### Minutes of the

# NIU Board of Trustees LEGISLATIVE AFFAIRS, RESEARCH AND INNOVATION COMMITTEE MEETING

August 28, 2014

# **CALL TO ORDER AND ROLL CALL**

The meeting was called to order by Chair Cherilyn Murer in the Board of Trustees Room, 315 Altgeld Hall. Recording Secretary Cheryl Ross conducted a roll call of Trustees. Members present were Trustees Robert Marshall, Robert Boey, John Butler, Marc Strauss, Anthony Iosco, Paul Julion. Also present were President Douglas Baker, Committee Liaison Lesley Rigg and Board General Counsel Jerry Blakemore.

# **VERIFICATION OF APPROPRIATE NOTICE OF PUBLIC MEETING**

Confirmation of Open Meetings Act notification compliance was given by Board General Counsel Jerry Blakemore.

# MEETING AGENDA APPROVAL

A motion was made by Trustee Strauss to approve the agenda. The motion was seconded by Trustee Julion. The motion was approved.

# **REVIEW AND APPROVAL OF MINUTES**

Trustee Strauss made a motion to approve the minutes of the February 24<sup>th</sup> Committee meeting and February 27, 2014 LEA Committee meeting. The motion was seconded by Trustee Julion. The motion was approved.

# CHAIR'S COMMENTS/ANNOUNCEMENTS

Chair Murer welcomed the University Advisory Committee representatives present this morning, Dan Gebo, University Council Representative and Deborah Haliczer, President of the Supportive Professional Staff Council. Faculty and staff on campus remain intensely concerned about pension changes, the next round of pension legislation, and the possibility that these changes are likely to result in still more departures of faculty and staff. Trustee Murer expressed a shared concern about the loss of talented employees.

Trustee Murer noted how delighted she was to be on campus to be able to see this committee move from an ad hoc committee and become reclassified as a standing committee. We are very appreciative of this support and vision of our board chair, the support and vision of our president, and the support of this board that voted to allow this ad hoc committee to leave its temporary status and become a standing committee. I think that that's a very important reflection on the value that we place on research, on technology, and our consciousness in regards to federal and state reimbursement which allows us to continue our mission. One of the things that we did when we formed this as an ad hoc committee and at that point I was working with the provost and then was very delighted to move with Dr. Rigg on these issues. We wanted to take this committee from a horizontal perspective to a more vertical perspective of analysis. And so I just want to recap where we've been. There was a trilogy and we've long awaited the third part of this trilogy but when we started we looked at research and wanted to make sure that there was a strong foundation of understanding from the perspective of the board and from the perspective of the university in terms of what does research mean, what is it's role, how does it work, what are the challenges, what are the opportunities and that was really the first committee meeting that we had address these factors. The second one we had was to try and bring life to the concepts that we had

addressed in the first meeting. And so we wanted an example of a very successful longitudinal research project and we were presented by Dr. Julie Crouch with the evolution of the research center at NIU which is the Center for Study of Family Violence and Sexual Assault. This allowed us to see the theory put into action and to understand that this is how this process works. Now today Vice President Riggs will present a long awaited presentation on accountability of expectations and metrics for the sponsored research and I think that that's very important that we look at it in these three parts and as we continue to move as a committee, we will use that same platform of drilling down, of being able to look at things from a more vertical perspective to be able to transcend the conversations from one committee meeting to another so that we have really in-depth analysis and I think the presentation that we had before under Academic Affairs as it relates to international endeavors and since one of the major factors in the international endeavors is research that I think we will see, I would like to see us address that more fully as we start to identify what is our next three parts, but if we don't know how the money works, we don't go real far do we, and is we're not in compliance with changing regulations, we're not going to go real far. So it is very important that we address federal relations and understand from a federal perspective and from a state perspective what is happening and we will have a presentation in that regard as well. There is an addition that we are very excited about as a committee and that is the addition of a new federal relations director and her name is Dr. Anna Quider. When I saw her curriculum vitae I was so pleased because I think as Deborah talked about talent at the university, I recognized that that was not unusual for a member of our faculty to be so distinguished as Dr. Quider is. Her perspective also, having studied at Cambridge, falls into place when we talk about the international dimension of what we're doing. So we're very excited to have her. She has a PhD in Astronomy and she will be our federal relations director and I've asked that she meet with us at our November 6 committee meeting so we can properly introduce her.

#### PUBLIC COMMENT

The Chair asked Board General Counsel Jerry Blakemore if any members of the public had registered a written request to address the Board in accordance with state law and the Board of Trustees *Bylaws*. Mr. Blakemore noted that no timely requests had been received to address this Committee meeting.

# UNIVERSITY RECOMMENDATIONS/REPORTS

# Agenda Item 7a. - Federal Relations Report

Lesley Rigg updated the Board on recent engagement opportunities that have occurred and some that are planned for the future. On August 18<sup>th</sup>, Executive Vice President and Provost Lisa Freeman hosted U.S. Senator Mark Kirk and the Chairman of the Export Import Bank at NIU in Rockford. The Senator and Chairman kicked off the half day exporter forum for small to medium businesses and they also met with three NIU undergraduate interns. Tomorrow, President Baker will be hosting Senator Durbin at NIU here on campus for a round table with Rebecca Babel, who is the Director of Student Financial Aid, and several current students and alumni. They'll be discussing the Bank of Students Emergency Loan Refinancing Act, a potential legislative fix for high student loan interest rates on existing student debt. NIU is also monitoring a forthcoming House Resolution from Representative Foster on the topic of student financing. Coincidentally, student debt was the topic of a recent Baker report so that was very timely. On September 2<sup>nd</sup> President Baker will join Senator Durbin, Representative Bustos and other academic and business leaders for a round table in Rockford. They'll be discussing the Digital Manufacturing and Design Innovation Institute in which NIU is involved and how the DMDII is what it's called could benefit small and medium manufacturers in the Rockford area and the region more broadly. And finally on September 25<sup>th</sup> Dr. Rena Cotsones will be speaking at the economic summit which has been organized by Representative Bustos and others at Augustana College. She'll be reflecting on NIUs engagement in the Rockford area. We have a lot of opportunities to talk about regional development, the research that we have going on at the university, the students we have at the university, and what their concerns are as they reflect on all aspects of university life.

At the state level, President Baker commented that at the last presidents and chancellors meeting that preceded the Illinois Board of Higher Education meeting the group discussed the coming legislative session in Springfield. Common concerns include pension issues, operating budgets, and regulatory reform. So we'll be meeting before the next IBHE meeting to coordinate our positions on those items and see how we can work together in the coming session to better higher education.

# Agenda Item 7b. - Fiscal Year 2015 State Budget and Legislative Affairs Report

The materials provided in this report, as presented by Mike Mann, included the FY15 state budget for higher education, including public universities and higher education agencies. It was noted that the final budget reduced NIU's appropriation by \$223,000, which is less than the potential cuts the university was facing. At this point there's been no mention of a mid-year budget reduction, although we do expect the upcoming election and veto session to focus on the tax increase issue. The results of that discussion will lead to any possible budget implications for FY15 and FY16. We have a budget overview meeting with the IBHE on October 14<sup>th</sup> where we will discuss the challenges ahead in the upcoming fiscal year. One technical note in your materials, after this item went to print the Governor signed the smoke-free campus act which will prohibit, effective July 1, 2015, will prohibit smoking on campus property.

# Agenda Item 7c. - Drilling Down the Research Enterprise: Accountability

Lesley Rigg announced this is the third part of a presentation, but what I'm going to do very briefly just in the first few minutes, is review some of the information that was presented previously by Dr. Freeman on the research enterprise sort of the life of how we go about doing research on campus and some of our successful stories. As we all know the mission of the university is to promote excellence and engagement in teaching and learning, research and scholarship, creativity and artistry, and outreach and service. I feel very strongly that while I'm here to talk about obviously research and scholarship and artistry and creativity, these things aren't separate. They are very connected so as we have our faculty engaged in research, they bring that engagement back to the classroom, that brings the students into their research, that brings the students minds to the seat, and what it does is it helps not just retain our faculty, but retain our students. They're not separate, they're completely united in how in the Division of Research and Innovation Partnerships we don't think of students and faculty as separate entities, we think of research as a very holistic enterprise. So the first part of the presentation previously was the research process and then we had, as I said, the example from the Center of Family Violence. There is a tour, a little video tour, so you can link onto their website and see that and it's a really engaging short video and I encourage you to see it. Today what we're going to do, once I've finished reviewing a little bit, is really as Trustee Murer said, drill down and we're going to look at what we could phrase as accountability systems design. In essence, when we think about funding and we think about research at the university we think about the agencies from which we're asking the money from and the funding and the support. What do they want? What are their criteria? How do we respond to them as an institution? And then in terms of the individual faculty, we have to work with individual faculty, staff and students to be able to create a product that is responsive to what both the institution wants to show and what the agencies are asking us to provide to them. Dr. Freeman started her presentation at the beginning of the research process and that is from an institutional standpoint. The process starts with the hiring of faculty. And when we hire our faculty, we have to think about all the aspects of attracting high quality faculty to the institution. What we want to do when we attract faculty here is make sure that as an institution we're supporting our researchers as they come in, so that they can initiate a research portfolio that is productive for them, productive for the institution, and is able to bring students into the classroom, into the research, into the lab, into the field immediately and effectively. A national study that was done in 2004-05 looked at the size of start-up packages for institutions that had medical schools and you'll see that they have slightly higher start-up packages than we do on average. We have a start-up package for PhD programs in the sciences of about \$200,000. While that is a little bit on the low end, it marks an increase over a number of years. I was in the College of Liberal Arts and Sciences in the dean's office and Vice President Freeman and I worked with Dean McCord to synthesize between the units and the divisions how we best support our faculty when they come in by providing them what they need in terms of a start-up package. It's an investment in our future and it's an investment in our students and it's

crucial for attracting research ready faculty. One of the things that we've been working on in terms of bringing in faculty and research ready faculty is the notion that if we can bring in groups and clusters of faculty, faculty who across divisions, across colleges, across departments, can work together on a common theme, we stand very well to access dollars and funding opportunities that we haven't necessarily been able to access before or we've done it on an ad hoc basis. What you see here are how we compare to a few peers. And the two peers that I have up on the board are North Texas and Kent State. As you can see, from about 2003 to about 2009 the three of us are sort of tracking the same in terms of expenditures, how we spend our research dollars here at the university. And what that reflects is when we get funding for the university we call that an award, but we don't spend the entire award. So if I told you I had a \$250,000 grant from the National Science Foundation and I got that this year, it doesn't mean that I'm going to go spend that \$250,000 tomorrow. I have three years over which to spend it or whatever the timeframe of the grant is and so we spend it as we need to. What we're seeing here is how the research dollars are getting spent by our researchers who are getting funding. The red line marks a series of changes that happened at NIU in terms of retirements, change in faculty, and we see that our research dollars have been slightly declining for a little while. At the same time, around 2009 when NIU was facing a number of retirements we saw our research expenditures begin to decline. It was also associated with a change in funding structure from the federal government, but at the same time North Texas had an investment that was state developed; so the state of Texas invested in research clusters. In other words it made a pool of money available to their university to hire groups of faculty who were research ready, who were thinking about the same topics and working on similar fields so that they could collaborate and really access funding pools. What you see is that green line, that's North Texas research expenditures over the next few years associated with those research clusters. What we see is that if we focus on facilitating and maximizing the success of our current faculty, if we hire highly accomplished senior and junior faculty and not just all new faculty who are coming out of post-docs or research or PhD's, we expand our research space, we invest in infrastructure, we support funding and we enhance our research collaboration and our partnerships, we have the capacity as North Texas did to really increase our expenditures. So this is something that as a division and as an institution we are thinking about and really working towards. This is a partial list of some of the things that North Texas invested in. And if you read down this list, we have many of these programs here at NIU. It doesn't mean that we need to go and copy Texas, it just means that we have a number of very creative clusters already in place here at NIU to invest in ideas that we can move towards in terms of strategic hires and strategic areas for investment. These are our top federal funding agencies, based on 2012/2013 data. Just a few that I want to note here, the Department of Education funding along this top line, you may have read recently in the newspapers about the Illinois report card which is one of our products here from campus. It was the only one in the nation to make the top pick for both parents and researchers who applauded the on-line report card for being easy to find, easy to navigate and easy to understand and this money here reflects the funding for that initiative here at NIU. So that's just one of our very good success stories. The bottom line here is that this represents from some of our top federal agencies NIH referring to National Institute for Health and NSF down here referring to the National Science Foundation. This is a fairly consistent amount of funding that we get both direct and collaborative funding. So collaborating with other institutions and the bottom line is where at about \$14 million from these federal agencies. This year, or this past year that just ended, we see that our bottom line in terms of funding has slightly increased. Now I want to say that while we only show a rise of about \$600,000 in terms of funding from federal agencies, we need to remember that this is on the heels of the sequester. So the fact that we have actually been able to grow our research dollars while dealing with the government shutdown, a decrease in funding, and the sequester of funds, this is particularly encouraging. In fact Dara Little who is the Director of the Office Sponsored Projects and I were ecstatic when we saw these numbers because it really represents a lot of hard work on the part of our faculty to be able to get this funding. One of the things that I want to point to which wasn't on the previous slide is the Department of Commerce. This was some funding that came to the College of Engineering for additive manufacturing and that is a very nice award to be receiving. The National Science Foundation funding is staying constant. Which again following on from sequestration, the number of programs stopped their calls. So there were a number of our investigators who had proposals ready to go but the agencies of the parts of NSF where they were trying to get their money from were not having those funding calls last year. So this is particularly encouraging. One of the things I want to highlight is we can

look at places like North Texas, we can look at other institutions, we can look at our own institution in terms of collaboration and what collaboration means. When we think about the presentation that Julie Crouch gave on the Center for Family Violence and some other data that I'm about to show you, working together and collaborating really encourages productivity and what I mean by productivity is writing of proposals, getting proposals, writing papers, giving presentations, incorporating students into your research experience; these are all things that are encouraged by collaboration. This is not something new, very new, but it is something that we have to start thinking about as a whole and as an institution. What this data are are the number of authors that we see on papers just from two journals, but they're the two key journals in the field of geography which is the field that I came out of and this is data from a paper that I published with a graduate student of mine. What we see is that over time the days of a single author paper are gone. What we're looking at now are collaborative efforts. Researchers work together, they publish together, they get funding together, and we as an institution has to recognize that particularly when it comes to thinking about how we provide merit for our researchers and how we evaluate them in terms of progress to tenure and at the tenure point. So some of our selective centers that have been highly successful in terms of collaborative, so this is the nature of the collaborations are successful and the quality of the team and you can have a collaboration that isn't successful because the quality of the team members isn't there. So what we see here are some of our very successful centers, so the Center for the Study of Family Violence and Sexual Assault, the Center for Southeast Asian Studies, and NICADD which our Northern Illinois Center for Accelerator and Detector Development. In 2014 these centers brought in over five million dollars in funding to the institution in terms of their collaborative efforts. One of the centers that isn't on here because it didn't exist in some of the previous years so there wasn't comparative data is the Center for Environmental Studies. It also this year brought in over half a million dollars in collaborative funding so this is crucial and a very positive way of thinking about moving forward as an institution. So the story that was given last time was the success story for the Center for Family Violence and Sexual Assault. I encourage you all to go to their website, take a look, see what kinds of projects they're doing and take the little visual tour. One of the things I wanted to highlight was that when we talk about collaboration in the Center for Family Violence if you know anything about the center you think of psychology and you can see here there is clinical psychology, social psychology, and the school of psychology, but they're also collaborating with political science, sociology and foreign languages. So this is a collaboration that is not just discipline specific, it's not an intra-collaboration, it is an inter-collaboration among many, many different groups. And speaking to what Dr. Alden just presented, there is also a great deal of international collaboration going on for this center as well. Students come in, researchers come in, and researchers are also going overseas with their collaboration. We see this across not just the centers, but across all our faculty as Dr. Alden presented. We have very international focused research active faculty on campus and what we can do to support them and the structures that we can put in place, I think we'll see that speaking to the question on financing, the return on investment for international research will be great and it will be fun to look at. So accountability then; how do we measure whether or not we're successful? How do we know if we're successful as an institution; how do we know as an individual researcher if we're successful? And so I'm going to not break it down into three specific groups but sort of go from sort of an invisible way, from what we call agency to institution to individual researcher. Agencies have very specific criteria that they're looking for when you submit a funding proposal. You might have the greatest idea ever, but there are other requirements in terms of explanation and institutional support that you have to make sure is evidenced in that proposal if it's even to be considered competitive. So we have to be very attentive to the criteria. The funding agencies as an institution and that means that we have to have institutional support programs which come out of the research division but also out of the colleges and out of the provost's office and across the entire campus to make sure that we as an institution are responsive to what the agencies are asking us to provide. The individual researchers are like on pointillism picture if you stand back far enough you see somebody's face, but as you go up close all you see are dots, each of those individual dots is a crucial element to the picture, and if you pull one out that persons face will look odd as you stand back. So the individual researchers are essential to creating the picture that the institution provides to the agencies. But how do we know if we're successful? We can apply and apply and apply for grants. So we can have over 400 submissions in a year to the federal agencies, which we do. Our research development specialists in the division are very busy every day submitting grant proposals from our faculty and from our staff and from other areas of the institution. What you can do, and this is just

for two of our agencies, this is for the National Science Foundation and the National Institute for Health, we can look at what their stated success rate is versus what our success rate is. How many proposals do we submit and of those proposals how many of them are successful? What we see here, and I just want to walk you through a couple of these numbers. This up here, these top suite of numbers are the success rate for NIU faculty. So this is all federal research proposals on average we have a success rate, so this past year or 2013, actually I'll apologize, we don't have the 2014 data yet, our year just ended so we still have proposals that are out there so we don't know if they're successful or not. So it takes us a couple of months post-yearend to get the 2014 numbers. So that will be if not the next one the one after we'll be able to get the latest year. So in 2013 of all the proposals that we submitted, 36.4% were successful. I can tell you that that is a very good number. If you look down to just the NSF numbers, you see that we were successful 22% of the time. Overall at NSF all proposals that go into the National Science Foundation only 22% get funded. So we were quite on target. But I have sat on dozens of National Science Foundation panels where we evaluate the proposals. And it depends from division to division within the National Science Foundation what the hit rate actually is. So on the panels that I sat on which were mostly biology international student focused REU's and the geography and special analysis panels, the hit rate was more like 16 to 18 % so this number here, the 22% actually reflects probably for the divisions that we are putting our proposals into, a rate that's higher than the national average. So we are doing very well. For the NIH funded proposals you can see that our success rate in 2012 was guite high, and what that reflects, let me just tell you that our 15 proposals here are three year proposals or three year funded proposals that are set a rate of \$300,000 dollars. They are targeted to institutions that have a certain level of research infrastructure but also a commitment to undergraduate research. We tend to be very successful in those proposals. The R1 proposals are also individual investigator proposals; they tend to tend to have more money associated with them. You tend not to get funded on our first try and I can tell you, I got funded on my fifth try the first time from the National Science Foundation. It took me five tries to get that first one, once I got that first one, I hit first time for the next three or four. But you have to get into the rhythm. We have a very good structure or support group here at NIU that works with researchers who have gotten their comments back from their funded proposals to them work with them and David Stone has played a key role in this, working with our NIH researchers to get those proposals into a shape that they're going to be funded. So what we see here is this represents a resubmit that was successful and in 2013 the number has declined significantly, that doesn't represent a drop in our productivity, it represents a change in the proposals that were submitted so that was not a resubmit, okay that would have been a first time proposal that was successful. So you submit your proposal, you have this great idea, you get a team of colleagues together and you put your proposal in. Say we're putting it into NIH or we're putting it into the National Science Foundation, there are things that they are looking for. They are looking for evidence of a research culture on campus. They are looking for institutional support. They look at the quality of the researchers. They are looking at their CVs. They are looking who they're working with and who they're getting support from. They're looking at what the level of institutional commitment in terms of facilities, time to do the research, what they're teaching load are. They look at everything. They want to know who it is that they're funding and how they're going to get the job done. Because if you get a proposal you have deliverables, you're telling them I'm going to do this study and I'm going to produce something. So they have to be confident that you as a group of researchers will be able to get the job done. NIH looks at things like the overall impact of the project, the significance of the work, the investigators, the quality of the investigators, whether or not these are innovative topics, and particularly one of things I'd like to highlight is the environment. So they want to know that the labs are there and that the researchers can do the work that they need to do. For National Science Foundation, I just want to point out two things. There are two criteria; intellectual merit, in other words that mirrors the NIH the content the overall impact and significance of the work, but National Science Foundation also has something called broader impacts. And some of you are probably aware of these. Broader impacts are how important to society this work might be, what the application might be, who you're incorporating, are you working with a region, are you working with non-profits? Who are you working with to get this done? Who are you going to inform when you have the results from your research? It's also looking at are you incorporating graduate students? Are you incorporating undergraduate student? Do you have an eye to diversity? Are you making sure that the impact of this work will be broad indeed? I can tell you from my time on panels, we have rejected proposals based on broader impacts. It might be the greatest idea ever, but if you can't show that you are being inclusive

and that you are going to have an impact, you will not be funded because we have to change perception and the National Science Foundation is adamant about this. This researcher is no longer getting funded. Okay? What we're looking for now are teams, engineering teams, field teams, lab; we may have the odd sole lab person, but this person is also working in collaboration with others. They're looking for groups of researchers who are working together and a synthesis of ideas. If you think this person doesn't exist, it exists in the minds of our students. I used to teach a class called Women in Science and I would ask on the first day; we would do a draw the scientist test, this is the scientist that they draw. I want them to draw this scientist. I want them to draw these scientists. I want them to draw these scientists. So that's one of the things we're working towards. If we have a good research culture on a campus and we have evidence of institutional support, what does that mean? How do we know that we're successful? So I'm pulling the example from psychology because of the example that we had in this trilogy from the Center for Family Violence. Psychology has a very good research culture and it has a lot of support through the College of Liberal Arts and Sciences and from the institution itself for the work that it does. But we can look at and we use something called Academic Analytics. It's a database that we can access here at NIU to evaluate against peers across the United States and beyond now. We look at things like how many refereed journal articles do they have, how many book chapters do they have, are they being cited by others, are they invited to give presentations, are they getting grants, submitting grants, and are they getting contracts? What we can see from the Department Psychology is that they tend to be for several categories above the national average for like psychology departments. So for refereed journal articles, for citations and for grants and contracts. So we have a very productive unit in our psychology department. We have productive units across the campus, this is just one example. As we think about it from the institutional perspective, how do we move our researchers in this direction? How do we make sure that researchers are being attentive to what the agencies want? And we do that through a set of structures and policies that we have in place, but primarily we do it through the tenure and promotion process. So to get tenure each department has its own criteria and some of those criteria include the list that you might see here, it's going to vary from department to department, so it could be the number of articles published, it could be books, it could be that same list that I gave you before, grants and proposals submitted, funded, presentations, invited speeches, artistic production performances and exhibitions. The very last line there that I have the ability to attract and fund and complete graduate students, is essential to our research mission and while it may not be incorporated in most or all departments tenure and promotion criteria, it is being incorporated more frequently in our annual merit evaluation of faculty. It's absolutely essential that we build the graduate program, the graduate research program here at NIU into our tenure and accountability system. We have a number of just briefly as we come to it's not immediately a close but we're working towards it, I just want to go through a couple of our successful support programs that we have here on campus that are primarily run through the Division of Research and Innovation Partnerships. One that Associate Vice President David Stone runs, it's called the Principle Investigator Academy, we link our incoming investigators, our incoming faculty with experienced mentors across the country and they work on projects together. This has been an extremely successful program both from the confidence level and the job satisfaction level of our incoming researchers to the fact that we're getting more and more incoming federally funded dollars associated with these relationships. If you have successful faculty that are creating relationships and feeling like they have support, they are more likely to stay. And so this is a retention issue, if we keep our good faculty, we keep our good students. The two are not separate. So what we see is that we had 42 faculty go through so far in the first two years. We're just starting our 2014 year now. They have submitted over 32 proposals. The number of faculty which have been funded from these relationships is 17. They have a total of 165 proposals from those 32 faculty and we have been awarded over three million dollars in funding now associated with these relationships. One really great success story is Dr. Ryan Pollyea here who worked with a researcher from Stanford and that researcher encouraged him to apply for money that he probably would not have applied for otherwise from the DOE and on their first try they got it and he is the principle investigator on that project, it's over half a million dollars, and Stanford is our subcontract. So that's something that's come out of the academy. Some other success stories here are Dr. Lucy Bilaver who has been funded as well. Dr. Sherine Elsawa who has two hits now base on the relationships from the PI Academy and Justin Dodd who has also had a couple hits. One thing that I'll show you about Justin Dodd from, he's in the Geology Department, he has a very prestigious National Geographic Society award. Those are really seed money for larger grants. So once he has something like

that on his CV the likelihood of getting other grants is great. We have another program called Research and Artistry where we fund three different groups of faculty every year. We have facilitation grants that are money dedicated to research projects in areas that incoming external funding is usually very limited and so these are ways that we can promote some of our humanists and others that aren't necessarily going to get money, targeted money, from the National Science Foundation or the National Institute for Health or DOE, etc. We have opportunity grants which are for investigators who want to put together a project for developing to get funding from a national foundation or agency and then our completion grants which go to faculty who have finished their grant but they need another year of funding just to get those papers out, presentations, or finalize some data analysis. What we find is that again like the other projects these tend to attract very active faculty who would be productive anyways, but the investment in these funding sources has resulted in much greater levels of funding than we would have found without this investment. We on average fund about between 30 and 40 faculty each year with these initiatives. Some of the highlights that I might just read off, a chemistry professor ended up with a \$420,000 NSF career grant following on his research and artistry money; a computer science professor ended up with two grants totally half a million dollars following from their research and artistry money, and Dr. Grippo in Psychology also ended up with a \$350,000 NIH grant following on from her research in artistry opportunity. NIU is NEH strong. And NEH is the National Endowment for the Humanities. You can see the three winners last year. What I want to highlight is these are highly competitive programs and while we're only, some would say, we're only looking at \$50,000, this is an extremely competitive, very high quality program that is much harder to get than any NSF funding. As you can see, the success rate is only 7%. Last year there were three in all of Illinois, we got two of them here at NIU. Great Journeys is out of the graduate program and they fund interested researchers who have a graduate student that they would like to fund as a research assistant and that research assistant is working with them on developing a program or a grant for submission and what we've found is that over the years, it's a little bit of investment, so \$225,000 of annual investment has resulted in almost five million dollars in grants. So this is a win-win for our graduate students and a win-win for our faculty. We can compare ourselves, as I said to the national average and we do this through various benchmarking tools and what we find is that in terms of journal publications, we have greater than average rates of publication for physics, geography, chemistry, psychology and geology. Our citations are through the roof in physics and geography. Books, if we look at the national average for English and history departments of our size and in our type of institution, History and English outshine all our peer group. And grants for faculty in geography and geology, we are much greater than anybody else in our peer group across the country. So investing in faculty, investing in quality faculty and putting these programs in place means that we should be able to see a shift in funding. What we see here is just one department. This is the Biology Department. We have a suite of retirements and loss of key faculty over the last few years and in 2013 the College of Liberal Arts and Sciences did a targeted hire of a number of very research energetic and motivated faculty, and so we're hoping to see a turn- around as we invest in these researchers and put them through the programs that we have. Five years from now I hope to stand before you and showing you the increased productivity out of units such as Biology. We like to get our faculty hitting the ground running and so these faculty that we're hiring we're hoping to put in improved start up packages. We're working right now with the College of Health and Human Sciences to make sure that we put in place start up packages that encourage research right from day one. Hiring of clusters of cohorts, strategic hires, research ready hires, and bringing in faculty that have existing funding. And we've been doing that successfully as well. Just to end here, this is a little bit of a teaser for the next time I'm standing in front of you when we're looking at research dollars, one of the things that we like to do is every year just sort of show you how we're doing. As I said earlier, even though we've had sequestration and a number of other issues at the national level that have created several road blocks and really inhibited our ability to get proposals in, we have been doing very well. We've seen a steady increase over the last few years. Dr. Freeman established a number of programs when she was the Vice President for Research in collaboration and working with the staff and faculty here on campus. The individuals in the division, many of whom are sitting in the room, worked very hard to make sure that our faculty feel welcome, that they have the support that they need and we see it paying off. This year our research expenditures have gone above \$36 million, as compared to \$31 million last year.

Trustee Marshall said, collaboration is the key, but I want to take it a step further and ask about the idea

of consortium with sister institutions of higher learning. Where are we on that? Lesley Rigg responded there are a number of researchers who work with other institutions. Some of the calls that go out such as we have a call going out right now to the National Science Foundation which is through a group PIRE. PIRE is a group that works for international research and education. You have to have collaboration among institutions and we normally were only allowed to submit one proposal as an institution in collaboration with national and international partners. We don't have a problem with reaching out to other institutions and creating the consortiums that we need to get our proposals into a state that would be funding ready. It's something that we actually do very well. The other thing that I can note is that when it comes to cluster hires we are also focusing on very intense searching and targeted searches for intensive research clusters. So we'd started our first one, we have hired somebody from the UK who is probably the global leader in accelerator physics right now in his field, and he's joining the Physics Department, he's already here and he will be key and we've been collaborating with Fermi Lab on this so this is a shared position between Fermi Lab. President Baker and the new director of Fermi Lab have worked very hard together to create this collaboration and as this researcher has come to campus, we will be working on creating a cluster around him with the Physics Department and Fermi Lab to really create one of these intensive research groups. This will be the first hopefully of several more and so the next cluster that we will be looking to create will be a competitive process. We'll be looking to our faculty for the great ideas that they have and to our departments to reach out across departments, across colleges to create these clusters in areas that are both research intensive and also of interest to students both undergraduate and graduate studies.

Chair Murer said as we continue to move with this committee I would like us to establish more comparative analysis and benchmarks so that we know when 22% is good. I have also asked Dr. Alden if we can be more prospective in our expectations so that the board will have a basis for reflection on where we are going, and to determine what resources do we need.

Chair Murer asked Dr. Baker to expound on what Dr. Rigg talked about in that collaboration with Fermi Lab. President Baker noted this university has an amazing set of opportunities and resources in front of it. We have fantastic faculty and some areas of real excellence at the university and Physics is one of them. And we have a partner less than an hour a way that is one of the leaders in Accelerator Physics in the world and they're really trying to build a cluster there. It's going to be globally competitive. There's only a handful of people that are at the very top of their game and we just got maybe the best and it joins a strong faculty that's already there. So if you can build those clusters then you've got a group that can be competitive in your acceptance rates at NSF or wherever you're sending your proposals, Department of Energy, can be very competitive because you've really got the brain trust that's working on it and you also have the facilities. And the facilities turn out to be very expensive and so Fermi Lab not only brings research partners, they bring facilities that are a true competitive advantage for us. So we're going to be looking at those kinds of opportunities to build clusters where we've got particular core strengths and it doesn't have to be a Fermi Lab, it can be things we have on this campus as well, but that one was just so obvious and with a new director wanting to partner with us and us seeing an opportunity we went forward and got the faculty member.

# **OTHER MATTERS**

None.

# **NEXT MEETING DATE**

The next meeting of the LARI Committee will be Thursday, November 6, 2014 at 10:00a.m.

# ADJOURNMENT

Chair Murer asked for a motion to adjourn. Trustee Strauss so moved, seconded by Trustee Butler. The meeting was adjourned.

Respectfully submitted,

Cheryl Ross 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.