

Proposal to Establish a Temporary Institute of the University of Illinois System

Submitted to University of Illinois System, University Senates Conference

February 19, 2019

TITLE OF PROPOSED UNIT:

Discovery Partners Institute (DPI)

CONTACT INFORMATION:

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PROPOSED STATUS:

This proposal is for the creation of a Phase 1, temporary institute. We will evaluate the unit's performance after five years and request permanent status at that time, assuming favorable results.

DESCRIPTION OF THE CHARTER:

The Discovery Partners Institute aims to be a joint education, research, and innovation institute led by the University of Illinois System (U of I System) and its three universities. DPI's mission is to establish collaborative partnerships that address 21st century societal grand challenges, promote entrepreneurship, and educate the next-generation workforce. Its primary goal is to conduct purpose-driven research and education that create actionable results that will have tangible results throughout the economy, including those for the underserved.

In order to fulfill its mission, DPI's research and public activities will:

- address key grand challenges and/or the critical needs of industry, governmental and non-governmental agencies, community and community-based agencies,
- attract students (current and new) who desire to engage in translational research and learn entrepreneurial skills,
- attract external partnerships with industry, governmental and non-governmental agencies, foundations, community or community-based agencies, and philanthropic organizations,
- have the potential for receipt of external funding or technology commercialization, and
- add jobs and grow the economy of the State of Illinois.

The DPI mission (described above) aligns well with the strategic direction of the U of I System's Strategic Framework, as outlined in the pillars below:

- to be an institution of and for our students, grow and diversify experiential learning and career guidance, and strengthen students' opportunities to excel beyond academic sphere (Pillar I),
- to conduct research and scholarship with global impact by building a culture of innovation, collaboration, and entrepreneurship, identify significant sociotechnical problems, and forge new research and development partnerships (Pillar II),
- to facilitate a healthy future for Illinois and the Midwest by investing in human capital and being an engine for economic development (Pillar III), and
- to promote our reputation as a leading global brand in higher education by helping create a technology platform that touches the whole university environment and ensures our long-term financial sustainability (Pillar IV).

DPI also aligns with the State of Illinois' need for increased economic activity, employees, and increased state income by providing facilities for the U of I System to serve additional students and conduct research that supports continued growth and innovation in Illinois.

JUSTIFICATION:

The DPI is designed with a goal of bringing together faculty, students, and corporate partners to work in proximity to each other to nurture new ideas and further research with an accelerated transition to results. DPI's research activities will create an increased demand for employees (faculty, students, and staff), equipment, and other expenses at the DPI and Illinois Innovation Network (IIN) sites, while DPI's educational initiatives will prepare students to contribute to the 21st century economy by engaging them with project-focused teams, entrepreneurial concepts, and corporate partners.

DPI has the potential to have a unique identity as a state, national, and international research and innovation leader. It is centered on four key focus areas that are strengths of our three universities: Computing & Data, Environment & Water, Food & Agriculture, and Health & Wellness. These areas serve as the backbone of the collaborative efforts within the institute. These are only starting points, however. They will be augmented and expanded to respond to challenges discovered in the course of DPI's evolution. Woven throughout DPI's four key themes are important cross-cutting areas of opportunity. These areas – Culture & Society, Entrepreneurship & Technology Transfer, Education & Workforce Development, and Public Policy – are where the innovation created within the DPI meets humanity in real and impactful ways. As such, DPI will ensure that it strategically aligns its research and development in ways that improve the human condition.

To facilitate this alignment, DPI research will be responsive to the input of stakeholders at the universities, in companies, in neighborhoods and communities, and throughout the state. DPI will be guided by principles of inclusivity (in all forms), transparency (in both process and governance), ethics and accountability, and engagement with the local community.

DPI will develop activities that connect top faculty and students with leading companies to create new technologies and products and accelerate their introduction into the public sphere. Students will work closely with DPI's corporate partners, which will increase the likelihood that they will remain in Illinois after graduation, grow the state's economy, and contribute to the overall well-being of the state and its residents. In addition to corporate partners, DPI will build relationships with leading international universities to promote knowledge and cultural exchange across borders.

In particular, DPI will have national, international, and state of Illinois partners (those already committed include Hebrew University, Northwestern University, Tel Aviv University, the University of Chicago, and MS Ramaiah Medical College), and will be part of the IIN. With IIN hubs planned at each of the U of I System locations, as well as other university partners in the state of Illinois (those already committed include Northern Illinois University), the IIN will help companies, schools, and researchers across Illinois connect and collaborate.

During the planning stage, DPI administrative leaders have organized several faculty planning groups that represent all three universities of the U of I System to generate proposals for research and teaching initiatives. More than 150 faculty across the system are involved in these planning committees, and another 1,000 faculty members have volunteered to serve as "experts" in one or more of the eight working groups. (See <https://dpi.uillinois.edu/>).

PROPOSED STRUCTURE:

Reporting Structure: The Interim Director of DPI has a dual reporting structure to the President of the U of I System and to the Vice President for Economic Development and Innovation. The interim director provides leadership in all areas of DPI, overseeing the strategic vision, financial and business plan, and operational priorities.

Governance: To aid in planning, DPI's administrative leadership has appointed two advisory committees with representation from all three universities: the Academic Executive Committee (originally charged until end of spring semester 2018 but has been continuing) and the Academic Governance Advisory Group (charged until end of spring semester 2019). The *Academic Executive Committee* (https://dpi.uillinois.edu/about/academic_executive_committee) is chaired by the Interim Director of DPI. It is comprised of the Vice President for Economic Development and Innovation, nine deans or associate deans, and five faculty members who hold administrative appointments at one of the three universities. It serves an advisory role to the interim director and other system-level leadership. The *Academic Governance Advisory Group*

https://dpi.uillinois.edu/about/academic_governance_advisory_group) includes the Executive Vice President for Academic Affairs, two deans, one of the university registrars, and three faculty members, two of whom also serve on the University Senates Conference (two of the three also serve on the DPI Academic Executive Committee to ensure coordination between the committees). The Academic Governance Advisory Group serves an advisory role to the interim director, other system-level leadership, and the Academic Executive Committee.

Proposed Faculty Governance Structure: The structure and function of the DPI are similar to those of a major interdisciplinary research institute, such as the Beckman Institute (UIUC), the Center for State Policy and Leadership (UIS), and the U of I Cancer Center (UIC). However, the DPI is a system-wide unit that reports to the president and is not unique to any single university. Similar to other interdisciplinary research institutes, DPI will not be the “home” unit of any member of the faculty nor will faculty tenure lines reside in the DPI. In addition, any courses offered through DPI will be courses established and approved by one of the three universities of the U of I System. Therefore, the DPI governance structure will not mirror that of an academic college or department because it will neither administer faculty lines nor establish new courses, degrees, or academic programs. Nevertheless, like a major interdisciplinary research institute, there is a role for shared governance in the DPI.

As recommended by the DPI Academic Governance Advisory Group, an elected executive committee will be established for DPI that will advise the Director of DPI on academic as well as research matters pertaining to the institute. The executive committee will consist of 10-12 faculty (tenure system and NTT) that represent all three universities and that serve staggered terms to ensure steady experience. The provosts from each university, the University Senates Conference, and faculty who are participating in DPI will be canvassed for nominations for the committee. Nominees will be voted on by the faculty electorate of the DPI. The committee will ensure that there is broad input from the faculty on governance issues as well. The committee should have both advisory and communicative roles, interfacing regularly with the Director of DPI, system-level leadership, and the USC.

Other Advisory Groups: External advisory groups that provide guidance and input will be created. These are likely to include a *DPI Corporate Advisory Board* (appointed) consisting of stakeholders from partner companies to ensure that research and academic activities are relevant to the current needs of industry. There may be other advisory groups as needed.

Faculty and Staff Currently Involved: The faculty and staff that are currently engaged include:

- the Interim Director
- a Visiting Special Assistant to the President
- an Administrative Assistant

- the Academic Executive Committee (https://dpi.uillinois.edu/about/academic_executive_committee),
- the Academic Governance Advisory Committee (https://dpi.uillinois.edu/about/academic_governance_advisory_group),
- Thematic Working Groups (<https://dpi.uillinois.edu/themes>)
- Cross-cutting Working Groups (https://dpi.uillinois.edu/cross_cutting_areas), and
- A hand full of staff and faculty from other units that support the development of DPI on a part-time basis (<https://dpi.uillinois.edu/directory>).

Staffing Needs: Given the tremendous amount of work that needs to be accomplished in the planning phase of development, the current staffing is not sufficient. Thus, the president has authorized four new positions that will report to the Director of DPI; searches are underway for these positions:

- Managing Director (will provide managerial oversight of all unit functions and operations)
- Director of External Engagements and Partnerships (will oversee DPI’s strategy to connect with industry; governmental and non-governmental agencies, community-based agencies, and cultural and philanthropic organizations)
- Director of Academic Affairs (will facilitate academic activities and student involvement)
- Director of Administration (will serve as the chief financial officer and human resources liaison)

ACADEMIC IMPLICATIONS:

There will be no tenure-track or specialized faculty appointments at DPI. All non-zero appointments of tenure-track or specialized faculty will be held at the university (not system) level. However, faculty may hold zero-time appointments at DPI, as is common practice in university-level interdisciplinary research units.

Faculty ownership of the curriculum is basic to our universities and faculty governance. DPI is not a university or a college and it will not own degree-related courses or programs. All curricular matters related to student degree programs will continue to be governed by existing faculty governance structures at the various universities in the system. DPI will provide physical space for courses that have gone through appropriate faculty governance structures using existing policies and procedures at the relevant university. Courses may be offered that originate at partner universities outside of the U of I System. In these cases, course articulation of credit will be done through direct agreements between participating universities using articulation agreements such as those used for study abroad programs.

DPI will not offer academic degrees for students. Instead it will support existing academic programs at participating universities to prepare the next generation workforce along the aims of DPI. Through deep integration with industry partners, a project-focused team environment, and a culture of entrepreneurship, DPI's education initiatives will include such student activities as: internships, student exchange, and study abroad opportunities. For example, these may include entrepreneurship classes and boot camps that help startups validate business models, technology acceleration programs such as the NSF I-Corps, and short courses and workshops designed for industry.

Decisions regarding faculty participation in and compensation for activities such as teaching and research leaves will be determined by chancellors, provosts, deans, unit heads, and the faculty involved. DPI will follow best practices of other interdisciplinary centers and institutes within the three universities of the U of I System when engaging faculty.

As DPI builds, it will do so in collaboration with and advised by relevant groups across the three universities of the U of I System to make sure that the institute builds on and enriches the strengths and successes of departments, centers and institutes, and colleges at the three universities.

BUDGET AND FUNDING STRATEGY:

On June 4, 2018 then Governor Rauner signed into law the fiscal 2019 state budget that included a capital appropriation of \$500 million to support the DPI. The funding is designed to construct the DPI facility and build out the IIN through capital projects at hub locations around the state. A proposal to Department of Commerce and Economic Opportunity for release of these funds is undergoing a routine review by the new state of Illinois administration. There also has been \$249.1 million promised to the DPI and the IIN from non-grant sources (mostly comprised of matching funds from the three system universities).

The U of I System has committed to provide a budget for DPI's administrative and operating costs. The administrative costs consist primarily of salaries (for an Interim Director, an Administrative Assistant, and four positions that are currently in search mode: a Managing Director, a Director of Administration, a Director of External Engagement and Partnerships, and a Director of Academic Affairs). The current operating costs consist primarily of the rental costs of the Wacker facility.

To date the U of I System has invested a total of \$1.1 million in DPI.

Additionally, the Office of the President and the Office of the Vice President for Economic Development are currently providing support from current system-level staff for the following:

- Operations
- HR

- Finance
- Communications
- Academic and research initiative administration

The goal for DPI is to keep costs down for the U of I System and to seek revenue generation from six sources:

- Corporate investments
- Philanthropy
- Government funding
- State appropriation
- Federally funded research grants
- Program revenue

DPI currently has 20,000 square feet of classrooms and office space along the Chicago River in downtown Chicago, which can be used for meetings, events, workshops, and classes. DPI is working with developer Related Midwest to build the future DPI site in the South Loop by 2021 as part of Related Midwest's plans for "The 78" neighborhood. A gift agreement for the land between Related Midwest and the U of I System is currently being reviewed.

OUTCOMES:

The criteria and outcomes that will be used to demonstrate the quality and effectiveness of DPI will be based on its ability to fulfill its mission. For example, given that DPI's approach to its mission includes partnerships with a variety of stakeholders, purpose-driven research that creates actionable results, and educating the next generation workforce, the following metrics are examples of those that may be used to demonstrate quality and effectiveness:

- 1) number of active partnerships and joint projects with partners
- 2) number of disclosures/patent applications
- 3) number of research projects funded by companies and other external partners and the total dollar value of this support
- 4) number of students and faculty involved
- 5) amount of external funding and technology commercialization
- 6) number and prestige of awards, prizes, and honors received as a result of faculty and staff involvement with DPI

DPI will be evaluated through generally accepted review processes used at the three universities for interdisciplinary research units and that are agreed upon by the U of I System president and chancellors of the three universities. In conducting such reviews, DPI's internal governance bodies and external advisory board(s), faculty, staff, and other stakeholders will be consulted. Furthermore, since DPI is expected to have multiple external partners, input from these partners

also will be sought to evaluate the success/impact of the DPI for each of these groups.

In addition, informal input from stakeholders will be sought once a year. This input will likely be in the form of surveys as well as discussions and will be used to make improvements at DPI.

UNIVERSITY OF ILLINOIS

Urbana-Champaign • Chicago • Springfield

University Senates Conference
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506 South Wright Street
Urbana, IL 61801

February 28, 2019

Professor Bettina Francis, Chair
UIUC Senate Executive Committee
Dept. of Entomology
320 Morrill Hall MC 118

Professor Catherine Vincent, Chair
UIC Senate Executive Committee
College of Nursing
506 NURS MC 802

Professor Ranjan Karri, Chair
UIS Campus Senate
Dept. of Management
MS UHB 4060

Re: Discovery Partners Institute (USC OT-356)

Dear colleagues,

On February 26, 2019, the University Senates Conference considered the attached proposal to establish the Discovery Partners Institute (DPI) as a Temporary Institute of the University of Illinois System. We now transmit the proposal to you for consideration by your senate, in accordance with Article VIII, Section 3 of the University *Statutes*.¹ We urge you to bring the proposal before your respective senates as expeditiously as possible.

In what follows, we summarize our comments and advice regarding the proposal.

1. General considerations:

As a System-wide research and education entity focused on collaboration among the three universities as well as with external academic and industrial partners, DPI is unprecedented. In

¹ *d. Units Organized at the University Level.* [“University” here refers to what we now call “System.”]

Units organized at the university level, such as institutes, councils, and divisions, may be formed for the development and operation of teaching, research, extension, and service programs which are statewide or intercampus in their scope and which cannot be developed under a campus administration. Such an organization may be proposed by a senate, a chancellor/vice president, the University Senates Conference, or the president. *The president shall submit the proposal for the new organization together with the advice of the appropriate senates, taken and recorded by a vote of each such senate, of the appropriate chancellors/vice presidents, and of the University Senates Conference to the Board of Trustees for action.*”

keeping with its unique status, the current proposal requests establishment of the Institute *on a temporary basis*, to be considered for permanent establishment at the end of an initial five-year period. Because requests for temporary status are made in order to give centers or institutes the opportunity to first experiment with and then eventually establish longer-term practices and policies, they typically provide considerably less detail than do proposals to permanently establish such entities.

Over approximately the past year, as faculty interest in the DPI initiative has burgeoned, USC has thoroughly considered and discussed central questions of policy and procedure raised by system-wide initiatives like this one, including appropriate governance structures, control of academic programs, and faculty hiring and appointments. On January 24, 2019, USC approved a statement outlining our view of the general principles that should underlie the planning of initiatives like this one (transmitted to the Senates on January 29, 2019, and attached here). USC is pleased to note that the proposal has hewn closely to these principles. In particular, we note that the proposal properly specifies that “all curricular matters related to student degree programs will continue to be governed by existing faculty governance structures at the various universities in the system” (p.5). Equally importantly, we note with approval the specification that “there will be no tenure-track or specialized faculty appointments at DPI” (p. 5). (We understand “tenure-track” to refer to tenure-system faculty members, and “specialized faculty” to refer to non-tenure-system faculty members.)

As the proposal notes, as part of DPI’s initial planning process, members of an *ad hoc* Academic Governance Advisory Group were appointed to recommend specific structures and governance practices (pp. 3-4). The recommendations of that group were shared with USC in draft form. Most notably, the Academic Governance Advisory Group recommends that the proposed Institute follow the Statutory norm of elected faculty executive committees as the locus of unit shared governance. The AGAG report also correctly indicates the need for DPI-affiliated faculty members to determine a set of bylaws as their primary governing document once the Institute is formally established. USC is pleased to note that these key recommendations regarding the DPI’s governing structure are reflected in the proposal.

In addition to the Academic Governance Advisory Group, an *ad hoc* “Academic Executive Committee” was appointed, also for initial planning purposes. That group consists primarily of deans and other faculty members holding administrative appointments (pp. 3-4). USC recognizes that, if the Institute is granted temporary status, there must be regular and active guidance from our three universities’ deans and other academic officers, and a structure for that guidance must be provided, in addition to the planned faculty executive committee. However, it is our understanding and expectation that, in accordance with their *ad hoc*, appointed status, both the Academic Executive Committee and the Academic Governance Advisory Group, as currently constituted, will be discharged.

2. Areas for further consideration:

USC notes that, because it is a request for *temporary* status, this document cannot address every issue in detail. However, USC recommends that the following aspects be addressed before permanent status is requested:

1. An estimate of annual System investment in DPI should be provided;
2. Some examples should be given of the sources of “program revenue” (p. 7);
3. The proposal should provide a description of a general funding strategy allowing DPI to replace internal funding (whether from the System or our universities) with external funding;
4. The list of criteria for assessment of the Institute’s success should include a reference to the demonstrated added value to our three universities (UIC, UIS, and UIUC), fiscal or otherwise (p. 7);
5. A list of long-term milestones to gauge success should be provided.

Finally, the University Senates Conference recommends:

1. that the proposed structure of DPI’s faculty executive committee be slightly revised to specify that it consist of 12 members, two of whom will be University Senates Conference designees, and 10 of whom will be elected by and from among the DPI faculty electorate, with representation of all three universities (p.4);
2. that an annual self-assessment process be implemented once the Institute is formally established on a temporary basis, rather than waiting until the proposal for permanent status is prepared.

Summary:

The members of the University Senates Conference recommend that the proposal to establish the Discovery Partner Institute on a temporary basis be forwarded to the Board of Trustees, along with the above recommendations.

We request that your university senate endorse these recommendations as you consider your own advice on the proposal.

Sincerely,



Joyce Tolliver, Chair
University Senates Conference

Enclosures

cc: President Timothy Killeen
Executive Vice President Barbara Wilson
Vice President Edward Seidel
Dr. William Sanders
Dr. Phyllis Baker
Elizabeth Dooley, UIC Senate
Brian Moore, UIS Senate
Jenny Roether, UIUC Senate
Members, University Senates Conference

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Office of the Provost and Vice Chancellor
for Academic Affairs

Swanlund Administration Building
601 East John Street
Champaign, IL 61820



February 28, 2019

Gay Miller, Chair
Senate Committee on Educational Policy
Office of the Senate
228 English Building, MC-461

Dear Professor Miller:

Enclosed is a copy of a proposal from University System Office via the University Senates Conference (USC) to establish the Discovery Partners Institute as a Temporary Institute of the University of Illinois System. The proposal documents include:

- Letter of transmission from Joyce Tolliver, USC Chair, that provides a summary of USC's comments and advice;
- The proposal itself;
- USC OT-351, *Guidelines for Shared Governance and System-Wide Academic and Research Initiatives at the University of Illinois*, approved by USC on January 24, 2019.

Sincerely,



Kathryn A. Martensen
Assistant Provost

Enclosures

c: C. Sailor
B. Francis
J. Roether
J. Tolliver
W. Sanders
P. Baker

GUIDELINES FOR SHARED GOVERNANCE AND SYSTEM-WIDE ACADEMIC AND
RESEARCH INITIATIVES AT THE UNIVERSITY OF ILLINOIS

1. In planning and implementing system-wide academic or research initiatives, active engagement of shared governance processes as well as faculty/administration buy-in are essential. Faculty, administrative leaders, and other stakeholders must work in collaboration to establish a culture of trust and collegiality in order for system-wide initiatives to succeed.
2. Substantial effort should be made to resolve questions or disagreements as early as possible in the initiative planning and implementation process. Uniform and agreed-upon governing policies and procedures should be built into the design and planning from the outset.
3. While initiatives that involve external stakeholders who may not share the same commitments to shared governance may be more delicate, the fundamental principles of transparency still apply. Our commitment to institutional principles and processes cannot be set by others.
4. To the greatest extent practicable, the planning and implementation of such initiatives should draw on existing shared governance processes and structures, because these processes have already been vetted and approved by system stakeholders. The substitution of these processes and structures with ad hoc alternatives or decisions is unlikely to result in widespread support for the initiatives.
5. Faculty, students, and courses involved in system-wide academic or research courses, projects, or initiatives should be based in home universities, and be subject to the processes and regulations of their home universities. The procedures for hiring, evaluation and promotion, admissions, course approval and transfer credit are all university based and well-established.
6. The integrity, quality, and national profile of the university departments/units must be protected. New hires, new programs, and new R&D initiatives should enhance their reputations, not detract from them. The fundamental quality and identity of the University of Illinois System is in the profile and success of its three universities, and the colleges and departments within them.
7. The System's role should be to enable and encourage collaboration and interdisciplinarity through incentives, and it should not do anything that could be perceived as taking away resources of the units. For instance, the ranking of a given department should stand to

gain, not lose, because of the participation of its faculty in a system-wide initiative. This applies to revenue as well, and may necessitate discussions about buy-out policies to fairly compensate units in exchange for faculty time spent on system-wide initiatives, as well as MOUs concerning IP and related revenues.

8. Where system-wide initiatives are funded out of the system budget or use existing system resources, there should be budgetary transparency. An examination of the impact of providing budget and support to such initiatives should be conducted and reported to the University Senates Conference and university senates.
9. System-wide initiatives whose participants engage in academic or research endeavors should have elected committees as their primary advisory committees, whose members represent the relevant system stakeholders. In the formative stage prior to having an electorate, the administration should work with the USC to appoint an interim advisory committee. Advisory committees should be independent from the administrative leaders of an initiative and contributing an independent perspective to the decision-making process.
10. All system-wide academic or research entities should have written bylaws that have been reviewed and approved by the appropriate elected representative committee. (See 9 above.)
11. The governance structure of the system-wide initiative should have close articulation with and membership from USC, since the Conference is a key stakeholder as the sole system-wide governance body and as the coordinating hub between the system and the three university senates. Articulation may be achieved through a committee of elected representatives, members from USC, and members from other system-wide stakeholder groups.

Date: April 18, 2019

To: University of Illinois, Urbana Champaign Senate

From: Phyllis L. Baker and William H. Sanders
Discovery Partners Institute

Re: University of Illinois, Urbana Champaign Combined Addendum to the Discovery Partners Institute Proposal to Establish a Temporary Institute of the University of Illinois System

Below is our response to 28 questions forwarded by the UIUC Education Policy Committee (EPC) to the Discovery Partners Institute (DPI) regarding the proposal to establish a temporary institute of the University of Illinois System. These questions come from email requests by Eric Meyer on April 5, 8, and 9, and also include the questions raised during the April 15 EPC meeting. They are listed in chronological order.

1. Overall, several committee members expressed concern about what they regarded as relatively vague details in the proposal. As one put it: “I have to say I find the proposal quite surprisingly ‘undercooked.’ There is typically much more detail and precision in most proposals for a new minor within a department.”

The DPI is requesting to establish DPI as a temporary institute following all the relevant State of Illinois and U of Illinois Statutes, General Rules, and procedures. Over the next few years, DPI will work to establish longer-term practices and policies, using a shared governance model that is being developed by our current DPI Academic Governance Advisory Group (AGAG), which includes members of the University Senates Conference (USC). Eventually, the AGAG will be replaced by an elected faculty executive committee that is described in #6 below.

2. Several suggested that approval for a five-year period, without clear landmarks and reporting procedures along the way, might be too long. They suggested that some form of annual review would be more appropriate given the natural degree of uncertainty surrounding such a large proposal in its very early stages of development. Even in the private sector, startups seem to be rarely approved for five-year development periods without greater degrees of annual or more frequent evaluation.

We believe that a 5-year temporary status, which is standard for such proposals, is crucial to facilitate partnerships and stability as we formulate this institute. To ensure regular updates and communication, DPI will be happy to provide annual reports to the USC and other relevant bodies as needed. In these reports we will share information that is being shared with the U of I System president and vice presidents, the Board of Trustees, and the legislature. In addition, DPI is in regular communication with several outside organizations, providing information and receiving important feedback during this development stage. For example:

- *Since October 2018, DPI has been providing monthly reports to the Illinois legislature that include information such as of 1) amount and kinds faculty interactions, workshops/retreats held, 2) types of meetings with companies, councils, and groups, 3) updates on the Department of Commerce and Economic Opportunity (DCEO) proposal, 4) updates on organizational meetings held with IIN hubs, 5) updates on hiring, and 6) any agreements signed.*
 - *Once the \$500 million capital appropriation grant is released, the DPI will be reporting regularly to the legislature on such metrics as patents developed and commercialized, temporary and long-term full-time employees, rate of new entrepreneurs, university graduates retained in Illinois, number of companies financially invested in DPI including investment dollars, and the number of future companies attracted to Illinois.*
3. Because the task of the Urbana-Champaign Senate appears at least in part to be reporting back to the University Senates Conference (USC), members also suggested addition of a bullet-point appendix, listing each specific concern of USC and how that concern was addressed or dismissed, perhaps with good reason, in the proposal.

Please see our responses to USC recommendations (Appendix A).

4. Much concern was expressed about the source of funding for many of the proposed activities. At several points, the proposal discusses the need for rather large investments for operational overhead or seed money but fails to indicate likely sources of that money. It also seems to imply that each campus will be required to share in expenses annually but fails to offer details of what each campus's share might be or even a rubric to determine that answer. Although this is an unusual, almost unprecedented proposal, nearly all proposals of this nature typically are accompanied by detailed memoranda of understanding or budgets that as clearly as possible establish funding expectations.

DPI currently has two sources of funding. One is a proposed state appropriation of \$500 million for capital projects. We have submitted the required proposal for release of those monies, but the funds have not yet been released. The second source of money is the U of I System Offices. Specifically, the president and the chief financial officer (Avijit Ghosh) have committed to covering operational expenses for DPI using central resources. In the long run, much of the operational costs will be covered through a corpus of endowments established through philanthropic contributions, industry partners and others. For example, annual funding is expected from industry partners as well as other universities (non UI System) joining the DPI. We also expect that federal funds will be awarded through standard grant applications and that some of the costs will be covered from ICR.

The U of I System Offices have committed to provide (from central funds) for DPI's administrative and operating costs until longer term funding models explained above are established. Currently this funding level is equivalent to \$2.2 million per year and the President and CFO have both indicated their commitment to continue such support.

There is no expectation that the three universities will share in paying for the operational costs of DPI.

5. Several also noted that no clear indication is made of how monies are to be used (incentives, seed grants, etc.) beyond the creation of many new staff and administrative positions and facilities.

The money proposed to be appropriated from the state will be used for capital expenses. The budgeted money from the UI System will be used for operational expenses including salaries and support for the core team.

6. Despite statements in the proposal, several questioned whether shared governance in reality exists. Members seemed to want much more detail on how faculty would be involved in governance and more than in just an advisory way. How will the composition of the faculty electorate be determined? Who will appoint members of any corporate advisory board? The executive committee, unlike nearly all other such committees, seems to be limited to an advisory role, without even the typical charge of regularly reviewing the performance of key unit executives and reporting to the top official outside the unit who is charged with selecting or renewing leadership appointment. It also is unclear whether, as typically is done, nearly all administrators are excluded from executive committee membership. Typically, for new units of any size and scope, much greater detail, including at least draft bylaws and a sense of how they were drafted and how they will be considered for adoption, are included.

The elected executive committee will be composed of full-time faculty members who are not administrators. AGAG submitted a set of recommendations (Appendix B) regarding faculty governance to the USC. DPI will follow these recommendations, which address this set of concerns.

7. Courses are discussed, but there appears to be no clear path for developing other course offerings or details on how those courses merge with offerings on any of the campuses. Much of this appears to be brushed off with a general statement that campus course articulation procedures would handle any questions. Course articulation may be a very poor fit for what is planned. Articulation generally works best with introductory level courses, the content and scope of which are measured after the course has been conducted previously. Here, we probably are talking about very advanced courses, typically independent studies, which have never been taught before. How articulators could evaluate these in advance, on a speculative basis, is unclear. Students from one campus might be confronted with a situation of wanting to work with a professor from another campus on a project he or she is directing. It would be unfair to that student to be unsure whether his or her work qualified for course credit when another student, from the professor's home campus, was getting credit for the exact same experience. Moreover, controls would be necessary to ensure that class credit was universally used for actual educational activity, not just as a reward in lieu of fair-market payment for simply working in some lab or on some project.

Course offerings and course content will be faculty driven and faculty from the three U of I System universities will oversee all courses taught at DPI. Course content is the purview of

the faculty, not DPI staff. What counts for credit on a student's transcript will be the purview of that student's academic program, college, and university, not the DPI staff. We envision DPI affiliated courses to work in a fashion that is similar to a student in a study abroad program, whereby the home institution/academic program determines what counts for academic credit. The DPI Director of Academic Affairs will work closely with the student's university and academic program to make sure that progress toward degree is not impeded. AGAG is currently developing a set of principles and policies regarding courses and curriculum. We attach a draft of some of those principles (Appendix C) to illustrate the guidelines we will be employing.

8. Members expressed concern about whether a clear path for development, evaluation, and targeted utility has been charted. They found the metrics to be used for assessing outcomes vague. If not a specific set of numbers that would indicate success, some sort of basic logic model, as one member put it, or rubric might be desirable for a project of this size, with this sort of investment to date. A phrase indicating that DPI will be evaluated through "generally accepted review processes" was regarded by several members as overly vague. At least some detail about what those standards might be and whether they might shift over five years was requested.

Please see answer to questions 2, 14, 17, and 18 which detail several proposed metrics for success and the plans for future reporting. We assume that metrics and standards for evaluation of DPI will evolve over time and will be responsive to changing foci in the institute.

9. How does DPI relate or compare to projects at peer universities, such as the Austin Technology Incubator at UT-Austin, the Center for Entrepreneurship at Michigan (top rated undergrad entrepreneurial program) or Berkeley's Engineering Center for Entrepreneurship and Technology? This is a concern both overall and as it applies to faculty governance procedures and processes.

AGAG has reviewed several other initiatives across the country and has taken them into consideration when they wrote their recommendations for faculty governance. The projects listed above are narrower in focus than what is planned for the DPI. They are primarily tech incubators that promote entrepreneurship.

10. How were already committed partner universities chosen? Is the comment about building relationships with leading international universities aspirational or reflective of the list of already committed partners?

Partner universities have been chosen in consultation with the president, faculty across the three universities, the vice president for economic development, and the interim associate vice president for corporate and international engagement. Focus has been on countries and institutions a) that are recognized as world class in research and education, and b) that have expertise that matches the research strengths and interests U of I System faculty.

The comment about building relationships with leading international universities is both aspirational and reflective.

11. What mechanisms will exist to ensure that “DPI research will be responsive to the input of stakeholders,” and how will potential disagreements among those stakeholders — faculty, businesses and communities — be resolved?

As with other research institutes across the U of I System, DPI research will be determined by the DPI affiliated faculty and will be faculty driven. Research themes are envisioned to be entrepreneurial and innovative, and to promote economic development and social equity. Resolutions to potential disagreements by stakeholders ultimately will be decided by DPI faculty governance and the Director of DPI.

12. How were members of the various faculty planning groups selected? A member suggests that the market potential of the eight working groups appears uneven.

The DPI working groups were formed to address significant societal grand challenges that match the research strengths of our three universities. Each group has a leadership team that is comprised of three faculty members, one from each university. The leadership team was chosen by the interim director and other DPI staff, with input from the provosts. Members of the working groups were recommended by the chairs and co-chairs of the groups and then appointed by the interim director. The main charge of the working groups is to write a report that proposes several research and teaching foci for each area as well as any suggestions for partners.

13. A minor typo was noted in the last of the bullet points at the top of Page 4: handful instead of hand full.

Thank you.

During our conversation with you as well as other faculty bodies, questions about intellectual property (IP) and indirect cost recovery (ICR) have been raised. Below we address those questions.

As a University of Illinois institute, we envision that DPI will follow the procedures for intellectual property (IP) followed by other U of I institutes and prescribed by the offices of technology management (OTM) at UIC and UIUC, Sponsored Programs Administration (SPA) at UIUC, the Office of Research Services (ORS) at UIC, and the Research and Sponsored Programs Office at UIS, both for IP that is licensed to outside entities, and to the royalties that are provided to creators.

Likewise, cognizant of fact that academic departments are ranked and institutes are not, and that academic departments rely on the ICR that is currently provided to them for operating expenses, it is envisioned that 1) an accounting will be made of all DPI research expenditures and “credit” for the expenditures will be transferred to the academic department(s) of the faculty that are involved in the project (as is already done, e.g., for NCSA and other interdisciplinary research institutes at UIUC), and 2) DPI will learn from “best practices” that are current used for ICR

distribution for research expenditures, following the principle that no harm be done. For example at UIUC there is no reduction in ICR that goes to a PI's home department if a grant is run through an interdisciplinary research institute such as IGB and Beckman.

14. A member suggested that if monthly reports are being supplied to the Legislature, the same reports might be copied to each Senate for inclusion as information items on their agendas. Other members suggested that, if monthly reporting proved too burdensome or problematic, yearly reporting still would be desired given the almost unprecedented scope of the project. No votes were taken, but the notion of waiting five years for any sort of follow-up report generally did not seem to be favored.

We agree that reporting should be more frequent. DPI will provide annual reports to the University Senates Conference (USC) and appropriate university senate committees (e.g., UIUC Senate EPC) and if desired, discuss these reports with the members.

15. Some members were concerned by what they thought were ambiguous or contradictory references to courses. While it seems clear that any course offered would have to be approved via normal channels by its campus, another section of the documents seemed to indicate that agreements would be executing requiring each campus to accept for credit any course approved by any other campus. A clear statement on this point would seem to be in order.

We apologize for the confusion. We appreciate that the sections may sound contradictory and that was not the intention. The most important statement in the "Proposal to Establish a Temporary Institute of the University of Illinois System" (page four) is this: "In addition, any courses offered through DPI will be courses established and approved by one of the three universities of the U of I System." However, we do not intend to imply or suggest that a UI System university would be required to accept for credit any course approved by another UI System university. Although the only for-credit courses for UI System students that would be taught at the DPI would be those that are approved by one of our three universities, each university will determine on its own what courses count for which degree programs and for which students. Put another way, full determination of whether any course that is taught at the DPI could be taken for degree credit by a U of I student resides with that student's academic program, not with the DPI.

16. Some members questioned whether shared governance could truly be achieved if the faculty electorate were limited to choosing among two nominees submitted by each provost. Some questioned why election to the executive committee should not be by open ballot. Failing that, the notion of faculty sending nominees to administrators and having administrators choose from among them might be a more inclusive alternative — one that has been established in other areas. The reverse — having administrators pick the nominees — seemed unusually restrictive to some committee members.

DPI agrees that shared governance could be hampered if the faculty electorate were limited to choosing among two nominees submitted by each provost. Indeed, we plan to follow the recommendation of the DPI Academic Governance Committee, which has recommended that

the provosts from each university, the USC, and DPI faculty all should identify nominees. The details of the composition of the committee and the faculty electorate will be delineated in the bylaws to be established by the DPI affiliated faculty.

17. Comparing the level of clarity and specificity regarding financing and success metrics to levels cited in other institute proposals did not prove overly persuasive. Members suggested that because this project is of near unprecedented scope, greater amounts of information are needed as a result of the much higher stakes.

We agree that clarity, specificity, and transparency are vital elements to DPI's success. Because the DPI is still in the early stage of creation (as is expected for an institute requesting temporary status), there are details that still need to be determined, including financing and success metrics. Our goal is that by the end of summer 2019 we will have established initial metrics and a plan for assessment. Regarding finances, please see the answer to questions 4, 5 and 19.

18. To emphasize transparency as DPI grows, stating that you plan to share your self-assessment (mentioned in answer to question 3 on page 3) might be desirable.

We agree. The annual self-assessment process to be led by DPI's managing director will be included in DPI's reporting to the USC and other relevant bodies.

19. On page 4, while you express no expectation that the three universities will share DPI's operational costs, it may be more the opportunity costs that faculty members are worried about. Any assurances that can be offered that other investments or activities will not suffer would be advisable. Likewise, faculty will have a strong interest in knowing on an annual basis how much is being invested in what at DPI.

DPI's goal is to grow the pie of resources and opportunities, not take pieces of the current pie away from the three universities. Operational costs will be kept low, following the model of other interdisciplinary research institutes. It is our intention that in the long run, much of the operational costs will be covered through a corpus of endowments established through philanthropic contributions, industry partners, and others. Establishing philanthropic, industry and non-U of I System university partners as well as ICR principles are immediate goals and we are working hard on them.

DPI is committed to transparency in its budget and investments. As we grow and develop policies and procedures, we will ensure ongoing mechanisms for obtaining feedback and for sharing the financials parameters of DPI.

20. On page 5, in response to EPC question 7, a member questions anyone's ability to ensure that progress toward a degree is not impeded because progress can be relative. Rephrasing or simply striking the sentence was recommended.

Progress toward degree will continue to be assessed and managed by the academic programs in which students are enrolled. DPI is committed to hosting courses that do not

slow time to degree, but as one of your members correctly notes, we cannot ensure that. The DPI Director of Academic Affairs will work hard to coordinate with the student's university and academic program so that DPI affiliated courses are appropriate and advantageous for the student.

21. On page 6, in response to EPC question 10, a member suggests providing reasons for choosing matching institutions rather than complementary institutions. The member suggests this is particularly important given the mission of DPI and its social equity focus.

DPI will continue to choose partner institutions based on fit with the institute's mission and with U of I System faculty research strengths across of range of disciplines. The research at DPI will be faculty-driven, which will influence choice of partner universities.

22. Finally, on page 7, under item 13, a member suggests that deeper thought about this issue may be needed. The member urges that DPI explicitly encourage recalculation of ICR rates and contribute data to help determine the best and most accurate ICR rate for UI, given DPI and its associated structures and expenses.

DPI's ICR policies will be determined through a process of discussion and modeling that will involve the chancellors, the provosts, the vice chancellors for research, and various deans at each university as well as faculty leaders on the DPI executive committee. The process will be informed by best practices currently in place for other interdisciplinary research institutes at UIUC and UIC. The overriding principle will be that "no harm be done." Our goal is that all parties be at the table and collectively negotiate ICR policies that encourage, not discourage, departments and colleges to motivate their faculty to participate DPI.

The UIUC EPC asked more questions during its meeting on April 15, 2019. Those questions and our responses to them are below.

23. How much of the \$249 million that is promised would be coming from the Urbana-Champaign campus?

The capital funds that have been promised from the three university campuses to augment the DPI funding provided to the campus for DPI-related capital projects will be entirely used for projects on the campus that provides them. We have proposed to the State that projects at UIUC utilize \$100 million in DPI grant funds: \$40 million for the replacement of Illini Hall with a new Data Science Center, \$25 million for the Illinois Biomedical Translational Facility, \$20 million for an expansion of the National Center for Supercomputing Applications (NCSA) and the Siebel Center for Computer Science, and \$15 million for an expansion of the Research Park, achieving a positive inflow to the campus of \$100M. These projects were selected by the UIUC Chancellor based on their relevance to DPI. UIUC has committed \$60 million in non-grant funds to the Data Science Center project, \$50 million to the Biomedical Translational Facility, and \$27 million to the expansion of NCSA and the Siebel Center for Computer Science.

24. How much money has already been extended on this project?

Approximately \$1.1 million has currently been extended to DPI. See #'s 4, 5, and 19 for more detailed information about DPI funding.

25. Why would DPI work any better than the other 58 incubators in Chicago?

DPI is not primarily a tech incubator. It is an interdisciplinary research institute that intends to do purpose-driven research that produces actionable results that build prosperity for all. In doing so, it will engage community and industry stakeholders in projects from the beginning, and produce results that, among several transfer strategies, can be transitioned to incubators in Chicago. It thus will do research that is at an earlier stage than appropriate for an incubator, and while some companies that involve students and faculty may be incubated at DPI, will work closely with the existing incubators to transition results.

26. Will the monthly reports be shared with the three senates?

We agree to share monthly reports with the USC and appropriate university senate committees (e.g., UIUC Senate EPC) and if desired, discuss these reports with the members. In these reports we will share information that is being shared with the U of I System president and vice presidents, the Board of Trustees, and the legislature. See #'s 2 and 14.

27. What will happen if any of the senates didn't approve the proposal?

Each of the three senates transmits its advice on the proposal to the University Senates Conference. The USC then transmits the advice of the three senates, along with its own advice, to the President for transmittal to the Board of Trustees for its consideration at action.¹ (See University Statutes (Article VIII, Section 3, [d]) "Units Organized at the University Level. Units organized at the university level, such as institutes, councils, and divisions, may be formed for the development and operation of teaching, research, extension, and service programs which are statewide or intercampus in their scope and which cannot be developed under a campus administration. Such an organization may be proposed by a senate, a chancellor/vice president, the University Senates Conference, or the president. The president shall submit the proposal for the new organization together with the advice of the appropriate senates, taken and recorded by a vote of each such senate, of the appropriate chancellors/vice presidents, and of the University Senates Conference to the Board of Trustees for action.")

Appendix A: University Senates Conference Seven Recommendations and DPI's Responses

1. the proposed structure of DPI's faculty executive committee be slightly revised to specify that it consist of 12 members, two of whom will be University Senates Conference designees, and 10 of whom will be elected by and from among the DPI faculty electorate, with representation of all three universities (p.4);

The DPI welcomes regular involvement by the USC in the faculty executive committee, that members of the faculty executive committee be elected by the DPI faculty electorate, and that all three universities are represented in the DPI faculty executive committee.

2. an annual self-assessment process be implemented once the institute is formally established on a temporary basis, rather than waiting until the proposal for permanent status is prepared.

As DPI gathers momentum and related activities occur, DPI's managing director will develop and oversee an annual self-assessment process. The structure and process for a self-assessment of the first two years should be in place by the end of the summer 2019. We envision that after the initial self-assessment, we will be able to have in place a robust self-assessment process based on our experiences with and the results from the initial two years.

3. before permanent status is requested, an estimate of annual U of I System investment in DPI should be provided;
4. before permanent status is requested, some examples should be given of the sources of "program revenue" (p. 7);
5. before permanent status is requested, the proposal should provide a description of a general funding strategy allowing DPI to replace internal funding (whether from the System or our universities) with external funding;
6. before permanent status is requested, the list of criteria for assessment of the Institute's success should include a reference to the demonstrated added value to our three universities (UIC, UIS, and UIUC), fiscal or otherwise (p. 7);
7. before permanent status is requested, a list of long-term milestones to gauge success should be provided.

DPI agrees that these five recommendations (#s 3 – 7) are important and that they will be addressed and in place before we submit our application for permanent status.

Appendix B: DPI Academic Governance Advisory Group Proposed Governance Structure (submitted to USC, 2.20.19)

Overview

The DPI Academic Governance Advisory Group recommends that a primary governance structure for the DPI be an elected body known as the DPI Executive Committee (DPIEC), reporting to the U of I System and serving as a liaison to the University Senates Conference (USC). Additional governance and advisory structures both internal and external to DPI (e.g., an elected or appointed DPI Advisory Committee, a board of advisors) may be established at the discretion of the DPI Director and the System Offices, including the President and the Vice President for Innovation and Economic Development.

Rationale and Assumptions

The structure and function of the DPI are similar to those of a major interdisciplinary research institute, such as the Beckman Institute at UIUC, the Cancer Center at UIC, and the Institute for Legal, Legislative and Policy Studies at UIS but the DPI sits at the U of I System level, not at the level of any one of the universities. It is understood that the DPI will not be the “home” unit of any member of the faculty, and that any courses offered through DPI will be approved courses of one of the three universities of the U of I System. Therefore, the DPI governance structure need not mirror that of an academic college, since the DPI will neither administer faculty lines nor establish new courses, degrees, or programs. Nevertheless, like a major interdisciplinary research institute, there is a role for shared governance in the DPI, and the governance body, which should be elected by stakeholder voting members of the faculty, should advise the DPI director, report to the appropriate UI System administrator (e.g., the President or designee), and perform a liaison function with respect to the system-level shared governance body, the USC.

Membership of Committee

The DPIEC should consist of elected representatives from among the faculty (tenure system and NTT) stakeholders of the DPI. The DPIEC should be a standing committee, and some members of the committee should be members or designees of the USC, to facilitate the liaison role of the committee. The committee should have both advisory and communicative roles, interfacing regularly with the DPI director, system leaders, and the USC.

Details of the composition of the committee should be articulated in the by-laws of the DPI. For now, the DPI Academic Governance Committee recommends that the DPIEC consists of 10-12 members, on staggered terms, so that once the committee is fully staffed, some seats would be open for election each year. The committee members should be organized so as to represent all three universities. The provosts from each university, the USC, and DPI faculty should identify nominees to fill these seats. The list of nominees should then be voted on by the faculty electorate of the DPI, which should also be delineated in the DPI by-laws.

The Role of the DPIEC

The duties of the DPIEC should be articulated in the by-laws of the DPI, but, for example:

- The DPIEC should consider and recommend courses as possible DPI-affiliated courses. DPIEC advice on such courses should be forwarded to the DPI director or designee for final formal approval.

- The DPIEC should consider and comment on external institutions as possible DPI partners. DPIEC advice on such partnerships should be forwarded to the DPI director and the U of I system leadership.
- The DPIEC should provide advice to the DPI director.
- The DPIEC should provide regular feedback and consultation to U of I system leaders and to the USC.
- The DPIEC should carry out an annual evaluation of the DPI director, to be communicated to the U of I president and system leaders.

Submitted on February 20, 2019 by the DPI Academic Governance Advisory Committee:

Matt Ando, Academic Executive Committee representative, UIUC, Professor of Mathematics and Associate Dean CLAS

Phyllis Baker, Visiting Special Assistant to the President, U of I System

Sandra DeGroote, USC representative, UIC, Professor and Scholarly Communications Librarian

Rob Dixon, Registrar, UIC

Harley Johnson, USC representative, UIUC, Professor, Kritzer Faculty Scholar, Mechanical Science and Engineering

Pete Nelson, Academic Executive Committee representative, UIC, Professor Electrical Engineering and Computer Science, Dean College of Engineering

Kathy Novak, USC representative, UIS, Associate Professor, Department of Communication

Barb Wilson, Executive Vice President and Vice President for Academic Affairs, U of I System

Appendix C: Academic Governance Advisory Group DRAFT Guiding Principles and Approaches to DPI Affiliated Courses

April 5, 2019

Principle One: Faculty ownership of the curriculum is basic to our universities and faculty governance. DPI is not a university or a college and it will not own courses or programs. All curricular matters will be governed by the existing faculty governance structures within the System. Therefore:

- a) Approval of new courses or course modifications associated with DPI will happen through already existing faculty governance rules.
- b) If faculty associated with DPI would like to participate in or create a course or program grounded in the work of DPI, (e.g. badges, certificates, minors) they will follow the procedures of their own university.
- c) DPI will need to interface with departments vis a vis majors and curricular decisions and will need formal mechanisms for doing that. This will take place through the DPI Office of Academic Affairs.
- d) Every DPI affiliated course must go through the regular faculty governance process at one of the respective campuses.

Principle Two: The overall process for collaborating with UI System and partner universities will include formal agreements to accept credit and determine tuition sharing from DPI affiliated courses entered into by all DPI partners.

Principle Three: The DPI Office of Academic Affairs will facilitate the processes for reaching the agreements and will oversee their implementation.

Principle Four: Communication between universities and to participating students will be the responsibility of key contacts at each partner institution and be coordinated through the DPI Office of Academic Affairs.