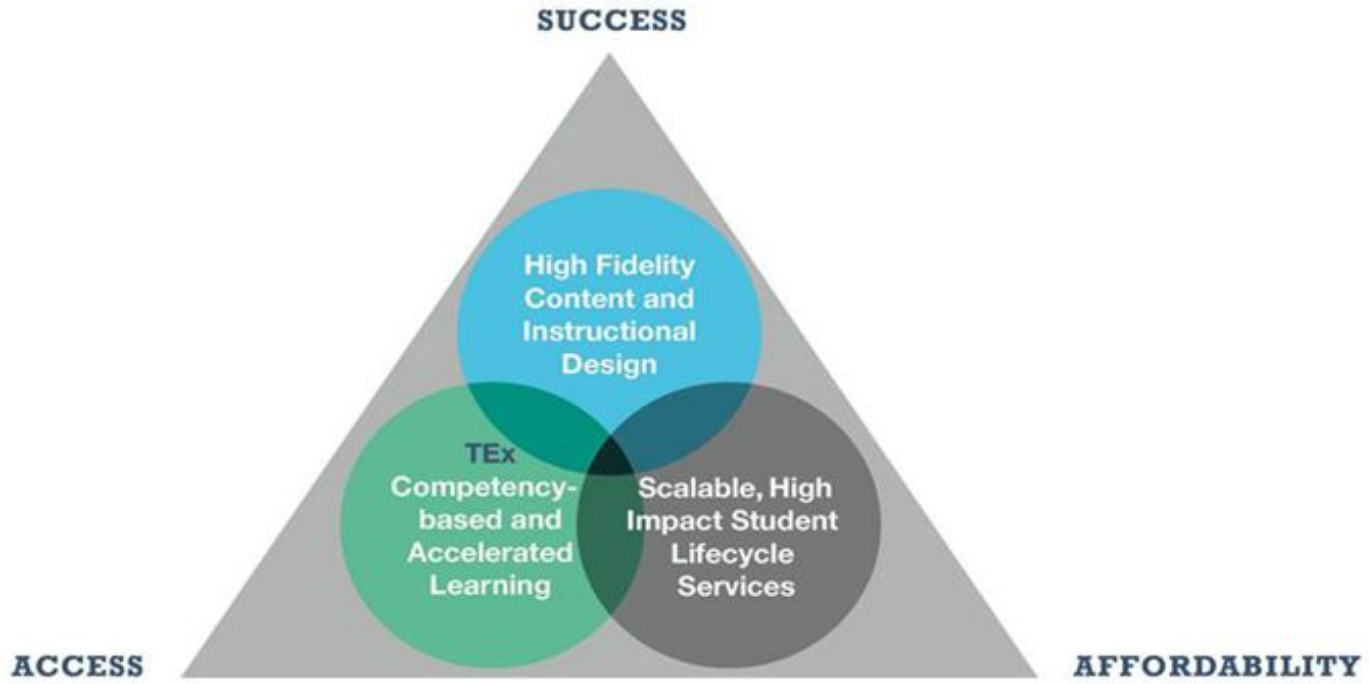
Dr. Steven Mintz, Executive Director
Dr. Marni Baker Stein, Chief Innovation Officer

U. T. System Board of Regents' Meeting
Technology Transfer and Research Committee
February 2015



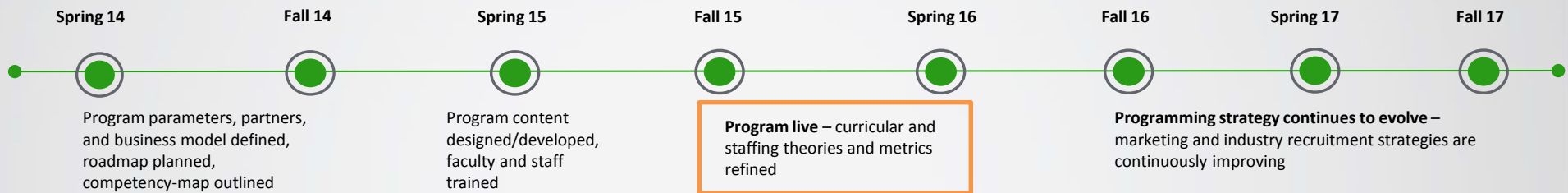
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Competency-based, Cross-Institutional Programming at Scale: In Progress: BS in Biomedical Science



Progress to Date

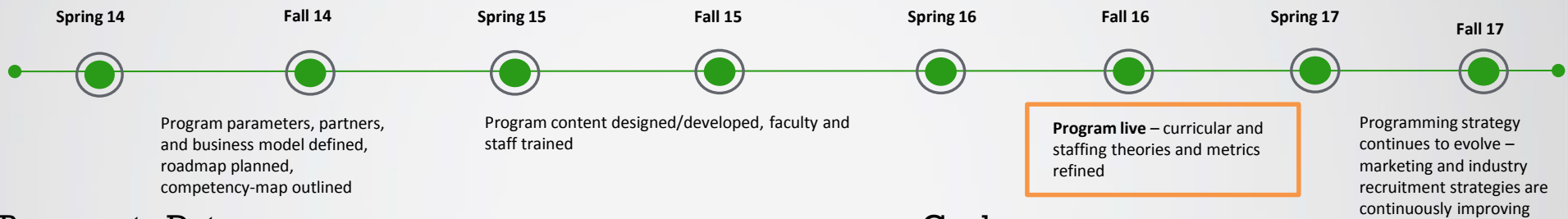
- Interagency agreement signed to support the ITL – U. T. Rio Grande Valley partnership
- Program competencies defined and aligned with medical school outcomes and admissions standards
- 3 year accelerated and 4 year traditional models blueprinted and year one schedule and supporting services defined
- Year one instructional modules in production and on track for Fall 2015 launch
- Industry advisory and super reviewer committee identified
- Partnerships to support outcomes assessment and licensing distribution to high schools identified and agreements in progress

Goals

- Significantly increase program completion rates across all student profiles
- Significantly increase student engagement and accelerate time to degree
- Increase total enrollments to: 5,000+ FTE (through programming and licensing “curriculum as a service” partnerships)



Competency-based, Cross-Institutional Programming at Scale: In Progress: Next Generation Medical School



Progress to Date

- Interagency agreement signed to support the ITL – U. T. Health Science Center - San Antonio partnership
- Competency-based education (CBE) curriculum projects complete supporting U. T. Rio Grande Valley School of Medicine and U. T. Austin Dell Medical School – program competencies defined and aligned with medical school outcomes and admissions standards
- Medical School year one and two program blueprints in progress for a tech supported, personalized, and adaptive approach for U. T. Health Science Center - San Antonio and U. T. Rio Grande Valley
- Instructional module production schedule in progress for Summer 2016 launch
- Industry advisory and super reviewer committee identified

Goals

- Significantly increase student engagement, improve success, and accelerate time to degree
- Licensing individual modules and “curriculum as a service” to schools across the country and globally



Competency-based, Cross-Institutional Programming at Scale: On the Horizon: Degree Completion



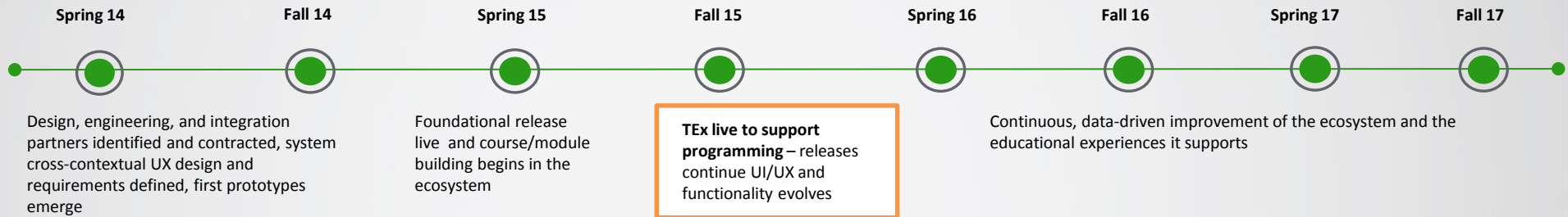
Goals

- Develop 8 competency-based undergraduate degrees in partnership with academic institutions
- Significantly increase program completion across all student profiles
- Significantly improve student engagement, outcomes, and accelerate time to degree
- Grow total enrollments to: 25,000+ FTE
- ITL operated in partnership with participating academic institutions
- Tuition revenue flows into participating academic institutions (ITL program operation expense allocated)



Total Educational Experience for Competency-based Education:

TE_x



Opportunities

- Develop first of its kind ecosystem to support mobile first, personalized, and adaptive learning capable of supporting high impact CBE initiatives across the U. T. System and beyond (programming and curriculum as a service)
- Define next generation methodologies for student lifecycle management and instructional design
- Collaborate (within Texas and nationally) with innovation-minded systems and institutions interested in growing CBE or outcomes-driven education at scale
- Internet of Things partnerships to enhance the student experience (Apple, Google, Samsung)
- Engine next generation operations, academic, and learning research

Threats

- Speed of contracting
- Coordination of complex project involving subject matter experts, design, engineering, and integration partners
- Careful selection and continual alignment of partners



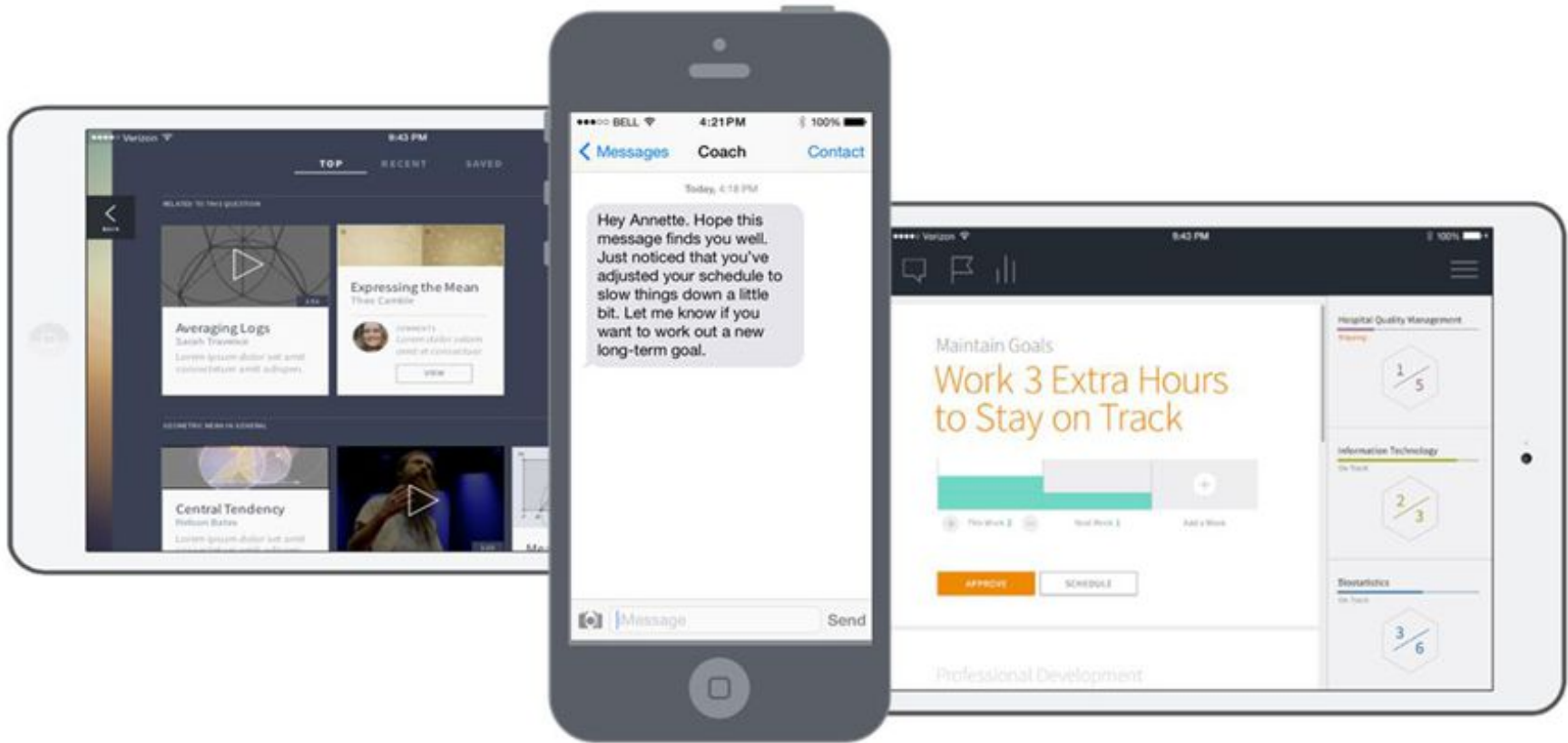
TEx is designed to support: competency-based and accelerated education



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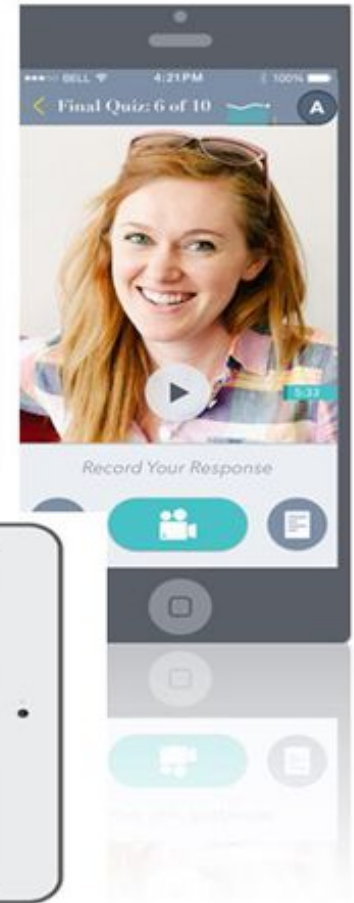
TEx is designed to support: personalized, just-in-time services



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TEx is designed to support:
engaging, high impact
learning activities

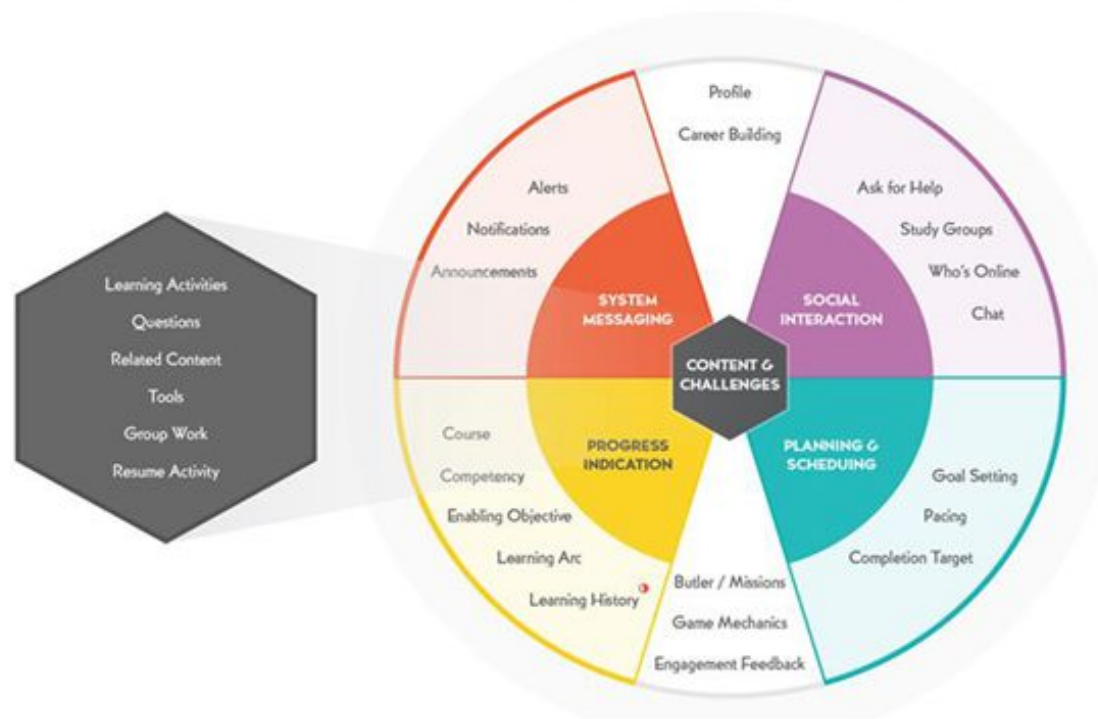


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TEx is designed to support the total educational experience – at scale

TEx Student Experience



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3. **U. T. System: Report on the U. T. System Innovation Framework 2014 initiative to create a U. T. Systemwide research experts tool to promote research collaboration**

REPORT

Dr. Stephanie Bond Huie, Vice Chancellor for Strategic Initiatives, will report on the U. T. System Innovation Framework 2014 initiative to create a Systemwide research experts tool through a live demonstration of the products in development - a website and federated search engine called "Influent at the University of Texas System." Dr. Huie will demonstrate the capabilities of the website and search engine to promote increased research collaborations across all U. T. System institutions, across disciplines, and to facilitate the formation of public-private partnerships.

BACKGROUND INFORMATION

The Board approved funding for the construction of a U. T. Systemwide Research Experts Data Warehouse with big data analytics structures on May 15, 2014. The first phase of this initiative called for the creation of a Systemwide research experts search engine for both business and industry and for internal collaborations. Progress on the development of these Board-funded tools will be demonstrated.

4. **U. T. System: Discussion and appropriate action regarding report and recommendations from the Task Force on Intellectual Property Issues**

RECOMMENDATION

The Chancellor, the Executive Vice Chancellor for Academic Affairs, and the Executive Vice Chancellor for Health Affairs concur in the recommendation of the Vice Chancellor for Research and Innovation and the Vice Chancellor and General Counsel that the U. T. System Board of Regents accept the report and recommendations of the U. T. System Task Force on Intellectual Property Issues. The report, titled Task Force on Intellectual Property: Disposition, Practices, and Mechanisms of Implementation, is set forth on [Pages 313 - 339](#).

U. T. Arlington President Karbhari, Co-Chair of the Board of Regents' Task Force on Intellectual Property Issues, will present the report of the Task Force. Dr. Karbhari's PowerPoint presentation is set forth on [Pages 340 - 346](#), with the Task Force's conclusions and recommended actions set forth on [Pages 343 - 346](#).

BACKGROUND INFORMATION

The Task Force on Intellectual Property (IP) Issues, created by Chairman Foster on February 6, 2014, was charged with examining the intent, current language, workability, and requirements of the U. T. System Board of Regents' *Rules and Regulations* governing the disposition and management of research-derived IP at U. T. System institutions. The Task Force was also asked to recommend any needed changes or revisions to the Rules.

If approved, the Task Force's recommendations will be effected in part through the Regents' *Rules and Regulations*, presented to the Board for approval, and implemented through U. T. System policies.

A presentation on the Task Force activities, key findings, and recommendations was made to the Committee on August 20, 2014.



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Task Force on Intellectual Property: Disposition, Practices, and Mechanisms of Implementation

REPORT

August 2014

U.T. System Task Force on Intellectual Property: Disposition, Practices, and Mechanisms of Implementation

The University of Texas System

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I. LETTER TO CHAIRMAN OF THE BOARD

Chairman Paul L. Foster
The Board of Regents
The University of Texas System
Ashbel Smith Hall, Suite 820
201 West 7th Street
Austin, Texas 78701-2981

Dear Chairman Foster:

The Task Force on Intellectual Property (IP) is pleased to present its report, which examines the intent, rationale, current language, and workability of the U.T. System Board of Regents' *Rules and Regulations* 90000 series on research-derived IP at U.T. System institutions.

Currently, the U.T. System research engine drives \$2.5 B in total sponsored research programs (federal, state and private grants and contracts), receives a U.S. patent every two days, signs a commercialization agreement every three days and starts a new company every nine days. In FY 2012 alone, 110 new patent licenses were executed across the U.T. System, generating total revenue of \$64.8M. The continued vibrancy of the university discovery mission is linked to the strength of academic-industry partnerships. To foster such partnerships, a culture of open innovation with efficient avenues for transferring science into technology must flourish. Furthermore, achieving the right balance between protection of institutional IP interest and the engagement of industry will enable the U.T. System to continue a leading role in discovery and innovation in the state, nation and the world.

The report makes seven recommendations:

1. The Board of Regents' *Rules and Regulations (Rules)* concerning IP should be re-written to promote industry engagement and enhance brevity, simplicity of language, and clarity of intent.
2. The *Rules* should affirm student ownership of student-created IP.
3. U.T. System must strengthen faculty and student Incentives to pursue entrepreneurship. Particularly, commercialization and discovery efforts should be considered in institutional processes related to promotion and tenure.
4. The current 50%-50% allocation of net license revenue required in the *Rules* should be re-configured so as to provide maximum flexibility to each U.T. System institution but also recognize the importance of multi-investigator and multi-disciplinary discovery.
5. In collaboration with its institutions, the U.T. System Administration should be charged to carry out a systematic assessment of how to best advance, and resource, the mission of the institutional Offices of Technology Commercialization and the process of commercialization of discovery.

6. The U.T. System should appraise strategies for using university facilities in more aggressive academic-industry partnerships within the confines of applicable I.R.S. laws and regulations. Opportunities may exist to better deploy U.T. System facilities in connection with sponsored research.
7. The U.T. System Institute for Transformational Learning (ITL) should be charged with, as part of its ongoing study, an assessment of the present state of educational technology development and how IP and commercialization in this area is currently managed at each U.T. institution, and to project the future state. This assessment is required for future recommendations concerning IP related to education technologies, particularly distance and hybrid online learning.

Implementation of these recommendations will strongly advance the discovery enterprise and its commercialization at all of our institutions, empower academic-industry partnerships and potentially reap great benefits for U.T. System and our state.

Please feel free to call on any or all of us if we can be of assistance.

Respectfully submitted,

Members, Intellectual Property Task Force

II. EXECUTIVE SUMMARY

The Task Force was created to evaluate the intent, rationale, current language, workability and requirements of the The University of Texas System (U.T. System) Board of Regents' *Rules and Regulations* related to the disposition and management of research-derived IP at U.T. System institutions and to recommend changes or revisions of the Regents' *Rules* to the Board of Regents. Five Task Force meetings were held in Austin at U.T. System from March through May, 2014. The following findings emerged over the course of these meetings.

First, the general posture of the Regents' *Rules* allows for numerous types of commercialization and sponsored research arrangements as desired by the U.T. institutions. However, there are prominently stated default rules that appear to mandate ownership of IP by the Board of Regents in all cases, obscuring potential flexibility in certain limited instances. The Task Force believes this default language significantly hinders attracting the volume and depth of sponsored research partnerships that might otherwise materialize. Second, the standing of IP created by students or related to educational technologies at U.T. System institutions is not clear in the present *Rules*. Third, faculty and student incentives to commercialize research products could be strengthened. Fourth, institutional offices of technology commercialization may not be fully positioned to advance campus commercialization objectives. Lastly, opportunities may exist to deploy U.T. System facilities in a more aggressive fashion in connection with sponsored research than may currently be in effect.

Based on these findings, this report makes seven recommendations:

1. The Board of Regents' *Rules and Regulations* concerning IP should be re-written to promote industry engagement and enhance brevity, simplicity of language, and clarity of intent.
2. The *Rules* should affirm student ownership of student-created IP.
3. U.T. System must strengthen faculty and student Incentives to pursue entrepreneurship. Particularly, commercialization and discovery efforts should be considered in institutional processes related to promotion and tenure.
4. The current 50%-50% allocation of net license revenue required in the *Rules* should be re-configured so as to provide maximum flexibility to each U.T. System institution but also recognize the importance of, and maintain a balance between, multi-investigator and multi-disciplinary discovery.
5. In collaboration with its institutions, the U.T. System Administration should be charged to systematically assess how to best advance, and resource, the mission(s) and functions of the institutional Offices of Technology Commercialization and each office's process of commercialization of discovery.
6. The U.T. System should evaluate and appraise strategies for using university facilities in more aggressive academic-industry partnerships within the confines of applicable I.R.S. laws and regulations. Opportunities may exist to better deploy U.T. System facilities in connection with sponsored research.

7. The U.T. System Institute for Transformational Learning (ITL) should be charged with, as part of its ongoing study, an assessment of the present state of educational technology development and how IP and commercialization in this area is currently managed at each U.T. institution, and to project the future state. This assessment is required for future recommendations for IP related to education technologies, particularly distance and hybrid online learning.

Implementing these recommendations will strongly advance the discovery enterprise and enhance commercialization at all of our institutions, empower and foster academic-industry partnerships and potentially reap great benefits for U.T. System and our state.

III. CHARGE TO THE TASK FORCE

Currently, the U.T. System research engine drives \$2.5 B in total sponsored research programs (federal, state and private grants and contracts), receives a U.S. patent every two days, executes a commercialization agreement every three days and starts a new company every nine days. In FY 2012 alone, 110 new patent licenses were executed across the U.T. System, and, together with existing licenses generated total revenue in excess of \$64.8M. The continued vibrancy of the university discovery mission is linked to the strength of academic-industry partnerships. To foster such partnerships, a culture of open innovation with efficient avenues for transferring science into technology must flourish.

Recent recommendations from the U.T. System Task Force on Engineering Education for Texas in the 21st Century included the need to review opportunities for, and barriers to, expanding industry engagement that supports research, and reviewing and proposing potential modifications to U.T. System's position and rules for IP. Achieving the right balance between protecting institutional IP interests and engagement of industry and the commercialization of discovery is a primary goal that will enable U.T. System institutions to continue playing a leading role in discovery and innovation in the state, nation, and the world.

The Task Force was created to evaluate the intent, rationale, current language, workability and requirements of the U.T. System Board of Regents' *Rules and Regulations* related to the disposition and management of research-derived IP (Series 90000) at U.T. System institutions and to recommend changes or revisions to the Regents' *Rules* to the Board of Regents. Specific aspects of the charge included:

- Review Regents' *Rules* concerning IP, propose and consider future revisions in the context of applicable federal and state law;
- Consider best practices in public university systems or peer organizations for the disposition and management of IP;
- Evaluate new and emerging models of flexible IP ownership as implemented by peer universities and academic health institutions;
- Review Regents' *Rules*, propose revisions or new rules concerning IP relative to education-based inventions, specifically online and distance education technologies and materials;

- Review Regents' *Rules*, propose and consider future revisions concerning IP of student origin;
- Review potential impact of any such changes in disposition and management of IP to researchers at all levels, including potential philanthropic support from grateful faculty and student innovators;
- Consider potential impact for industry partnerships; and
- Consider contract review processes that insure the timely execution of transactions.

IV. TASK FORCE MEMBERSHIP

- Regent Wallace L. Hall, Jr., Task Force Co-Chair and Regent, U.T. System Board of Regents
- Dr. Vistasp M. Karbhari, Task Force Co-Chair and President, The University of Texas at Arlington
- Dr. David E. Daniel, President, The University of Texas at Dallas
- Regent Nash Horne, Student Regent, U.T. System Board of Regents
- Dr. Roberto Osegueda, Vice President of Research and Sponsored Projects, The University of Texas at El Paso
- Dr. Gregory L. Fenves, Executive Vice President and Provost, The University of Texas at Austin
- Dr. Sadiq Shah, Vice Provost for Research and Sponsored Projects, The University of Texas-Pan American
- Dr. Cory R.A. Hallam, Chief Commercialization Officer, Office of Commercialization and Innovation, The University of Texas at San Antonio
- Dr. Frank Grassler, Vice President for Technology Development, The University of Texas Southwestern Medical Center
- Dr. Ferran Prat, Vice President Strategic Industry Ventures, The University of Texas M. D. Anderson Cancer Center

(Ex officio):

- Dr. Francisco G. Cigarroa, Chancellor, U.T. System
- Dr. Patricia D. Hurn, Vice Chancellor for Research and Innovation, U.T. System
- Dr. Dale E. Klein, Associate Vice Chancellor for Research, Academic Affairs, U.T. System
- Mr. Evan E. Fitzmaurice, Attorney, Office of General Counsel, U.T. System
- Mr. Bryan Allinson, Special Consultant Technology Commercialization, U.T. System

V. STUDY PROCESS

Five Task Force meetings were held in Austin at U.T. System from March through May, 2014. Each meeting was held for two to three hours, and members participated either face-to-face or by conference call. Prior to the first task force meeting, all U.T. System campus faculty were surveyed for non-structured comments on local experiences with university IP processes by electronic survey. All participation from faculty was voluntary, and responses were collected with anonymity, identified only by campus location unless the faculty member chose to provide an e-mail address in their response. All survey data were analyzed by the U.T. Office of Strategic Initiatives and made available to the Task Force. All documents and recommended readings provided to the Task Force in advance of a meeting were archived by Microsoft SharePoint for Task Force use throughout the meeting period.

Agendas, meeting work plans and guest speaker credentials for all meetings are found in [Appendix A](#).

VI. TASK FORCE FINDINGS

Key overall findings of the Task Force are summarized as follows.

1. Results of review of the language, tone and organization of current Regent's *Rules*.

Industry-sponsored research is growing in importance in the face of reduced availability of federal funding for university research. The Regents' *Rules* are perceived by many, including potential industry partners, to be an obstacle to crafting workable sponsored research arrangements with U.T. System institutions.

The Regents' *Rules* have been amended over twenty times since 1985, when the Board of Regents first implemented a comprehensive IP program for the U.T. System by replacing the then-existing "Patent Policy" with three policies regarding license agreements, sponsored research agreements and marketing.

As part of a detailed review of current Regents' *Rules* ([Appendix B](#)), their general posture was found to be more flexible than initially meets the eye and allowed for numerous types of commercialization and sponsored research arrangements as desired by the U.T. institutions. However, plainly and prominently stated default rules that appear to mandate ownership of IP by the Board of Regents in all cases obscures this flexibility. This default language is believed to significantly hinder attracting the volume and depth of sponsored research partnerships that might otherwise materialize.

The Regents' *Rules* should reflect sponsored research policies that are adaptable to the highly varied circumstances that characterize the broad portfolio of research at U.T. System institutions and in industry, both in terms of style and content.

Subject to the Bayh-Dole Act of 1980 and its restrictions, Regents' *Rules* that are meant to encourage and strengthen university-industry partnerships should recognize that industry, which is paying for research, prefers to own all IP resulting from the university's work. Depending on the nature of the research, this preference is not necessarily seen as unreasonable or objectionable in certain cases.

While the university brings a wealth of background knowledge, capability, and frequently, its own background IP to bear on a project, doctrinaire default rules mandating ownership of IP by the Board of Regents in all cases may not indicate the actual willingness of U.T. System institutions to negotiate in this regard. This willingness is reflected in the existing Regents' *Rules*, but can only be found in guidelines and procedures buried deep within the *Rules* and

in external U.T. System-wide Policies and guidelines established by the Office of General Counsel (OGC).

Examination of the latter reveals a preference in sponsored research arrangements for an option to negotiate for either an exclusive or nonexclusive right to a license to develop and commercialize any IP resulting from the project for a royalty in an amount to be negotiated. Arrangements that reflect deviation from this policy, such as a non-exclusive license or exclusive license from inception, or even outright assignment of IP created during the project, require special approvals of such deviations from policy, which are frequently given at U.T. institutions. Unfortunately, potential industry sponsors may be unwilling to wade deeply into the procedures described in these documents, particularly if already deterred by the initial provisions of the Regents' *Rules* mandating what appears erroneously to be an inflexible Board ownership, without the appearance of any likelihood of variation.

The Task Force found that industrial support of research will be earned only if timely and efficient processes exist to manage IP issues at the institutional level. Industry partners desire rapid decisions about IP, without unnecessarily prolonged processes with institutional commercialization offices.

2. Standing of IP created by students at U.T. System institutions is not clear in the present *Rules*.

The Task Force recognized long-standing concerns that the *Rules* are not clear on the subject of ownership of IP created by students. These concerns are magnified by the blanket presumption in the *Rules* that the Board of Regents owns IP created by U.T. System employees and individuals using the resources and facilities of U.T. System. A specific concern is that the Board of Regents could claim to own IP created by non-employee students who do not use U.T. System resources and facilities, or who solely use commonly provided resources and facilities for the use of which the students have paid tuition and fees. The Task force found no evidence that this was the intent of the *Rules*; however greater clarity on this issue would be important.

The Task Force studied the positions of numerous research-intensive universities and university systems regarding student-created IP. In general, registered undergraduate or graduate students using commonly provided resources and facilities (for which they have paid tuition and fees) should be allowed to own the IP they create, unless (a) they are also employees and the IP is developed within the scope of their employment, in which case they must observe the IP rules governing institutional employees, (b) they work on an institutional project or under a work for hire contract with their institution, (c) they choose to participate in a project in which any IP created has been committed to a governmental, philanthropic or corporate sponsor, or (d) they jointly create the IP with a non-student, in which case the *Rules* and applicable law would dictate ownership.

3. If research commercialization is to grow within U.T. System and become part of the dominant discovery culture at each U.T. institution, faculty and student incentives in this area must be strong.

The Task Force identified that U.T. institutions currently use a variety of practices to incentivize research commercialization and to encourage faculty and students to more actively engage in the pursuit of entrepreneurship in research. Data and definition for number of disclosures, licenses, and revenue by U.T. institutions for the years 2009-2013 were studied ([Appendix C](#)). In May 2014, the U.T. Board of Regents approved and created resources for the creation of a U.T. System-wide Entrepreneurship Academy that would provide education and training in this important area to faculty and students at all U.T.

institutions. Recognizing the importance of commercialization and creation of IP should be included as significant positive factors when evaluating research impact during promotion and tenure processes.

Also studied was the allocation of licensing royalty income as an incentive for faculty to translate their research into use. The current *Rules* allocate licensing and equity revenues in a 50-50 division between the IP creator and U.T. System institution, subject to readjustment if approved by the Board of Regents. The Task Force evaluated practices in this regard at numerous peer institutions. The Task Force finds that the 50-50 split does not allow each U.T. institution maximum flexibility, diminishes the importance of balancing multi-investigator and multi-disciplinary discovery and notes that some peer institutions provide less generous arrangements. A better approach would be to allocate income to the IP creator (net of the costs of licensing) from within a narrow distribution range, thus empowering each U.T. System institution to determine the precise allocation between creator and institution.

4. If industry-sponsored research is to grow and prosper as part of each university's discovery portfolio, then institutional offices of technology commercialization must be adequately funded and positioned to advance this objective.

Each U.T. System institution has different needs, assets, aspirations, and opportunities in the area of commercialization and the creation of IP, but each shares a need for resources and investment that will allow them to achieve their highest potential in discovery to commercialization and will foster and nurture strong and longstanding industry research partnerships.

Institutional offices of technology transfer and commercialization require significant resources and consistent operational funding streams, if they are to fully carry out their mission in a competitive landscape. The Task Force reviewed a variety of creative, cost-effective mechanisms by which universities and academic health centers across the country advance commercialization of research. There are many such mechanisms, and developing best practices in this area could confer considerable strategic and competitive advantage to U.T. institutions.

5. Opportunities may exist to deploy U.T. System facilities in a more aggressive fashion in connection with sponsored research than may currently be in effect.

The Task Force studied I.R.S. laws and regulations concerning tax-exempt bonds and the private use complications that arise in connection with sponsored research agreements relating to bond-financed facilities. After consultation with U.T. System outside bond counsel, the Task Force found that such considerations may not prove to be a definitive hurdle to crafting policies in the *Rules* that better incentivize sponsored research in this regard. A clear, quantitative understanding should be created and established as to how "safe harbors" within the private use realm can be reported and employed within relevant buildings at each U.T. System campus. Such understanding could allow institutional leadership to take better advantage of opportunities for industry partnerships.

6. Standing of educational technology as IP at U.T. System institutions is not clear in the present *Rules*.

U.T. System faculty and students are increasingly engaged in developing novel technologies and potentially commercializable educational products, particularly in online, distance and adaptive personalized education technologies. Currently, inadequate data are available on the level and intensity of this activity across U.T. System institutions. The ITL is best situated to assess and quantify the present state of these efforts, and is currently conducting a study

of this activity and capabilities. Once data are available to better understand the present state of activity at U.T. institutions and to project future opportunities, the Task Force will need to evaluate the *Rules* relating to copyright ownership in order to best permit the deployment and exploitation of new models of learning.

VII. RECOMMENDATIONS

A significant barrier to attracting more industry-sponsored research appears to be the real or perceived obstacles related to U.T. System's IP rules and guidelines. Some of the obstacles are real, and others are matters of perception and lore by both industry partners and by faculty, students, and administrators in U.T. System institutions.

The IP Task Force presents seven recommendations aimed at addressing this concern, specifically to: (1) revise the Board of Regents' *Rules and Regulations* concerning IP, (2) affirm student ownership of student-created IP, (3) strengthen faculty and student incentives to pursue entrepreneurship, (4) increase flexibility at U.T. System institutions by reconfiguring the existing 50%-50% allocation of net license and equity proceeds, (5) perform a systematic assessment of how to best advance Offices of Technology Commercialization and the process of commercialization at each U.T. System institution, (6) appraise strategies for using university facilities in more aggressive industry partnerships within the confines of applicable state and I.R.S. laws and regulations, and (7) task the ITL, as part of its ongoing study, to assess the present state of educational technology development and how IP and commercialization in this area is currently managed at each U.T. institution, and to project the future state.

Recommendation 1: Revise the Board of Regents' Rules and Regulations Concerning IP

The Board of Regents' *Rules and Regulations* Concerning Intellectual Property (IP) should be rewritten to simplify the language, clarify the intent and shorten the policy while promoting strong and longstanding industry engagements.

The Regents' *Rules* should more explicitly recognize the importance of translating research into commercialization and/or use by society as a mission of the U.T. System and its component institutions, and emphasize the high value placed on partnerships with the private sector. The language should be revised to emphasize flexibility and adaptability, rather than appearing inflexible and "automatic," by didactically vesting all IP rights in the Board of Regents without clearly indicating the broad variety of commercialization and sponsored research arrangements available at institutions.

In addition, the Regents' *Rules* should be preceded by a new preamble that clearly states the key values of welcoming industry partnerships in discovery, seeking out innovative academic-industry co-development of IP, and of adapting to unique, favorable circumstances wherever feasible. In addition, the preamble should describe key principles that will guide existing and new institutional documents and processes related to IP and discovery commercialization. Recommended language for such a preamble is contained in [Appendix D](#).

Recommendation 2: Affirm Student Ownership of Student-Created IP

The Board of Regents' *Rules and Regulations* concerning IP created by students are confusing as to whether students actually own the IP they create.

The *Rules* should be revised to clearly articulate the ownership status of IP arising from undergraduate and graduate student work. New language should state that students, defined as registered undergraduate or graduate students, own the IP they create in courses and extra-curricular activities. This clear statement would address circumstances where the students are

using resources and facilities of U.T. System institutions commonly provided for the student's use for which they have paid tuition and fees.

In contrast, the new language would reflect that a student would not own the IP that he/she creates if:

- 1) the student is also an employee *and* the IP is developed within the scope of his/her employment, in which case the student will observe the normal rules governing employees;
- 2) the student works on an institutional project or under a work-for-hire contract with a U.T. System institution;
- 3) the student chooses to participate in research which results in the creation of IP that has been committed to a governmental, philanthropic or corporate sponsor; or
- 4) the student jointly creates the IP with a non-student, in which case the *Rules* and applicable law would dictate ownership.

Recommendation 3: Strengthen Faculty and Student Incentives to Pursue Entrepreneurship

Commercialization and discovery efforts should be considered in promotion and tenure.

We recommend that the U.T. System and its institutions explore ways to increase incentives for faculty and students to more actively engage in the discovery process by pursuing entrepreneurship and commercialization of research. For example, commercialization and creation of IP are well-recognized as integral parts of discovery at our universities, and as such, they should be considered as a factor in assessing research impact in institutional processes to determine promotion and tenure.

Recommendation 4: Reconfigure the 50%-50% Allocation of Net License and Equity Revenue Between Researchers and Institutions in Order to Increase Flexibility at U.T. System Institutions

Provide maximum flexibility to each U.T. System institution while recognizing the importance of multi-investigator and multi-disciplinary discovery, as appropriate, to better align the U.T. System institutions with peer institutions.

In those instances where a U.T. System institution licenses rights in IP to third parties, the allocation of income (net of the costs of licensing) set forth in the Regents' *Rules* should be reallocated to provide flexibility to the U.T. System institutions as to how such income may be distributed.

The Regents' *Rules* currently allocate 50% to the creator(s) and 50% to U.T. System or U.T. System institution of such income derived from license fees, pre-paid royalties, milestone payments and many other types of arrangements.

We recommend that this division of income be revised to give each U.T. institution maximum flexibility and better align U.T. System institutions with peer institutions, while recognizing the importance of multi-investigator and multi-disciplinary discovery.

Specifically, the Regents' *Rules* should be revised to reflect that an allocation range of 30-50%, rather than a flat 50%, can be disbursed to the creator(s), and that each individual U.T. System institution would determine the actual share within that range. The remaining 50%-70% would be disbursed to the U.T. System institution in its sole discretion.

The same change would apply when the U.T. System institution elects to share an equity interest, dividend income, or the proceeds of the sale of an equity interest with the creator(s) or when any U.T. System institution receives equity interests as partial or total compensation for the rights conveyed in agreements with business entities relating to rights in IP.

Recommendation 5: Carry Out a Systematic Assessment of How to Best Advance Offices of Technology Commercialization and the Process of Commercialization of Discovery at Each U.T. System Institution

Each U.T. System institution has different needs, assets, aspirations, and opportunities in the area of commercialization and the creation of IP, but each shares a need for sufficient resources and investment that will allow them to achieve their highest potential in discovery to commercialization and strong industry research partnerships.

Institutional offices of technology transfer and commercialization require significant resources and consistent operational funding streams, if they are to fully carry out their mission in a competitive landscape. The Task Force reviewed a variety of creative, cost-effective mechanisms by which universities and academic health centers across the country advance commercialization of research. There are many such mechanisms, and developing best practices in this area could confer considerable strategic and competitive advantage for U.T. institutions.

U.T. System should carry out a systematic assessment of how best to advance offices of technology commercialization, and more generally, the processes of discovery commercialization at each U.T. institution and across and between- U.T. System institutions. The assessment should be guided by the knowledge that each institution has different needs, assets, and opportunities in the area of commercialization and the creation of IP. These differences, as well as similarities, should be assessed and communicated.

The importance of proof-of-concept funding, and how to prioritize and align such funding relative to the marketplace, should be determined. In addition, the importance and potential impact of a U.T. System-wide entrepreneur-in-residence program should be evaluated. Best practices from organizations outside U.T. System should be included in the assessment.

Based on the conclusions of this assessment, U.T. System should consider the best mechanisms by which to provide resources that will incentivize, promote and support U.T. institutions to achieve their highest potential in discovery commercialization and strong industry research partnerships.

Recommendation 6: Appraise Strategies For Using University Facilities In More Aggressive Industry Partnerships Within the Confines of Applicable I.R.S. Laws and Regulations

Opportunities may exist to deploy U.T. System facilities in a more aggressive fashion than may currently be in effect in connection with sponsored research.

I.R.S. laws and regulations concerning tax-exempt bonds and the private use complications that arise in connection with sponsored research agreements relating to bond-financed facilities are rife with complexity, but U.T. System, in collaboration with its institutions, should appraise strategies for commercialization and academic-industry opportunities concerning university facilities that are consistent with state and federal law.

A clear, quantitative understanding should be developed of how “safe harbors” can be reported and employed within relevant buildings at each U.T. System campus so that administrators can

take advantage of opportunities that may exist to craft additional arrangements with industry sponsors.

Recommendation 7: Task the ITL to Assess the Present State of Educational Technology Development and How IP and Commercialization in this Area is Currently Managed at Each U.T. Institution, and to Project the Future State

Rapidly emerging educational technology will continue to alter the landscape for instruction and pedagogical activity across the U.T. System in coming years.

U.T. System faculty and students are increasingly engaged in developing novel technologies and potentially commercializable educational products, and this trend should be strongly encouraged.

At present, inadequate data are currently available on the level and intensity of this activity across U.T. System institutions. As such, the need and path forward for revision of the Regents' Rules and IP-related processes is unclear, although it would appear at a minimum that the Regents' Rules relating to copyright ownership may not be ideally constructed to best accommodate these new models of learning.

As part of its ongoing study, the ITL should assess and quantify educational technology development, IP and commercialization in the present state at each U.T. institution, and project the future state. The ITL should present the results of this appraisal and projection to the Task Force in Fall, 2014. Further recommendations will be advanced at that time.

VIII. FOLLOW UP ACTIONS

If the U.T. System Board of Regents believes that the conclusions presented by the IP Task Force warrant serious consideration for implementation, the following actions are recommended:

1. Develop new IP language for Series 90000 of Regents' Rules, which is succinct, simplified, clear and conveys the importance of discovery and of commercialization as a fundamental mission of the U.T. System.
2. Amend the present Regents' Rules to include language addressing recommendations 2 through 4.
3. Task the U.T. System Office of Technology Commercialization, in collaboration with all U.T. institutions, to systematically evaluate how best to advance the mission of the institutional offices of technology transfer and commercialization. Once a detailed plan has been developed, the resources necessary to support such advancement need to be identified.
4. The U.T. System, in collaboration with its institutions, should carry out an appraisal of strategies and "safe harbors" for best deployment of U.T. System facilities relevant to sponsored research and commercialization.
5. The U.T. System ITL should be charged, as part of its ongoing study, to assess the present state of educational technology development and how IP and commercialization in this area is currently managed at each U.T. institution, and to project the future state. This assessment is required for future recommendations for IP related to educational technologies, particularly distance and hybrid online learning.

Appendix A. SUMMARY OF MEETING AGENDA AND PRESENTERS

March 21, 2014:

- Welcome and introductions
- Review of Task Force Charge and Intent
- Review of Current Regents *Rules* and Implications for University IP
 - Presentation and Discussion Lead: Evan E. Fitzmaurice, Attorney, U.T. System Office General Counsel and Office of Technology Commercialization
- Briefing on federal law relevant to university federally funded vs. non-federally funded IP
 - Presentation and Discussion Lead: Evan E. Fitzmaurice, Attorney, U.T. System Office General Counsel and Office of Technology Commercialization
- Discussion of how Regent's *Rules* and relevant are used in practice at U.T. Institutions (all)

April 4, 2014:

- Summary of previous meeting key points and any continued discussion on legal aspects for consideration in revising Regents' *Rules*
 - Presentation and Discussion Lead: Evan E. Fitzmaurice, Attorney, U.T. System Office General Counsel and Office of Technology Commercialization
- Review of quantitative data from Association of University Technology Managers for U.T. Institutions
 - Presentation and Discussion Lead: Bryan Allinson MBA, Special Consultant Technology Commercialization, U.T. System
- Synopsis and comments on IP practices and commercialization models at Georgia Tech University, Iowa State University, North Carolina State, Pennsylvania State University, University of Arizona, University of Colorado, University of Iowa Research Foundation, University of Michigan and University of Minnesota
 - Presentation and Discussion Lead: Bryan Allinson MBA, Special Consultant Technology Commercialization, U.T. System
- Deeper discussion of practices and experiences, Phone interviews
 - Dr. Ronald Huss, Associate Vice President for Research and Technology Transfer and Director, Office of Technology Management, Pennsylvania State University.

Ron received his B.A. in biochemistry from the University of Wisconsin-Madison and his Ph.D. in biochemistry from the University of Illinois, Urbana-Champaign. He worked in the biotechnology industry for over 12 years as a research scientist, group leader, project manager, director of research and business development. Recently, the Industrial Research Office (IRO) and the Intellectual Property Office (IPO) at Penn State have merged to form a new Office of Technology Management (OTM). This is the first step in realizing an aggressive new vision at Penn State for technology development and translation to the market. OTM will focus on fostering an ecosystem for technology innovation and translation; it will be responsible not just for the successful marketing of Penn State IP and much more vigorous licensing to corporations and to start-up companies, but also for assisting faculty interested in doing more market relevant research. As of March 2014, Ron is leading a process to auctioning of many of Penn State's under-performing and/or underutilized patents (LINK: <http://news.psu.edu/story/306440/2014/03/04/research/penn-state-auction-intellectual-property-licenses>)

- Dr. Lisa Lorenzen, executive director of the Iowa State University Research Foundation (ISURF), a non-profit corporation that manages IP including patents, copyrights, and materials on behalf of Iowa State University.

Before becoming executive director of ISURF, Lorenzen coordinated Iowa State campus activities for industry visitors and managed economic development grant programs. She has a background in genetics and worked as a computational biologist with the bioinformatics group at Pioneer Hi-Bred International, Inc. Her work as executive director of ISURF focuses on technology transfer and economic development. Lisa has a PhD in Genetics from Iowa State University. Lisa is involved with industry-university collaborations, including Iowa Experimental Program to Stimulate Competitive Research (EPSCoR), a federal program designed to improve the research capacity of eligible states or regions, making them nationally competitive for future grants. (LINK: <http://vimeo.com/71576858>)

April 18, 2014:

- Summary of previous meeting key points and any continued discussion on practices and models around the U.S. for consideration in revising Regents' *Rules*
 - Presentation and Discussion Lead: Bryan Allinson MBA, Special Consultant Technology Commercialization, U.T. System
- Continuation of phone interviews with National IP leaders
 - Carl Gulbrandsen, Managing Director, Wisconsin Alumni Research Foundation serving University of Wisconsin, Madison WI.

Mr. Gulbrandsen is the Managing Director of Wisconsin Alumni Research Foundation, the patent management organization for the University of Wisconsin Madison. Mr. Gulbrandsen received his B.A. degree from St. Olaf College, Northfield, Minnesota. He received a Ph.D. degree in physiology from the University of Wisconsin –Madison and a J.D. degree from the University of Wisconsin Law School. He is admitted to practice law in the State of Wisconsin and before the United States Patent and Trademark Office. From 1981 until 1992 he was in the private practice of law. Mr. Gulbrandsen's law practice concentrated on IP with a specialty in patent prosecution and litigation. In 1992 Mr. Gulbrandsen became General Counsel of Lunar Corporation and Bone Care International, Inc. Lunar Corporation is a medical device company. Bone Care International, Inc. is a pharmaceutical company. Both companies are located in Madison, Wisconsin and sell products based on technology arising from research conducted at the University of Wisconsin – Madison. Mr. Gulbrandsen is a member of the Licensing Executive Society, the American Intellectual Property Law Association, the Wisconsin State Bar and the American Bar Association. He is also a member of the Executive Committee of the Wisconsin Technology Council. He is a member of the Patent Public Advisory Council for the United States Patent and Trademark Office.

- Doug Hockstad, Director, Office of Technology Transfer at University of Arizona, Tucson AZ.

Mr. Hockstad is the new Director of the revitalized Office of Technology Transfer at the University Of Arizona as of March 2013. The Office of Technology Transfer helps to accomplish the broader University of Arizona mission by providing a variety of services to faculty that protects IP whilst sharing important knowledge and discoveries with the world through technology commercialization. Mr. Hockstad joined UA after having served as Associate Director, Software & Engineering Licensing in the University of Michigan's Office of Technology Transfer. In this role, along with his primary responsibility for managing software and other copyright-related IP created across the entire U of M campus, he also managed the office's information technology requirements, and served as the liaison between OTT and the College of Engineering. Mr. Hockstad holds a BSE in Computer Engineering from the University of Michigan.

- Eric Lium, Vice President and Executive Director of Mount Sinai Innovation Partners serving Mount Sinai Hospital, New York NY.

Dr. Lium, a 16-year veteran with an extensive background in the academic, technology and medical sectors facilitates the real-world application and commercialization of Mount Sinai discoveries and the development of research partnerships with industry. Dr. Lium previously held the post of Assistant Vice Chancellor for Innovation, Technology and Alliances at the University of California, San Francisco, where he led a team of scientists, attorneys, and business development professionals responsible for advancing UCSF's research, instruction, and public service missions through the development of public-private research partnerships, management and licensing of technologies for commercialization, and entrepreneurship training and support. During his nearly nine year tenure at UCSF, Dr. Lium was twice the recipient of grants from the National Science Foundation. Prior to his service at UCSF, Dr. Lium served in senior roles in information services companies focused on the pharmaceutical, biotechnology, and engineering sectors. In 2001, he co-founded LabVelocity, software and information services company that provided life science research organizations with solutions to accelerate experimental design, as well as technology-based sales and marketing solutions for research tool vendors. In 2013, Dr. Lium testified before the U.S. House of Representatives' Committee on Science, Space and Technology, Subcommittee on Research on the importance of technology transfer at universities, research institutes and laboratories, and approaches to foster innovation and commercialization. Dr. Lium earned master's degrees in the arts and philosophy, and a PhD from the Integrated Program in Cellular, Molecular and Biophysical Studies at Columbia University; Dr. Lium served as a post-doctoral research scientist at Columbia and at the G.W. Hooper Foundation at UCSF, and graduated cum laude from Gonzaga University with a B.S. in Biology.

- Jay Schrankler, Executive Director, Office of Technology Commercialization at University of Minnesota, Minneapolis-St. Paul MN.

During his 26 years at Honeywell, Jay Schrankler held key management and executive roles spanning the Aerospace Business to the Automation and Control

Solutions business. After successfully leading Honeywell's \$1.1B Global Environmental Controls Business as Vice President and General Manager, he spent five years as the Vice President of Honeywell's Automation and Control Solutions Business (\$13B in sales) IP licensing and marketing business. He built this business from scratch by licensing Honeywell's technology as well as its renowned trademark. In April 2007, he was appointed the Executive Director of the University of Minnesota's new Office for Technology Commercialization. Schrankler's group is responsible for mining the University for key inventions and determining the best route to commercialization. This comes in the form of technology licenses and in new venture startup companies created by the University's Venture Center. As an undergraduate at the University of Minnesota he studied electrical engineering before getting master's degrees in Electrical Engineering and in Computer Science at the University of Wisconsin. He has also completed executive management certifications at Harvard University and UCLA. Schrankler also has held engineering positions at both 3M and Unisys Corp.

- Wendy Streitz, Executive Director, Research Policy Analysis & Coordination at University of California, Oakland CA.

Ms. Streitz focuses on UC-wide technology transfer coordination, UC patent & related IP policy development, IP manager meetings, tech transfer advisory committee (TTAC), UC policy guidance, web-based tools and resources and IP in clinical trials. Prior to joining the University of California, Ms. Streitz was Associate Director, Intellectual Property and Technology Transfer at Auburn University in Alabama, where her caseload included technologies from both the physical and life sciences. Prior to that, she spent twelve years at Westinghouse Electric Corporation, holding leadership positions in signal processing. She received a MS in electrical engineering from The Johns Hopkins University and BSE from Harvey Mudd College.

May 7, 2014:

- Consideration of IP rules and potential revisions relative to U.T. System institutional tax exempt status
 - Presenters and Discussion Leads: Victoria N. Ozimek, Partner Bracewell & Giuliani

Ms. Ozimek's practice focuses on advising clients regarding tax aspects of the issuance of tax-exempt and tax credit obligations. She serves a tax counsel on governmental and conduit financings, where she works with issuers and borrowers to review and structure proposed new money and refunding obligations. She received a JD from Harvard Law School, a BA from Tulane University and is a member of the bar of the State of Texas.

- R. Todd Greenwalt, Partner, Bracewell & Giuliani.

Mr. Greenwalt's practice focuses on governmental entities and tax-exempt organizations, advising clients with regard to tax-exempt financings and other business transactions, and resolving tax-exempt status issues. He received a JD from

the University of California at Los Angeles, BS from the University of Arizona and is a member of the bar of the State of Texas.

- Discussion of Student IP Rule Revisions
 - Presenter and Discussion Leads: Jim Phillips, Managing Attorney, Office of General Counsel, U.T. System and Dr. Dale Klein, Associate Vice Chancellor for Research, Office of Academic Affairs, U.T. System
- Creation of a potential preamble to the Regents' *Rules* that could address overlying sponsored research philosophy of the U.T. System and its Institutions
 - Presenter and Discussion Leads: Dr. Patricia Hurn, Vice Chancellor for Research and Innovation, U.T. System and Evan E. Fitzmaurice, Attorney, Office General Counsel and Office of Technology Commercialization, U.T. System

May 30, 2014:

- Discussion and Action: Emerging Recommendations from the IP Task Force (all)
- Discussion of IP Issues around educational technologies for U.T. System institutions and for the Institute for Transformational Learning
 - Presenter and Discussion Lead: Marni Baker Stein, Chief Innovation Officer, Institute for Transformational Learning, U.T. System
- Discussion and Action: Recommendations and Future Planning

Appendix B. THE INTELLECTUAL PROPERTY LANDSCAPE: SERIES 90000 OF THE REGENTS' RULES AND REGULATIONS AND RELATED LAW

The Default Board of Regents Ownership Rule: Rule 90101, Section 2

“The Board of Regents automatically owns the intellectual property created by individuals subject to this Rule that is described in Sections 3, 5, and 6 below and in Rule 90102, Sections 2 and 3. Accordingly, all individuals subject to this Rule must assign and do hereby assign their rights in such intellectual property to the Board of Regents. Moreover, individuals subject to this Rule who create such intellectual property (creators) shall promptly execute and deliver all documents and other instruments as are reasonably necessary to reflect the Board of Regents' ownership of such intellectual property. A creator of intellectual property owned by the Board of Regents has no independent right or authority to convey, assign, encumber, or license such intellectual property to any entity other than the Board.”

Individuals Subject to Default Ownership Rule: Rule 90101, Section 2

- All U.T. System Employees
- Works for Hire and Institutional Projects
- Anyone Using U.T. System or Institutional Facilities and Resources
- Undergraduate and Graduate Students, Visiting Scientists and Faculty
- Masters and Doctoral Candidates
- Post- and Pre-Doctoral Fellows

IP Subject to Default Ownership Rule: Rule 90102, Section 2

“Intellectual property either developed within the course and scope of employment of the individual or resulting from activities performed on U.T. System time, or with support of State funds, or from using facilities or resources owned by the U.T. System or any U.T. System institution (other than incidental use) is owned by the Board of Regents.”

Definition of Intellectual Property: Rule 90101, Section 3

- “This Rule applies to all types of intellectual property, including, but not limited to, any invention, discovery, creation, know-how, trade secret, technology, scientific or technological development, research data, works of authorship, and computer software regardless of whether subject to protection under patent, trademark, copyright, or other laws.”
- Current Exceptions to Default Rule: Certain Copyrights, Nonconforming Arrangements and Inventor-Owned IP

Determination of U.T. System's Interest: Rule 90102, Section 2.1

“Before intellectual property subject to ownership by the Board of Regents is disclosed to any party outside the U.T. System, to the public generally, or for commercial purposes, and before publishing same, the creator shall submit a reasonably complete and detailed disclosure of such intellectual property to the president of the creator's institution for determination of the U.T. System's interest. The institution will regularly and promptly communicate with the creator during this decision-making process.”

Invention Disclosure System: Rule 90102, Section 2.1

- Creators Submit Disclosure to Technology Transfer Office (Technology Evaluation Worksheet)
- Technology Commercialization Professionals Review and Evaluate Technology
- Office of Technology Commercialization Submits Its Recommendation to Institution President
- President Informs Creators If Board of Regents will Assert Its Ownership Interest

Infrastructure at Larger Institutions: Rule 90102, Section 2.1

- Larger U.T. System Institutions have a dedicated office to commercialize inventions, oversee their patent portfolio, seek patent protection and commercialize inventions
- Office of Technology Commercialization
- Staff size and expertise varies depending on the size of the Institution
- Each Institution promulgates own Invention Disclosure Form

Technology Evaluation Worksheet: Rule 90102, Section 2.1

- Creator Scientific Profile
 - Inventor Recognition, Track Record
- Primary Hurdles
 - Known Bar Dates, First Disclosure
- Commercial Potential
 - Ability to Define Invention, Perceived Need of Invention, Any Potential Licensees
- Scientific and Technical Merits
 - Stage of Invention, Available Data, Crowded Prior Art?

Election Not to Assert Ownership Interest: Rule 90102, Section 2.2

- If the Institution's president elects not to assert U.T. System's interest, OGC and the primary creator are notified in writing within 20 business days
- IP is released to the creator, except where prohibited by law, contractual obligations or requirements
- Institution's president may elect to impose certain limitations or obligations
- Typically, retain 5% to 40% and a royalty-free, non-exclusive license to use the invention for patient care, academically related purposes and non-profit research

Protection and Commercialization of Regents' IP: Rule 90102, Section 2.4

- Each Institution Decides If, How, When and Where to Seek Patent Protection and to Commercialize
- Mandatory Assignment From Employee, Faculty, Student to Board of Regents

Allocation of Royalty Income on Regents' IP: Rule 90102, Section 2.5

- Recapture of patenting and licensing costs comes "off the top" when an Institution commercializes IP
- Remainder is split:
 - 50% to Creator(s) (40% at UTHSCSA)
 - 50% to the Institution
- The split is subject to adjustment (with prior approval of the Board of Regents)
- Per Rule 90103, equity may also be shared with employee creator(s) at the discretion of the Institution

Bayh-Dole Act of 1980: Facilitates and Complicates IP Transfer

- Pre-Bayh-Dole, federal government asserted ownership over IP it funded
- A non-exclusive license was the best that industry could expect, which created poor incentives to licensing
- Consequently, federal money was regarded as “tainting” research at the university level
- Bayh-Dole gave IP ownership back to the universities, subject to several requirements

Bayh-Dole Act of 1980: University Requirements

- Disclose Invention to Federal Agency
- Claim Title to Invention
- File a Patent Application
- Give Preference to Granting Licenses to Small Businesses
- Require Exclusive Licensee to Manufacture in U.S.
- Share Royalties with Inventor(s)
- Use Balance of Royalties and Income to Support University Mission

Bayh-Dole Act of 1980: Prohibition on Assignment

Intellectual property rights to subject inventions arising from experimental, developmental or research work conducted at U.T. System institutions that are funded in whole or in part by the federal government may not be assigned without approval from the applicable federal agency.

35 U.S.C. 202(c) (7) (A)

Bayh-Dole Act of 1980: Government Retention Rights

- Right to a Nonexclusive, Nontransferable, Irrevocable, Paid-Up License
- Right to Require University to Assign Invention to Government if University Fails Certain Criteria

Bayh-Dole Act of 1980: U.T. System Research Activity

- \$1,258,130,858 of \$2,530,714,494 total U.T. System revenue expenditures in 2013, or 49.72%, came from federal (i.e., Bayh-Dole) sources
- Consequently, none of the intellectual property resulting from this funding may be assigned by U.T. System without approval from the applicable federal agency

Sponsored Research: Rule 90102, Section 3

“Intellectual property resulting from research supported by a grant or contract with the government (federal and/or state), or an agency thereof, with a nonprofit or for-profit nongovernmental entity, or by a private gift or grant to the U.T. System or any U.T. System institution is owned by the Board of Regents.”

Nonconformance With IP Guidelines: Rule 90102, Section 3.1

“Administrative approval of such grants and contracts containing provisions inconsistent with this Rule or other policies and guidelines adopted by the Board imply a decision that the value to the U.T. System or any U.T. System institution of receiving the grant or performing the contract outweighs the impact of any nonconforming provisions on the intellectual property policies and guidelines of the U.T. System or any U.T. System institution.”

Agreements That Do Not Conform to the Rules: Rule 90105, Section 2

“Any agreement that deviates substantially from the basic intellectual property Rule of the U.T. System as set out in the Regents’ Rules and Regulations may be executed and delivered . . . if, in the judgment of the institution’s president and after any required review by the U.T. System Office of General Counsel, the benefits from the level of funding for proposed research and/or other consideration from a sponsor, licensee, or other party outweigh any potential disadvantage that may result from the Rule deviation.”

UTS 125: Processing of Intellectual Property Agreements

“This policy provides the steps to follow to process legal documents, contracts, or grant proposals for sponsored research, including institutional support grants and licenses, grants and options, or other conveyances of intellectual property owned or controlled by the Board of Regents as outlined in Rule 90105 of the Regents’ *Rules and Regulations*.”

Sponsored Research Agreements Not Requiring U.T. System Review Prior to Execution

“Sponsored research agreements, clinical trial agreements, material transfer agreements, and laboratory studies that do not conform to the U.T. System Intellectual Property Policy or Guidelines, provided that, prior to execution of any such agreement, (i) each such agreement has been approved by the president of the institution or approved designee, and (ii) the president or approved designee has executed a Form G for that agreement approving the agreement with full knowledge of the scope of the deviations from the U.T. System Intellectual Property Policy or Guidelines.”

UTS 125, Section 2.7

Agreements Requiring OGC Review and Approval Prior to Execution

“OGC shall approve all of the agreements listed above when the dollar amount exceeds \$1,000,000. The request for OGC approval must be accompanied by a letter from the president or designee in a form specific for the type of agreement submitted (i.e., Forms A-E, F, G, or Q). . . After OGC approval is granted, OGC will send a courtesy copy of each agreement to both Executive Vice Chancellors.”

UTS 125, Section 3.1

Select Criteria For Approval of “Form G Agreements”: UTS 125, Section 4

- Fair Value Required: In the event that funding is conditioned on the grant to the sponsor of a royalty-free, nonexclusive license or other substantial intellectual property right, it is important that fair value be received for such rights because the State of Texas cannot subsidize private research.
- Limits on Rights: Any grant of rights, whether in data, inventions, or intellectual property, should be limited to results of research.
- Academic Interests: The proposed research should comport with legitimate academic and university research interests, should not incur unrelated business income tax liability, and should not be conducted solely for the proprietary interests of the sponsor.
- Commercial Benefits: The likelihood of patentable inventions and significant potential commercial benefits arising from the research should be carefully considered.

Sponsored Research: OGC Forms, Guidelines and Checklists

- OGC has developed a model sponsored research agreement.
- The Board of Regents should own the rights to all patentable discoveries, unpatentable technology, technical know-how, and other intellectual property that results from the research project.
- The sponsoring entity may have an option to negotiate for either an exclusive or nonexclusive right to a license to develop and commercialize any intellectual property resulting from the project for a royalty in an amount to be negotiated.
- License agreements that result from the exercise of options in the sponsored research contracts are subject to approval as set forth in the intellectual property policies and guidelines and should contain the provisions set forth in the model license agreement provided by the OGC, pursuant to the policy statement and guidelines for agreements licensing UT System Intellectual Property.

Clinical Trial Exception to Typical IP Ownership and Licensing Regime

- All of the inventions reasonably anticipated or contemplated to be developed pursuant to the clinical study statement of work will be owned by the sponsor.
- In addition, all rights to inventions and discoveries arising from research conducted under this Agreement, other than as a direct result of the performance of the work conducted using the study drug in accordance with the protocol provided by Sponsor may potentially be negotiable as an exclusive, world-wide, royalty-bearing license.
- This is a unique arrangement specific to the realities of certain clinical trials.

Major Issues If Sponsor Owns IP

- Bayh-Dole: Guarantee NO federal funds used in research; if so, jeopardize future federal funding
- Ensure open dissemination of research results
- Institution/Faculty need unfettered publication rights; demanded in all research agreements
- Ensure availability of future research: Cannot restrict faculty's research rights
- Ensure public interest is met: Education and Research Mission
- Diligent Commercialization Requirements Essential

Major Issues If Sponsor Owns IP: Significant Tax Considerations

- Private Inurement, University Mission and I.R.S. Tax Exempt Status
- Unrelated Business Income Tax (UBIT) Liability
- I.R.S. Rev. Proc. 2007-47: Tax-Exempt Bonds and Private Business Use Restrictions
- Article III, Section 51 of the Texas Constitution

Appendix C. DISCLOSURES, LICENSES, AND REVENUE BY U.T. SYSTEM INSTITUTIONS FOR THE YEARS 2009-2012

The table below illustrates the number of disclosures, licenses, and revenue by U.T. System Institutions for the years 2009-2012.

Institution	Type	New Invention Disclosures			Licenses Executed			License Income Received		
		2009-10	2010-11	2011-12	2009-10	2010-11	2011-12	2009-10	2010-11	2011-12
UT Arlington	Academic	49	43	49	4	5	5	\$73,434	\$329,415	\$116,062
UT Austin	Academic	182	157	168	32	27	10	\$14,315,073	\$25,641,730	\$20,333,183
UT Brownsville	Academic	0	3	1	0	0	0	\$0	\$0	\$0
UT Dallas	Academic	64	49	66	5	8	8	\$40,000	\$107,900	\$35,000
UT El Paso	Academic	18	20	26	1	0	1	\$7,836	\$0	\$13,944
UT HSC - Houston	Health	63	72	67	20	15	18	\$3,804,925	\$3,833,430	\$3,256,505
UT HSC - San Antonio	Health	25	36	47	7	9	9	\$1,923,847	\$1,226,971	\$572,399
UT HSC - Tyler	Health	0	0	2	0	0	0	\$0	\$0	\$0
UT MD Anderson Cancer Center	Health	132	132	147	14	14	24	\$10,083,759	\$17,731,000	\$28,316,648
UT Medical Branch - Galveston	Health	40	51	58	19	8	12	\$1,154,394	\$949,305	\$1,084,381
UT Pan American	Academic	9	9	8	1	0	1	\$0	\$5,359	\$53,571
UT Permian Basin	Academic	0	0	0	0	0	0	\$0	\$0	\$0
UT San Antonio	Academic	30	47	26	4	5	1	\$6,667	\$6,666	\$18,783
UT Southwestern Medical Center	Health	101	100	107	31	35	21	\$6,899,652	\$15,527,768	\$7,509,112
UT Tyler	Academic	0	0	2	0	0	0	\$0	\$0	\$0
Totals		713	719	774	138	126	110	\$38,309,487	\$65,359,544	\$61,309,587

New Invention Disclosures as defined by AUTM

A disclosure is a signed document whereby a faculty member or members is/are formally assigning IP rights to the institution. Represents the number of disclosures, no matter how comprehensive, that are submitted during the survey year requested and are counted as received by the institution.

Licenses Executed as defined by AUTM

The number of licenses that were executed in the year indicated for all technologies. Each agreement, exclusive or non-exclusive, is counted separately. Licenses to software or biological material end-users of \$1,000 or more are counted per license, or as 1 license, or 1/each for each major software or biological material product (at manager's discretion) if the total number of end-user licenses would unreasonably skew the institution's data. Licenses for technology protected under U.S. plant patents (US PP) or plant variety protection certificates (U.S. PVPC) may be counted in a similar manner to software or biological material products as described above, at manager's discretion. Material Transfer Agreements are not counted as Licenses/Options.

License Income Received as defined by AUTM

License Income Received includes: license issue fees, payments under options, annual minimums, running royalties, termination payments, the amount of equity received when cashed-in, and software and biological material end-user license fees equal to \$1,000 or more, but not research funding, patent expense reimbursement, a valuation of equity not cashed-in, software and biological material end-user license fees less than \$1,000, or trademark licensing royalties from university insignia. License Income also does not include income received in support of the cost to make and transfer materials under Material Transfer Agreements.

Data and definitions were collected from the AUTM Survey.

Appendix D. SAMPLE PREAMBLE TO THE REGENT'S RULES

1. Title

Rules for Intellectual Property: Preamble, Scope, Authority

2. Rule and Regulation

Sec. 1 Preamble. The Board of Regents promulgates these *Rules* on intellectual property to serve the public good, promote partnerships with the private sector, encourage innovation, promote the engagement of faculty, staff and students in research, and foster economic development. The Board of Regents recognizes the high importance of discovery commercialization as a core mission and that the University of Texas System will only attract industrial support of research if timely and efficient processes exist to manage intellectual property. These *Rules* are intended to be adaptable to the highly varied circumstances that characterize industry and the portfolio of research at U.T. System institutions. In all cases, U.T. System institutions will strive to enable the ease of intellectual property creation, protection, management and transfer to society within an environment that ensures the highest quality and integrity of academic activity, teaching and research. The fundamental principles that guide these *Rules* on intellectual property are:

- 1.1 The successful deployment of intellectual property developed through teaching, research, discovery, creative activities and application of knowledge, whether through sponsored research, licensing or other types of transactions or arrangements, allows for a dissemination of knowledge and technology that is in the broad public benefit and comports with the mission of the U.T. System;
- 1.2 Sponsored research is very important to the vitality and competitiveness of U.T. System institutions, the State of Texas and our nation. All U.T. System institutions shall encourage and strengthen university-industry partnerships, efficiently and expeditiously protect and manage intellectual property created from these partnerships and remain understanding, flexible and open to try to accommodate the varied circumstances and needs of potential industry sponsors;
- 1.3 U.T. System institutions should expect that when industry is underwriting sponsored research, industry commences negotiations with the expectation of speed in the execution of critical agreements, clear financial outcomes and ownership of all intellectual property resulting from the work;
- 1.4 Sponsored research is frequently tightly integrated with the educational mission at many U.T. System institutions but must not necessarily abridge publication and research rights, impinge upon the dissemination of research results, including student theses and dissertations, nor diminish an environment of academic and research integrity;
- 1.5 The primary research-related duties of members of the faculty at U.T. System institutions are to teach, study, investigate, discover, create, disseminate, develop professionally and infuse new knowledge into their classes and teaching;

- 1.6 Commercialization of technology enhances the reputation of the U.T. System; and
- 1.7 Compliance with applicable federal laws and regulations, the Texas Constitution and other applicable laws of the State of Texas is essential for successful U.T. System technology commercialization.

Conclusions and Recommended Actions: Regents' Task Force on Intellectual Property (IP) Issues

Vistasp Karbhari, Ph.D.
President, U. T. Arlington

U. T. System Board of Regents' Meeting
Technology Transfer and Research Committee
February 2015



THE UNIVERSITY of TEXAS SYSTEM
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The Task Force Purpose

- Examine the intent, rationale, language, and workability of the U. T. System Board of Regents' *Rules and Regulations, Series 90000*, on IP
- Recommend changes or revision in the Rules
 - Consider any limitations posed by the Rules that would impact academic-industry partnerships
 - Foster a philosophy and culture of innovation
 - Assure that U. T. System continues its leading role in discovery



Charge and Methods

- Consider best practices in public university systems or peer organizations
- Evaluate new and emerging models of flexible IP ownerships
- Propose revisions in particular areas of interest, including
 - IP of student origin
 - IP related to emerging educational technologies and inventions



Conclusions

1. The Series 90000 of the Regents' Rules should be revised to promote industry engagement and to enhance brevity, simplicity of language, and clarity of intent.
2. Student ownership of student-created IP should be asserted in the Regents' Rules.
3. Faculty and student incentives to pursue entrepreneurship need to be strengthened. Faculty incentives should include, but not be limited to, consideration of commercialization and entrepreneurship activities in promotion and tenure.
4. The 50%-50% allocation of net license and equity revenues should be reconfigured to increase each institution's flexibility in allocation.



Conclusions (cont.)

5. A Systemwide assessment is needed that will determine how best to advance the mission, goals, practices, and resources of institutional offices of technology transfer and commercialization.
6. Strategies for use of university facilities in industry partnerships should be reappraised with directions for improvement.
7. A study of how IP related to institutional educational technologies is currently managed, and its projected future state, should be implemented.



Recommended Actions

1. Develop new language for Series 90000 of the Regents' Rules consistent with these recommendations and present revisions to the Board of Regents for approval.
2. Task the U. T. System Office of Technology Commercialization, in collaboration with all U. T. System institutions, to evaluate institutional discovery commercialization and to create a Systemwide plan and resourcing recommendations for advancement. This plan will be presented to the Board for further action.



Recommended Actions (cont.)

3. The U. T. System, in collaboration with its institutions, will carry out an appraisal of strategies and “safe harbors” for the best deployment of U. T. System facilities relevant to sponsored research and commercialization.
4. Task the U. T. System Institute for Transformational Learning, in collaboration with all U. T. System institutions, to assess the present and future state of IP related to educational technology. The resulting report is to be presented to the IP Task Force for further recommendations to the Board.

