

Minutes of the  
**NIU Board of Trustees**  
**Research and Innovation, Legal and Legislative Affairs Committee**  
**November 15, 2018**

**1. CALL TO ORDER AND ROLL CALL**

The meeting was called to order at 11:58 a.m. by Chair John Butler in the Board of Trustees Room, 315 Altgeld Hall. Recording Secretary Chelsea Duis conducted a roll call. Members present were Trustee Dennis Barsema, Trustee Nathan Hays, Trustee Bob Pritchard, Trustee Tim Struthers (arrived 12:00 PM), Trustee Eric Wasowicz, Board Chair Wheeler Coleman, and Committee Chair John Butler. Also present were Committee Liaison and Vice President for Research and Innovation Partnerships Gerald Blazey, President Lisa Freeman, Acting General Counsel Greg Brady, Board Liaison Matt Streb, Vice President for Administration and Finance Sarah McGill, and UAC representatives Therese Arado and Cathy Doederlein.

**2. VERIFICATION OF QUORUM AND APPROPRIATE NOTICE OF PUBLIC MEETING**

General Counsel Brady indicated the appropriate notification of the meeting had been provided pursuant to the Illinois Open Meetings Act. Mr. Brady also advised that a quorum was present.

**3. MEETING AGENDA APPROVAL**

Chair John Butler asked for a motion to approve the meeting agenda. Trustee Coleman so moved and Trustee Wasowicz seconded. The motion was approved.

**4. REVIEW AND APPROVAL OF MINUTES OF AUGUST 16, 2018**

Chair John Butler asked for a motion to approve the minutes of August 16, 2018. Trustee Wasowicz so moved and Trustee Coleman seconded. The motion passed.

**5. CHAIR'S COMMENTS/ANNOUNCEMENTS**

I have just a couple quick things to say, began Chair Butler. I just want to point out that this Committee is doing some great work and that has a great deal to do with the fact that we are overseeing a function of the institution that's very well managed, and we've seen some indication of that in the last few months. You all know that we have developed a strategic vision for Research and Innovation Partnerships. We've seen in FY18 reports, as well as news media coverage, of our spike in research funding; a twenty-six percent spike in FY18. Congratulations to you and your team Dr. Blazey. Many of us were present at the press conference with the University of Illinois leadership celebrating the creation of the Northern Illinois Center for Community Sustainability, part of the Discovery Partnerships Institute. Congratulations. And, this is not a good news item, what I'm about to say, but we're also seeing an unprecedented amount of climate change-related crisis all over the country, and so it's a good time to be doing some of the research and work under these efforts. We should all feel very relevant and timely today as we execute our duties.

We have with us the UAC representative Therese Arado; and Cathy Doederlein is here, even though she was promising to leave earlier. Do either of you have any remarks?

UAC Representative Therese Arado said, thank you Trustee Butler. Cathy just could not bear to leave, she's enjoying her morning so much. Since this is the committee on research and innovation, I just want to publicly recognize our faculty because, while we don't always hear the names and the activities associated with so much of what's going on, research and innovative-wise is supported by the incredible work of the faculty at NIU, and their work is integral to success, along with all the other people who are also working behind the scenes to move forward these projects. While it is hard to believe we're heading into the final weeks of the semester, I also want to recognize the faculty who are right now working tirelessly to ensure the academic and personal success of their students as they come to a rather stressful time in their semesters; and so I just wanted to recognize publicly that they are all out there doing their best to enhance our students' academic experience as well as enrich their lives in general. Thank you.

**6. PUBLIC COMMENT**

Acting General Counsel Brady indicated that there were no requests for public comment.

**7. UNIVERSITY RECOMMENDATIONS**

**Action Item 7.a. – Northern Illinois Center for Community Sustainability (NICCS)**

Chair John Butler asked that Vice President for Research and Innovation Partnerships, Dr. Jerry Blazey,

would present the University Recommendation Item 7.a.

Vice President Blazey thanked Chair John Butler for the kind comments and congratulations earlier. As always, I think it really belongs to the faculty and staff whose energy and initiative is responsible for the increase in research activity this year. I'd also like to thank the staff in the Division because they are tireless in support of the faculty as we move forward with the research programs. Agenda item 7.a. seeks the Board's endorsement to move forward with the Northern Illinois Center for Community Sustainability, otherwise known as the acronym NICCS. As presented at past board meetings, NICCS is the hub of the Illinois Innovation Network or IIN. Our initiative will focus on two of the four IIN themes; food, agriculture, environment, and water; and, as you pointed out earlier, these are extremely timely as the environment is changing. Partnerships with the University of Illinois' College of Agricultural, Consumer, and Environmental Sciences, government agencies, and the private sector NICCS will create new knowledge, inform policy making, and inspire action in three interrelated areas of food systems innovation, water resources stewardship and development, and climate change adaptation. NICCS will occupy an approximately 30,000 square foot research facility on the west campus. And the west campus site is a 20-acre plot just to the northwest of the Convocation Center. The facility envisions to include a center core with offices for faculty, staff, and graduate students; state-of-the-art classrooms for on-site and off-site instruction; collaboration space and conference rooms. Three wings will comprise research and innovation labs and a high bay for equipment storage and instrument storage and construction. Design efforts are anticipated to be initiated in 2019 with construction activities in 2020 and 2021. The total cost of the initial facility will be just under \$23 million, of which \$15 million is requested from the Illinois Department of Commerce and Economic Opportunity (DCEO), and \$7.9 million will be provided by NIU. The funds from DCEO are limited to capital funds and will be used for A&E and construction. NIU funds include \$5 million for instrumentation and equipment and a \$2.9 million in-kind contribution primarily for land and site improvements. I'll just take a few minutes to mention the status of the IIN and Discovery Partners Institute. As President Freeman and I learned earlier this week at a status report to the Higher Education Committee, the U of I system is moving rapidly on the initiative with facilities already up and running in downtown Chicago and their organizational structure is well along. DCEO has the final proposal and we still expect initial funding to arrive very soon in this fiscal year. So therefore, it's timely to request authority to proceed with this grant opportunity. Approval for the execution of the required design, construction, and related expenditures to establish NICCS will be requested at future meetings of the Board of Trustees. Formally then, the University recommends that the Research and Innovation, Legal and Legislative Affairs Committee endorse this request and ask that the president forward it by means of the President's Report to the Board of Trustees for approval at its meeting on December 6, 2018.

Chair Butler thanked Dr. Blazey and asked for a motion to that effect. Trustee Wasowicz so moved and Trustee Barsema seconded.

Trustee Wasowicz asked, I have a question about what you said earlier about funding; \$15 million from DCEO and then \$5 million from us; but the total is \$22.9, so where's the other \$2.9 million coming from?

Vice President Blazey answered yes, it's just in-kind in land, parking and some other physical space we'll be accessing.

Eric Wasowicz replied, okay and then the five million that we're on the hook for, we're looking at how to raise that then?

Vice President Blazey answered, we will be spreading that over the probably four years, so it's \$1.25 million in equipment. Some of that will come out of the existing equipment funds at RIPS and some of that we will have to redirect other resources or find other sources of revenue.

Tim Struthers began, I have a series of questions. First, this entity - NICCS - is simply a division of the university. This is not a separate entity in any situation?

Vice President Blazey said yes, that's correct.

Tim Struthers asked, with respect to the operating cost of this unit, I think would be fair to call it, I'd feel more comfortable if I had some sense of what we thought.

Vice President Blazey said, yes, it's a good question and it's one we're grappling with right now. Some of it will be reorganization and redirection of existing efforts particularly in the water resources and the climate change adaptation. There likely will need to be new operating expenses associated with the food systems innovation. But again, we're planning on leveraging our partnerships with the U of I system itself. I will

also say that I think many of these research areas have high potential for donor activity.

President Freeman added, I would say that, in the spirit of Program Prioritization, which lives on beyond the process, we have a formal process for how we allocate faculty hires and participation in key university initiatives, support of our research clusters, teaching curriculum that is attractive to students, that will enhance enrollment, are all things that advance a faculty hiring request; and so you know, as faculty turn over, those lines will be allocated to things that pass the test, and we would expect this to be competitive in that context.

Trustee Struthers responded, that helps. I realize we have no idea and we'd just be guessing as to what this might look like fully staffed, but I wish we weren't on the record to some degree, so, to minimize your risk a little bit, but if we fast forward five years from now, how many folks do you think might be working in this division?

Vice President Blazey responded, I think the best model is looking at our Institute for Environment Sustainability and Energy; there's probably, I would guess, 30 to 40 faculty involved in that, and I think they would have greater and lesser degrees of presence in the facility. I think that would be augmented by additional faculty. I think faculty I would say roughly fortyish would be involved and might increase as the programs become more successful.

President Freeman added, one of the key strategies whenever you build a facility like this and form a Center is to think about shell space, to think about who you could attract to the building. That would complement the educational mission, create some partnerships that would benefit students and faculty, but also a revenue stream, and those are the things we're still grappling with because it's early in the process and the opportunities haven't been identified, embedded fully.

Trustee Struthers continued, I absolutely get that this is the first step in the process and there's so much to be determined. When this was announced, which is to me incredibly great, positive, encouraging news for the university, for sure. The only question that I had myself, and got quite a bit of, is the west campus. And, in an environment that we should have, and I think we do have, a fair amount of access capacity in the core campus itself, and I am a huge promoter of density and vibrancy and such, in the connection to the town; that would have been an ideal position. I understand there are constraints, but if we might just air that out a little bit and just talk about why the need to go west.

Vice President Blazey responded, there are a lot of ways I could approach that. First, I will state that I believe the University is badly in need of new, modern laboratory infrastructure. Some of our buildings where our research laboratory and research-intensive departments are located, shouldn't be located there. This is an opportunity to really enhance the attractiveness of the campus to faculty and students by having modern state-of-the-art laboratories. That's one answer. And, another answer is that we're looking seriously, and in detail, on a partnership with the...

President Freeman answered, DeKalb Food and Education Center.

Vice President Blazey continued, it will be located north of the campus along Annie Glidden and having the two institutions, or the two entities, in close proximity offers a lot of synergy and I think we'll be able to leverage the efforts very effectively.

President Freeman added, to build on that, we're in conversations to make one plus one equal three, so that the pieces of NICCS as envisioned that would do better near a population center. That would create synergy with things that would help community revitalization in the Annie Glidden North neighborhood. We are looking at a partnership strategy to put some of those things there to take things like greenhouses that require more space and maybe a little more privacy and protection and easier in and out for trucks to load things. For both of those entities maybe putting on the west campus. It's still preliminary, but we're very committed to working with community partners and community-based organizations to make sure that the maximum benefit to DeKalb and to the University is achieved through partnerships associated with the center.

Trustee Struthers replied, thank you and the last question would be, given that discussion and just the context of the overall campus and the finance piece of it, will this touch the finance committee? Will that capital expenditure and such go through that committee as well?

Vice President Blazey answered, yes. Further actions will go through the appropriate channels and will involve the Division of Finance and Facilities and items will be brought before the Board as needed.

Trustee Struthers added, I think that just puts the lens on the broader capital plan, the campus plan, the community, all of that stuff rolls into that. I get this is the science piece and the academic piece to a larger degree.

Vice President Blazey continued, we envision when there are programmatic aspects they will be brought to this Committee, and when there's facility and finance activities, they'll be brought to the appropriate committees.

President Freeman added, if there are curricular pieces they'll go to AASAP Committee.

Trustee Struthers said one last question: there's a piece of this that has engineering attached to the cost. If we start to spend some money, I realize we'll approve this in December, the Board will, if we start to spend some money on engineering I just want to be sure we don't lock ourselves into that specific site at that time before we make any final decisions.

Vice President Blazey responded, that's correct. That is part of the reason we engaged an architectural and engineering firm.

Chair Butler began, if I could comment briefly about the reason why this matter is before this Committee right now as an Action Item. Our thinking was we had a press conference on campus. Some trustees were present for that. I think we can all agree that this was a great thing to get – to become a partner with the U of I for this project and to receive these funds; but, I felt very strongly that the Board needs to put its arms around this project as a group, particularly because the institution is going to begin a process of moving these pieces forward and I think they need to have the authority of the Board working with them in that process. It's too early now to have the kind of items that go before the finance committee, but it isn't too early for us to say, as a board, we embrace this project and we want our leaders to move forward and make this happen.

Trustee Barsema added, I'm sorry, I might have missed it because the conversation was going in that direction, but what's the time frame of when we can expect an operating budget?

Vice President Blazey answered, we're starting to stand up our internal structure to address that issue as well as the programmatic issues, and I think that we will need six months or so to really come to grips with that.

Trustee Barsema, okay so sometime the middle of next year?

Vice President Blazey, I think that would be achievable.

Trustee Barsema continued, I have a second question: so there's been some discussion, and I've had a couple of questions of folks that have come to me, that with the change in administration in the state, that our governor-elect has made some comments that he doesn't know if he is in support of the IIN, and so I know you've been doing some research on that Jerry. What comments do you have in terms of, is there any risk that the new administration in the state of Illinois could put a stop to this, or somehow slow it down?

Vice President Blazey replied, the governor-elect was asked a very specific question: was he in favor of the then-governor's IIN. That's not quite the same as 'are you in favor of IIN'. That is the view that the U of I leadership is taking, that they're very optimistic. They believe that the governor-elect will be in favor of it, but there was one major concern the governor-elect expressed, that the initial claim that there would be matching funds available for INN/DPI had evaporated at the time that legislation was passed. Both U or I and we have been very careful to try to maximize the matching funds that are available for the initial \$500 million that was approved. U of I has not reached \$290 million and they expect that that's going to exceed that number easily. We're, as you can see, at \$7 million and we believe, and the U of I also believe that the governor-elect's primary concern has been addressed. I think that, at this point in time, all the signals are that we should proceed, and I think frankly we have time ourselves to mitigate the risk, if there is any risk associated with it.

Chair Butler asked for a vote and the motion passed.

## **8. UNIVERSITY REPORTS**

### **Information Item 8.a. – State Legislative Update**

Chair Butler asked that Dr. Blazey address the items in the University Report, beginning with State Legislative matters.

Vice President Blazey began, as we're through a very pitched and exciting election season, we'll have two reports, one on the state level. It won't be just about the election season, but cover a broad range of issues downstate. We'll also have a report on the federal situation and then we'll follow up with a report by Karinne Bredberg on our IP portfolio which was an explicit request at the last RILLA meeting. Dr. Streb will give the state report and I'll turn it over to you.

Dr. Streb began, Trustees, you have a very detailed written report in your materials. I'm happy, given the time, just to answer questions if you want, or I can walk through the presentation. I'm happy to do whatever you would prefer to do.

Trustee Coleman asked, do you want to talk about the election?

Dr. Streb, I never would pass up an opportunity to talk about elections. It's not a surprise that we have a new governor-elect. The Democrats swept all state-wide offices, which was also not a surprise. Interestingly many of you may have seen already that we had somebody who has won the comptrollers race who is now running for the mayor of Chicago, which is also not a surprise. So there wasn't really a lot of surprises from the state-wide perspective. At the state legislative level, Democrats picked up two seats in the Senate. There's still one seat that is not determined yet, and, in the House, they picked up six seats, so they're now at 73. There are actually two seats that haven't been called, one of which is separated by two votes at the last time I saw the vote count. What's important for those two things is that that gives the Democrats a super majority now in both houses. You might say, 'well they have a Democratic governor why would that be important because usually, if you've got a governor of the other party, it's important to have enough votes to override a governor's veto.' In theory Democrats in the legislature and the governor should agree, and so why would you need that? Well, what was governor-elect Pritzker's issue that he ran on in the election? It was the graduated income tax. He can't do that on his own. He needs a super majority of Democrats on board to pass that because it's got to be a constitutional amendment. It will be interesting to see what happens there. Locally, Jeff Keicher was elected. He will represent the 70<sup>th</sup> District replacing Trustee Pritchard. Dave Severson, who is our senator, was reelected as well representing the 35<sup>th</sup> District. He ran unopposed. We did have three new NIU alums who were elected into the legislature as well, so we're excited about that. And just a few minutes ago we found out that one of the newly elected senators has a son who is an alum at NIU, which I thought was kind of interesting. If you think about Governor-elect Pritzker and his higher education agenda, he talked about growing the globally competitive workforce in Illinois, concerned particularly with three areas: increasing college affordability, keeping Illinois students in the state. I've said many, many times there's nothing really positive that came out of the budget impasse. The only little glimmer of positivity that you could argue came out of the budget impasse was it put a focus on higher education, finally, and it really became the focus because students were leaving the state at such a great rate. And third, expanding economic opportunity and promoting innovation; and this goes to what

Vice President Blazey was saying earlier about Governor-elect Pritzker, that he certainly has a very similar view on economic opportunity, innovation, entrepreneurship as the previous governor did. Specifically, what has he talked about? Well I think good things, from a university perspective, if he's able to carry these things out. One, he wants to increase the MAP program by 50% and increase the maximum MAP award awarded for each student. He wants to go back to restore funding for public universities to pre-Rauner administration levels. If that's the case that would put us back at about fiscal '15 where we'd be at about \$91 million. We received \$83 million this past year. So that would be a positive if he's able to do that. He wants to enact a common application. That's something the university has supported, the higher education working group that Trustee Pritchard sat on when he was in the legislature looked at that. It's something that we weren't able to move forward as a piece of legislation yet, largely because of the opposition of the University of Illinois. We're hoping that maybe there's still an opportunity to move something there. They're concerned about losing their brand and their control over their admissions process. As so we'll see how this all plays out. I think those are positive things. Those are three things that if he was able to do I think would be very, very beneficial to the university. All of you know that we're in veto session right now. We'll be in veto session today, very short day, take off next week, and then the following week they'll have three more days of the veto session. The question is,

what's going on in veto session, and from a higher education perspective the answer is not much. Yesterday the legislature overrode 39 of Governor Rauner's vetoes which is a pretty large number in many respects. I should be clear that that's not 39 total bills that were overridden; that was several in the senate and several in the house, and both bodies have to override the veto. But there has been some activity. There has been some question about how much is going to be put forward because maybe Democrats will just say, you know what, we're going to wait until the new legislative session and pass the bills that we passed

and let Pritzker sign them into law and get some victories. So, we're monitoring that as things happen, but it's been a pretty quiet week so far. Going forward, I think the issues that you're going to see would be the same issues that we've been talking about for the last several years. It will come back to accessibility and affordability. You're going to see performance-based funding come up again and performance metrics in terms of university funding. You're going to see a push again by community colleges to try to get a four-year degree. So, there's a variety of different issues that we've been working on and dealing with in the past. The other thing I think that I'm hopeful we'll be able to get, and this is something that may even come up in the veto session, is an Aim High trailer bill. Many of you remember we had the Aim High bill. We talked about that previously, which you know we have about \$5.5 million now in additional scholarship money to give to our students. One of the concerns that NIU has expressed with that bill is that it's got to be spent all in one year. What we have is a huge bump in one year, potentially, and then how do you sustain that going forward? We've asked that the bill be rewritten to allow us to keep the money that we don't spend this year, so we can spread it out over a longer period. There seems to be some support among the higher education working group for that. We're hoping that that might be able to be pushed and that's something that we'll keep monitoring. With that, I'll turn it over to any questions that any of you have.

Trustee Coleman asked about capital expenditures, have you been hearing much about a massive capital bill?

Matt Streb responded, there has been some discussion about some sort of a tax increase that would happen potentially in lame duck. I was just reading Rich Miller's Capitol Fax, and he argues that there are eight lame duck Republicans who have argued that they would get on board with some sort of a tax increase. We've heard this rumor all along, that they would pass it, a tax bill, capitol bill and then allow Pritzker to sign it as soon as he enters office. So that's still very much on the table. What that looks like whether that comes to fruition we'll have to wait and see, but I think it's more than just a rumor.

### **Information Item 8.b. – Federal Relations Report**

Dr. Anna Quider began, it's great to be here with you all. I don't have any slides, just a quick few bullet points. First, I'd to start by recognizing my intern, Ian Pearson. He's a junior majoring in Political Science and non-profit and NGO studies. I don't know the next time we'll be in the same room together, so I just wanted to call attention to his great work this year. As you all know, on November 6<sup>th</sup>, the entire 435 seat House of Representatives and 35 U.S. Senate seats were up for election. The House flipped control and the Democrats now hold a 31-seat majority with eight seats still undecided. The Republicans strengthened their control of the Senate and presently hold a four-seat majority with two seats still undecided. The split party control of Congress and the slim majority in each chamber is likely to slow down the legislative process in the new Congress. Digging into the election results, NIU alumni Representatives Robin Kelly of Illinois' 2<sup>nd</sup> District and Dawn Beacon of Nebraska 2<sup>nd</sup> District, were both reelected. The Illinois Congressional Delegation will be 13 Democrats and five Republicans in the House. And, of course, we still have our two senators, Senator Durbin and Senator Duckworth, who are both Democrats. There will be three new members of the delegation; Republican incumbents Representative Peter Roskam and Randy Hultgren will be succeeded by Democrats Sean Casten and Lauren Underwood, respectively, and retiring Democratic Representative Luis Gutierrez will be succeeded by Democrat Jesus Chuy Garcia. Sean Casten is a clean energy entrepreneur; Lauren Underwood is a registered nurse and health policy expert who was a political appointee in the Obama administration; and Chuy Garcia is a member of the Cook County Board of Supervisors.

While committee assignments will not be announced until late 2018 or early 2019, extrapolating from the current assignments and their seniority suggest that Illinois is well positioned for leadership roles in key House committees including Appropriations, Energy and Commerce, Ways and Means, and the Science, Space and Technology Committee. Regarding caucus leadership, Representative Cheri Bustos is running for the Assistant Democratic Leader, which is one of the top positions in the Democratic Caucus in the House. Senator Dick Durbin is expected to remain the Democratic Whip in the Senate. For the remainder of 2018, Congress is expected to focus on completing the fiscal year 2019 appropriations process. Only five of their twelve appropriations bills have passed into law so far, with the remainder operating under a continuing resolution until December 7<sup>th</sup>. Among agencies under the continuing resolution are the National Science Foundation and the Department of Commerce, which are two priority agencies for NIU. It is unclear how the funding negotiations will proceed considering the election outcome as well as ongoing tension over funding for immigration related provisions. As I outlined in your report, an interesting point is the way the appropriations bill that funds many of the science agencies are the Commerce, Justice, and Science appropriations bills. This means there is just one bill that funds the Department of Commerce, NASA, the

National Science Foundation, a number of science agencies, and the Department of Justice. Because there is no agreement on the Department of Justice and how that relates to immigration issues, that entire bill is currently frozen. A continuing resolution that extends into the early calendar year 2019 is possible-to likely, and a government shutdown is looking remote, but definitely not off the table.

Looking ahead, Congress is likely to take another look at the reauthorization of the Higher Education Act. Immigration issues, especially the fate of the Deferred Action for Childhood Arrivals program, are likely to remain at the top of the national agenda. Within the research enterprise, national security concerns and harassment are expected to remain focus areas for the executive and legislative branches. And we could also see a renewed push for an infrastructure package and were that to happen we would be working to make sure that that includes research infrastructure. And with that I'd be happy to take any questions.

### **Information Item 8.c. – Sponsored Programs Administration**

### **Information Item 8.d. – Intellectual Property Procedures and Portfolio**

Vice President Jerry Blazey began, our last information item this afternoon is on our intellectual property portfolio. Karinne Bredberg, Assistant Director for Commercialization and Innovation, will presenting to the Board.

Ms. Bredberg began, Good afternoon. For those of you that I haven't met personally, I'm Karinne Bredberg, Assistant Director for Commercialization and Innovation in the Office of Innovation. I will be giving a short overview on the intellectual property procedures and portfolio at NIU. Briefly, the Office of Innovation, or OI, administers the university's intellectual property policy and receives, evaluates, and protects IP submitted by faculty, students, and staff that are covered under the policy. The data that I'll be presenting today is from fiscal years '08 to '18, so the past ten years. The OI receives approximately ten disclosures per year. When an invention is submitted to our office, the OI staff utilize two rubrics for evaluation. We use a research relevance and invention engagement rubric which evaluates the inventions compatibility with NIU's mission, vision, and values. The second rubric is a market analysis rubric which identifies the size and location of the invention's commercialization market. We also use third party market assessments as needed just to get some further information on the market. It's important to note that we do not evaluate the scientific merit of the inventions that we receive. Generally, the OI uses three criteria for considering advancement of IP for protection. The first is that the proof of concept data is sufficient for our patent attorney to capture the essence of the invention in draft claims. Currently we do use external patent counsel who have expertise in key areas such as chemistry or engineering. Currently the attorneys we engage have terminal degrees in their related fields and professional juris doctorate degrees. Our second criterion is that the invention has not been publicly disclosed or, if it has been disclosed, it's been within one year of public disclosure. This is important to note because the U.S. has a 12-month grace period from the date of public disclosure, whereas international countries, except for a few, do not have this grace period. Therefore, once something is publicly disclosed we have lost international patent rights. The third criterion is that the invention is within the scope of the inventor's university responsibility and advances NIU's research mission. From FY 08 to FY 18 the Office of Innovation has received 96 disclosures. Eighty-five percent of our disclosures come from the College of Engineering and Engineering Technology and the College of Liberal Arts and Sciences, with one-third coming from the Department of Chemistry and Biochemistry. NIU disclosures in the life and physical sciences are typically very early-stage in terms of technological readiness. For example, chemical synthesis for drug discovery has a much longer commercial path, approximately ten or seventeen years compared to inventions derived in technology-based departments like Mechanical Engineering. However, NIU's early stage research needs patent protection so that the faculty member can publish and apply for grant funding in order to further develop the IP without the loss of rights. In addition to faculty disclosures, we have also received ten disclosures from students or student teams. Under the IP policy, undergraduate students are not obligated to report inventions to the Office of Innovation unless they are employed by the university or they use significant resources such as specialized equipment to develop the IP. But they are welcome to come to our office for evaluation and for patent protection if they want to assign ownership rights over to the university. Approximately 45% of our disclosures received in the past decade have advanced for patent protection. Chemistry applications were the most common due to the ratio of disclosures received and the early nature of the discovery needed protection. The OI files applications both domestically and internationally and may file multiple applications depending on a patent examiners review or the market analysis. In the past decade, NIU has been issued 45 patents with many applications still pending. According to our records we have approximately 40 applications that are still pending at the U.S. patent office. In the past ten years, NIU via the Office of Innovation or the Northern Illinois Research Foundation, have entered into seven licensing agreements. To date, two remain active;

one to a Texas startup for an electrical invention, and the other to an NIU chemistry startup. There is also one license currently pending startup that had just been formed. As mentioned, inventions in engineering or technology rate higher on the technological readiness scale and therefore are most marketable. Since NIU's IP portfolio is chemistry based, or heavily chemistry based, and these inventions need more time for development, regulatory clearance and clinical trials than their engineering counterparts, identifying licensees for these areas and early stage research is challenging but can be highly lucrative. For NIU, protecting IP is an avenue to protect and promote faculty research and disseminate their findings for advancing knowledge for the public good. Our contracts have clear terms and conditions that protect the inventor and the university IP. An agreement such as licenses NIU retains ownership of the IP. We never sell the IP outright. Additionally, each agreement defines a field of use or the area in which the licensee is going to use the IP. The university then retains the right to license to others who may have other fields of use. In all cases, the university sets licensing agreement milestones that the company must reach so that the IP is not shelved for the company's competitive advantage. This ensures that the IP is used to disseminate knowledge for the intent of public good. The university also retains a perpetual royalty free right to practice and publish with respect to the licensed IP for the educational and research purposes. This clause ensures that the inventors can continue their research. One of the success stories that I'd like to talk about is with the Texas startup that I mentioned previously. In 2013, President Freeman, who was serving as Vice President for Research at that time, was in Chicago for a charrette. There she was introduced to a new startup, Invictus Medical, Inc., who was working on a product to reduce plagiocephaly or also known as flat head syndrome for infants in the neonatal intensive care unit. Through conversations, Invictus became interested in licensing NIU complimentary technology that could be part of their company portfolio. The invention, developed by Professor Emeritus Dr. Sen-Maw Kuo and Dr. Lichuan Liu in Electrical Engineering, is a wireless communication integrated active noise reduction system which is designed to reduce harmful noises in infant incubators. While licensing negotiations were taking place, the NSF Small Tech Transfer Research Program announced a funding opportunity that was perfect for an NIU-Invictus collaboration. The grant was awarded and both parties were able to use the grant funds to develop the technology further together. After the initial grant period, Dr. Liu's graduate student, who was set to graduate that semester, accepted a full-time position at Invictus to continue to work on the product and she is still there today. Just recently, Invictus raised \$1.26 million and is currently optimizing the system for use in NICU hospital settings. This success story highlights a licensing example at NIU, but also highlights the importance of networking and collaboration and how the Office of Innovation can facilitate strong, long-lasting partnerships involving NIU intellectual property. I'd be happy to answer any questions that you may have.

Trustee Barsema, thank you Karinne. So, on Invictus, correct me if I'm wrong, Dr. Freeman, but I think this was one of the ones that you brought to the Foundation and the NIU Foundation participated in this from a funding standpoint did they not?

President Lisa Freeman responded, when the Foundation grants committee did a pilot to look at innovation grants, Lichuan Liu, the PI, brought forward that incubator technology and she was indeed supported by the Foundation and that helped her be competitive for the NSF grant with Invictus.

Trustee Barsema asked, can you talk a little bit more about Invictus and what the financial relationship is with NIU and Invictus, and the creator or the inventor? What percentage of the revenues do we receive? Do we own a piece of the company, etc.?

Vice President Blazey replied, we probably shouldn't get into that, but we do have some ownership. I'll leave it at that.

Trustee Coleman asked, I do have a fundamental question about how we make available our patents to organizations to possibly license and invest in. Also, do we have an internal, or it sounds like the Foundation is providing some grant money or angel funds that we regularly pitch these patents to?

Ms. Bredberg responded, we try to maintain our website with current information about the patents and technologies that are available. Currently we are short staffed and we're a little behind on putting those up there. There's also other national databases through the Association of University Technology Managers, which is the professional organization that I belong to. They also have a database that is available. Generally, we are reliant on our scientists to go out to conferences that they may be presenting at and making those connections and then bringing those connections back to us so that we can reach out. Again, as our staffing level gets back to what I'll call normal, hopefully we'll be able to reach out to companies ourselves.

Wheeler Coleman asked, there's not an internal angel fund that we regularly call upon?

Ms. Bredberg continued, we have a small set-aside in our budget for venture funding. If there's an interest to commercialize the technology, we can provide a small amount of funding for that. We also have the Northern Illinois Research Foundation board to which many of our researchers present to let them know what's being done at the university.

Trustee Struthers began, I may be a tick or two off here in my focus, but I thought a year or so ago there was some discussion around collaboration with other universities maybe with respect to the process of capturing the external patent stuff.

Vice President Blazey replied, that's sort of off- and on-again. We did make some inquiries at the U of I system about a year ago and they didn't express much interest. But then it turns out a week ago we were meeting with some leadership from their tech park and they're considering it again for us. There would be some cost savings and probably a broadening of the expertise. It's certainly not off the table; it's just been a slow conversation.

Trustee Struthers added, great. I'm glad to hear that. Obviously, we'd all be quite positive on that idea and it seemed to me there was surely support and just encourage us to keep our foot on the gas there.

President Lisa Freeman added, I think what happened in the initial conversations, and Dr. Blazey correct me if I'm wrong, is there was a model where the U of I had assumed that responsibility for another public university. They had much less activity than we had. Assuming our responsibility was going to be a more complicated negotiation, because it would tax their resources more highly, and I think that's part of the reason it's moved slowly.

Eric Wasowicz also commented, this is outside of this, but I know some of the trustees know, what we're doing at Code Orange right now with your group Jerry, and Karinne you've been an enormous amount of help, so thank you on that. But this public/private partnership is just amazing. So if any of the trustees have not been there I'd highly suggest you go and take a look at the facility and the basement and the library. It is great, in fact we were on the field last night talking with Mike Brenner who represents Discover here and he is so excited about he had 37 students, I think, this semester. They've got over 70 now for next semester which is phenomenal and he's extremely excited.

Vice President Blazey added, thank you once again. That was very much a team effort. Sol had a part in it, John Heckmann and Karinne were all instrumental in making that happen. It really is a fine example of how the university can pull together across divisions.

Trustee Wasowicz continued, Mike was telling us last night that the president of Discover is coming out here in the first week of December.

Vice President Blazey said, Karinne maybe you want to expand on that? Is that part of the Amazon visit?

Ms. Bredberg responded, I'm not sure. I just received an e-mail today from Mike asking how to extend an invitation to our president for a meet-up for that.

President Freeman added, I think that the other thing we can take away from Code Orange goes back to what Karinne said on the first or second slide, that the professional network and leveraging is very important in trying to make these connections. Invictus wouldn't have happened the way it did if I, as the Vice President of Research, wasn't out networking, and Nick Karonis and his alumni had a lot to do with Code Orange; and so, the board members for the Research Foundation, and others using your professional context and helping us reach out to people with expertise, is very important in trying to connect our faculty and their inventions to resources that can help move them forward to the market.

Vice President Blazey responded, concerning Discover, I just want to add that we're thinking very hard about how to use the other part of that footprint downstairs, thinking of what I'm calling 'use cases' and starting to consider invitations to Innovation DuPage to bring some programmatic elements. Amazon is visiting the other half on December 6<sup>th</sup> and there is some chance that we may engage with them as well. And we're looking to start standing up more programs early in the next year.

Trustee Pritchard asked, of the 45 patents that have been issued, are any of them close to commercialization?

Ms. Bredberg replied, I would say that the one with Invictus is the closest. Again, the patents that come from Engineering are closer to market readiness. If there were any that were close it would be the ones from Engineering. But we have not successfully commercialized anything to date.

Vice President Blazey added, but we have licensed I'd say about half a dozen and most primarily out of Engineering.

Ms. Bredberg added, if I may, I'd like to redact my comment that nothing has been commercialized. There have been some technologies that have been licensed and commercialized, it's just nothing from our start-ups that has been commercialized.

Chair John Butler asked, does the College of Engineering have any sort of set up of the Invictus technology in house?

Ms. Bredberg responded, I'm not sure if it's still set up. I know at one point in time Dr. Liu did have an incubator with kind of a rudimentary set up. Of course, that was probably four years ago now, so the way that Invictus has taken the technology with new speakers and new error microphones, it may look completely different, but at the time yes, we did have a set up I believe in the digital signal processing lab.

Chair John Butler added, I've been in that lab and it's fascinating and I just wanted to encourage perhaps the trustees to schedule an opportunity to play around in the School of Engineering. Not just that lab, but other labs. It's fascinating and I'm sure the Dean would take you around.

#### **9. OTHER MATTERS**

No other matters were discussed.

#### **10. NEXT MEETING DATE**

The next meeting of the Committee is scheduled for February 7, 2019.

#### **11. ADJOURNMENT**

Chair John Butler asked for a motion to adjourn. Trustee Wasowicz so moved and Trustee Struthers seconded. The motion was approved. The meeting adjourned at 12:55 PM.

Respectfully submitted,

Cathy Craddock/Chelsea Duis  
Recording Secretary

*In compliance with Illinois Open Meetings Act 5 ILCS 120/1, et seq, a verbatim record of all Northern Illinois University Board of Trustees meetings is maintained by the Board Recording Secretary and is available for review upon request. The minutes contained herein represent a true and accurate summary of the Board proceedings.*