

**GEORGE WASHINGTON UNIVERSITY
Washington, D.C.**

**MINUTES OF THE REGULAR MEETING
OF THE FACULTY SENATE HELD ON
JANUARY 9, 2015 IN THE STATE ROOM**

Present: President Knapp, Provost Lerman, Registrar Amundson, Parliamentarian Charnovitz; Deans Dolling and Goldman; Professors Brazinsky, Dickinson, Fairfax, Garris, Gee, Harrington, Hawley, Katz, Lantz, Marotta-Walters, Miller, Parsons, Prasad, Price, Roddis, Sidawy, Squires, Swaine, Swiercz, Weiner, and Williams

Absent: Deans Akman, Brown, Eskandarian, Feuer, Johnson, Livingstone, Morant, and Vinson; Professors Castleberry, Costello, Feldman, Galston, Jacobson, Khoury, Lindahl, McAleavey, McAlister, McDonnell, Newcomer, Pulcini, Rehman, Sarkar, Shesser, Simon, Thompson, and Wald

CALL TO ORDER

The meeting was called to order by President Knapp at 2:15 p.m.

APPROVAL OF THE MINUTES

The Senate consented to deferring approval of the minutes of the December 12, 2014 meeting until the February 13, 2015 meeting because technical difficulties during the editing process did not permit incorporation of all of the edits into the version distributed at the meeting.

INTRODUCTION OF RESOLUTIONS

No resolutions were introduced.

ANNUAL REPORT ON RESEARCH

Vice President for Research Leo Chalupa presented the report in powerpoint format included with these minutes. He prefaced his remarks by saying that he would report on the metrics of research expenditures and indirect costs over the past few years to provide a picture of the overall trend. He said would also report on initiatives that have been launched or are in the process of being launched, and thirdly, about the current status of international research and plans to secure more of the same.

As background, Vice President Chalupa said it is worth emphasizing that the University is currently in the most challenging environment in terms of procuring extramural funding than it has ever been since funding became available from the federal government after the end of the Second World War. Ten years ago roughly one of three grants at NIH were funded; today it is less than one out of six. The latest budget approved by Congress provided an increase to the National Institutes of Health (NIH) of only one half-percent for the year. This makes for a very challenging environment for research, and as a result, in the last two or three years the premier research universities across the county have been essentially on a flat line in terms of extramural research funding.

Vice President Chalupa briefly discussed the metrics on the first slide of his presentation which shows funding received from extramural sources. for the years 2010 through last year 2014. 2010 was the year that government stimulus funds to ameliorate the effects of the great recession were made available, and the University unexpectedly received almost \$30 million. That disappeared after one year and, not surprisingly, the University's research volume dropped, as did that of every other research University. The drop continued for two years. In 2013 there was a nice rebound. The University's research expenditures went up about 7.4%. and in 2014, they increased another 11%. 2014 also saw the highest amount of indirect cost recovery funds, more than GW has ever received.

Vice President Chalupa gave credit for these results to the University's faculty members, both at the junior and senior levels. They have made tremendous strides in securing funding. Another factor has been the hiring of new faculty to pursue more extramural research funding.

President Knapp asked if Vice President Chalupa could explain for people who had not heard his report in previous years what was meant by indirect cost recoveries, what the trend means, and why that is regarded as significant. Vice President Chalupa explained that when extramural grants are provided, for example, by the federal government, other agencies, foundations (or other sources), an amount of money is added to the funds the principal investigator receives to do the research; these are called indirect cost recovery monies.

For example, the federal government provides approximately 52.5% in indirect cost recovery (IDC) for on campus research, and 548.5% in the Medical School. Thus, when a faculty member secures \$1 million over a five- year period, which is a typical grant from NIH, the University will receive \$540,000 in addition to that amount in indirect cost recovery money. The University has a large team that negotiates this percentage periodically with the federal government and in fact that process is in progress right now.

Indirect cost recovery money can be used for a number of purposes, including hiring new faculty members. GW also gives a certain percentage back to faculty member(s) to invest in future research. Non-federal sources, foundations for example, pay far less than the federal government in indirect cost recovery monies percentage-wise. GW does not turn down extramural funding from these sources, but the incentives are greater when federal funding is received. An important factor in the 11% increase achieved in extramural expenditures in 2014 occurred because there has been a gradual shift in emphasis away from low IDC grants to those that provide more. Faculty effort is also a major factor; it is nearly unheard for somebody to get a grant the first time around. Faculty members sometimes apply as many as seven times before they get their first research grant. A key factor in achieving success in the grants business is not only persistence, but being able to rebound from failure, and the University is fortunate to have faculty who are able to do that.

Vice President Chalupa then briefly discussed the eleven interdisciplinary initiatives presently in place that have been launched jointly with the Provost's Office. There are presently 6 that are operational with a director in place, these being the Computational Biology Institute, Cybersecurity, Food, Global Women's Initiative, Institute for Neuroscience, and Sustainability. A search for a Director is underway in connection with the other five initiatives – Arts, Autism and Neurodevelopmental Disorders, Cancer, Big Data for Science and Engineering, and Genomics.

With respect to the Arts initiative, several years ago a very large committee of approximately 25 faculty put together a very large report and one item in the report was that there was a dire need for a space for the arts, arts exhibition, performing and so on. The President embraced that notion but at the time that report came it was unclear where that space would come from. With the acquisition of the Corcoran Museum building the University now has the best space imaginable. The search for a Director is underway and a large component of what was recommended by faculty members in that report is going to be realized very soon.

A search is also underway for the Autism and Developmental Disorders initiative. Most have heard that about eight or nine months ago, Board Chair Carbonell provided a \$2.5 million endowment to fund that search.

The Cancer initiative represents a very big investment by the Medical School as it will occupy the 8th floor of the Science and Engineering Hall once that portion of the building is finished. This multidisciplinary initiative will also involve faculty outside the Medical School. The search for a director is underway, and already there are spectacular candidates, both clinicians and physicians who can bring with them substantial NIH funding. Vice President Chalupa said he would guess that within three years GW would be a regional leader in this area, because the University now has some very good talent both in the Medical School and across the campus.

Computational Biology has now been operational for about three years. The director in place, Keith Crandall, has hired three faculty and is looking for two more. Cybersecurity is also ongoing now.

A new initiative is Big Data for Science and Engineering. A search committee has just been appointed and it is starting to look for a director. This will be located at the Virginia Science and Technology campus following a plan put together by a faculty cohort.

The Food initiative is also one that was launched following a faculty report recommending its establishment. That has been incorporated into the Sustainability initiative and is making good progress with Dr. Kathleen Merrigan as the director.

A search is underway for a director for the Genomics initiative; this will probably be connected with the Cancer Initiative in the Medical School.

The Global Women's Institute headed by Dr. Mary Ellsberg has done phenomenally well, and is an example of something that has put GW on the international map. Dr. Chalupa said he hoped that everyone had had a chance to read her OpEd piece in the Washington Post the past Sunday about the pandemic of violence against women in the world.

Lastly, the Institute for Neuroscience was a joint investment of roughly \$1 million between the Provost's Office, the Medical School, and the OVPR office. The Institute has just received word that they are getting a grant for \$7.4 million, the largest one of its type ever received, and that will put it into about a \$13 million funding range. This is an example of how, in a short period of time, recruiting the right kind of people as directors who in turn recruit faculty who are all funded can produce results.

In sum, Vice President Chalupa said he thought it is fair to say that thus far the investments the University has made in people and in the multidisciplinary research it wants

to promote have so far paid off in great dividends, and there is every reason to think that is going to continue in the future.

Turning to international collaborations, Vice President Chalupa said that GW is in many ways not just in the nation's capital but in the world's capital. The world's ambassadors are here, and the European Union office is just across Pennsylvania Avenue from Rice Hall. Many different leaders of scientific research from around the world are GW's neighbors.

Currently, GW has 104 sites in more than 50 countries on six continents in the world where research is being done. There has been a concerted effort by the central University Administration to support this. This area will be a priority for the OVPR office this year. One reason for this is because there is a lot of untapped money out there and the rules have changed, so for example, in the past, it was not possible to not get European Union (EY) money without being an EU investigator – that has changed now, and GW professors can now get an EU grant and be the Principal Investigator for it. This is part of the European 2020 Vision; they are willing to fund the best science no matter where it is, and that includes the George Washington University.

If one looks at all of the ongoing projects funded at GW, 79 of them have an international component, Of the \$180 million GW receives in extramural funding, over 12%, or \$22 million. Vice President Chalupa briefly reviewed the information in his powerpoint report showing U.S. federal courses of funding for international research. As an example, 14 projects in the NIH with over \$30 million in funding came from international sources. Virtually every other federal department, including the Department of Education and the State Department also fund international research.

Three are also other non-federal sources of funding in the U.S.; for example, a faculty member in the School of Public Health has a sub-grant from the University of Chicago for a significant amount of money -- \$6 million. There are other kinds of non-federal sources of money as well. Some of them are well known like the McArthur Foundation and the Sabin Foundation, and the University needs to explore more of these sources going forward. There are also something like 25 different sources of funding from international agencies.

One of the ways of growing the international research component will be by encouraging GW faculty to make linkages with possible colleagues in other countries. One way in which this will be done is to provide roughly twenty travel grants of \$5,000 per faculty member. The application for this will be on the OVPR website soon. All the faculty member has to do is fill out a one page application, indicating who they want to collaborate with, what the topic is, and what the possible outcome of that is in terms of getting new grants. This program is something that involves a relatively small investment of money, but it will permit somebody to go for a week or so to cement a possible game plan.

Dr. Chalupa also indicated that he has recruited Dr. Yong-on Hahm as a consultant in this area. She will visit every school and talk to every dean about international research. She is very well connected and someone he has known since she was a graduate student at MIT many years ago. Until very recently, she was the head of International Research at the National Science Foundation. She is very well connected; you cannot go to any embassy that has to deal with science without her being there. She is also already connected to some of GW's faculty and their research collaborators.

Vice President Chalupa concluded his remarks by making two points. He acknowledged that the presentation contained a lot of focus on money. Obviously that is

important and it is a metric people think about a lot. He added that beyond that, he sees his job as promoting excellence at GW. Large grants are important, but so are grants in the humanities that may bring in no money, or perhaps \$5000 to 10,000. He said that before he arrived, less than 10% of University research funding went toward research in the humanities. Through the University Facilitating Fund, over half now does. It is very difficult to get funding (grants), it's difficult in the sciences but much more so in the humanities. It is also true that somebody in, for example, Romance Languages, could do a lot more with that money than somebody in developmental biology for whom that \$10,000 would not make that much difference – they would need ten times that amount to make an impact.

To sum up, there is a total upward trend with respect to both total expenditures and indirect costs. It would be nice if this would go up year after year, but it is unlikely there will be consistent increases every year. Over the short and long term the University should move up more and more. This is inevitable with the kind of faculty the University has and the resources GW has put into the research effort. In addition, initiatives are yielding substantial benefits to GW and there is good reason to believe this will continue in the future. Lastly, the OVPR will strive to increase the portion of research funding coming from projects in the international research area.

Professor Price said she was a faculty member in the Columbian College and the faculty in her department do a lot of international research. She added that she was pleased to hear that the OVPR Office is not solely focused on just thinking about metrics, and that a very important function of the Office is service to investigators.

Professor Price went on to say that she could not say how many frustrating experiences she had last year as Chair of the Geography Department, for example, having to deal with Research Assistants who mysteriously got kicked out of the system and could not be found. The list is long, but it does seem that there is a serious issue of turnover and not enough staff in the OVPR Office with the skills needed to handle complex grants. Professor Price also said that she had worked closely with Jennifer Wisdom in the OVPR Office, who met with the Geography faculty, but there are still some real problems. Professor Price then said she would like Vice President Chalupa to address the question of staffing and turnover as well as grant management, because for investigators, this can be enormously frustrating. Vice President Chalupa expressed surprise that someone he had never heard from would bring up such a complaint as his office is always open and he can always be reached via email. That would be preferable than waiting a long time until a Senate meeting to bring up something like this. He added that he thought that most people, whether they were assistant professors or Department chairs, would say that anytime anybody has any kind of complaint about anything to do with research, they can send him an email and it will be fixed -- it is usually fixed the same day.

Turning to the issue of turnover, Vice President Chalupa said he did not think his Office's turnover rate has been any different than any other office in Rice Hall. The fact of the matter is that the Office tries to get the best people it can. There is also a suggestion box outside his Office where people can put register complaints or suggestions. By and large in looking at these suggestions, and HR looks at them every week, he said he thought the morale of the staff is good. However, it is difficult to retain trained staff in this location when there are so many other opportunities – they can, for example, go work for the government or a number of other employers. Vice President Chalupa said he did not know why Professor Price thought the OVPR office has a higher turnover rate than other units, and added that if she had the turnover data he would be happy to see it.

Professor Price said she would be happy to share the data with him. She added that she had also contacted him directly and the result was that she usually eventually heard from Jennifer Wisdom. Further, she understood she was not the only person to experience this as a lot of her other Columbian College faculty colleagues have experienced similar frustration. She also said she would be shocked if other people in the room that day at the Senate meeting felt that way.

Another senator told Vice President Chalupa that she conducts a research program with a robust portfolio; most of it is international. If this is a direction that the OVPR wants to move in, it might be helpful to meet with some of the principal investigators both in the in the schools across the University that have been heavily involved in this area. Working in this area has not always been an easy path, rather, it has really been complicated; everything from issues of per diems to traveling in places with questionable security to letters of support from the University, turnover times, and quite a number of other, smaller issues.

Vice President Chalupa responded that he thought this was an excellent suggestion, and in fact, when Dr. Hahm arrives on campus later this month, that will be one of the first things she will be doing. He agreed there are many more complex issues involved with international than domestic research, because it is conducted in locations that have different rules. There also may be corruption issues and safety issues and these must be taken into consideration in any move to increase international research.

Professor Parsons observed in Vice President Chalupa's defense that administrative problems in the research area go back at least the two decades at the University. During that time, there have been at least 2 or 3 major "reforms" rather like soviet like reforms, where they put a different name on things, and tasks were outsourced and insourced. Each of them had a similar degree of incompetence tied in with them.

In view of this, Professor Parsons said he wondered if it wasn't time to sit back and think very fundamentally with respect to how he and the office spend their time. Even with the major grants in hand, new initiatives, a new focus on international funding and the hiring of a new consultant, and examination of the data shows that the University has been flatlining on Indirect Cost Recoveries not only since 2010 (which was on the graph, these started at \$20 million and went up to \$22 million) but even before that. Indirect Cost recoveries in 2007 and 2008 were \$19 million. This is an increase close to the rate of inflation. Taking inflation into account, there has really been no progress in obtaining increased Indirect Recoveries for probably a decade. Given this reality, Professor Parsons said maybe it was time to direct resources into administrative costs that would for example, recruiting a crackerjack group to process grants, make life easier for individual grant administrators, and enable the workflow to travel through the system in a very transparent way. Vice President Chalupa disagreed with Professor Parsons saying that numbers have been going up in the last few years and they will continue to go up. The trend is real.

Another faculty member observed that the year by year data presented show that if expenditures went up by 7% and the indirects only went up by 7.5%, then clearly the move toward more of the grants having full Indirect Cost Recovery is not happening at GW. This means the nominal indirect rate may be close to 50% but given other factors, it really is about 33%. Vice President Chalupa responded that the actual number is 18% and it is not going down.

Discussion followed. Vice President Chalupa said that a large chunk of the \$11 million increase is called a C06 grant from NIH to renovate Ross Hall and about \$6 to \$7 million of

the grant is for building is for renovations. The indirect overhead on that grant is therefore zero.

President Knapp said he thought what was needed is for Vice President Chalupa to come back to the Senate with the numbers that will clarify some of the points raised. One is the C06 grant already mentioned which results in a distortion of the numbers because of the fact that it was a unique grant for a short period of time that had no indirect costs associated with it. That aside, the trend of shifting from foundation support percentage-wise to federal sponsorship is a real trend that would be easy document.

Another thing that has not been addressed which goes to Professor Parsons' assertions, is the distorting effect of the very large Biostatistics grant which was at one point \$35 million. The amount of that grant has moved up and down, and its volatility has tended to obscure what has been a general and dramatic upward trend in securing research funding at GW during a time when most other universities results are either flat or declining. GW has seen a steady growth that is beyond the rate of inflation if the distorting effect of that very large grant [which has been a substantial portion of the overall funding for the University] is taken into account.

Professor Miller asked how many new initiatives will be planned or launched in the next few years. Vice President Chalupa responded that there aren't any plans right now to launch new initiatives; the focus will be on making sure the ones in place are viable.

Professor Brazinsky said he assumed that outside directors would be brought in for all of the eleven new institutes and these directors would be hiring staff to work with them. He asked Vice President Chalupa what costs are associated with running these institutes, where the money to do that comes from, and how many dollars they generate for the University *vis a vis* their costs. Vice President Chalupa said there are three institutes he could talk about where the University has invested money that have been around for three years. The Neurosciences Institute was started five years ago and the University invested about 1.2 million to hire a director and give him funding for four positions. The Institute receives over \$13 million in funding, all of it at the federal rate, so the amount brought in is roughly \$6.5 million on a \$1 million investment. Funding for the Computational Biology institute came from the Provost's Office. This one has not paid the University back yet but every indication is it is headed in that direction. The Global Women's Institute is one that has brought in a surprising \$3 million in extramural funding already.

President Knapp concluded this portion of the meeting by saying that the Administration would have Vice President Chalupa provide further information to the Senate in response to some of the questions raised at the meeting, specifically about the metrics, because this data is available and there is nothing secret about it. In terms of the handling of some of the logistical problems that have were raised by various colleagues, the Administration can also give an update on steps that have been taken to streamline those processes.

REPORT ON TECHNOLOGY TRANSFER

Director of Technology Transfer Kubisen said he came to GW about eighteen months ago. He earned his Ph.D. in Organic Chemistry and spent the first 20 years of his career in the areas of research, research management and general management in corporations. He then moved into running his own startup company. In the last ten years he has been involved in helping various universities commercialize their technology. Given the fact that the entities

the University transfers and licenses technology to are corporations and startup companies, this is a good background to have. But one person is not enough to have a successful technology commercialization office. Since he arrived, Director Kubisen said the office has not added people, but three of the four people are new, and it's an excellent team. Three are people with corporate, national laboratory, and startup backgrounds. The team is augmented with interns, one from the Law School, another from the Business School, and one each from Arts & Sciences and the Engineering School. The interns are a key part of the office's work and in the course of that work they also learn about business and are better able to compete in the marketplace. A number of interns have gotten jobs as a result of working with the Technology Transfer Office.

Technology Transfer involves taking inventions conceived at the University and transferring them into the marketplace so that society can benefit, for example, by bringing about better patient care, improved energy utilization, or reduced pollution. Director Kubisen said he sometimes refers this process to "we mine, refine, and market University inventions".

The mining phase involves connecting with faculty members. In the last 18 months, invention disclosures which are a measure of how the office connects with the faculty is up 50%. Refining involves taking an invention and getting it protected through a patent, copyright, or some other means. A company will not invest millions of dollars to try to commercialize something unless they have a barrier to entry because they don't want to take something to market and have someone who didn't spend all of that money to develop the product to step in. Securing a patent is typically the way in which inventions are protected.

Director Kubisen emphasized that when he mentions the word "patent" to faculty members, he tells them there are laws administered by the United States Patent Office that the University has to abide by. These have changed in the last couple of years and now a patent application has to be filed with the patent office before a public disclosure is made, whether that is in a presentation, paper, or by other public disclosure.

Staff in the Technology Transfer Office want to form relationships with faculty members, see their labs and what they are doing, and have a discussion so it can be determined if a patent is possible, and if the innovation is something the University should invest funds in to seek and file a patent and put the Technology Transfer's marketing efforts behind commercializing the invention. Some people will say they don't know what an invention is. If a faculty member has solved a problem, they should talk with the Technology Transfer staff. Someone else may have solved it and if it's not patentable, the Office will find that out, but the key is to have that discussion at a very early stage, for example, pre-publication.

At the back end of the process, there are three stakeholders: the University, the inventor, and the licensee, be it a corporation or a startup. Dr. Kubisen said he has been in this business a long time and sat on all of the “sides of the table”, and in the end there has to be a deal that is good for everybody. This is a good path to having strategic relationships, marketing a number of things to the same company and if everyone is satisfied then it is good for the faculty inventors and can lead to repeat arrangements.

Turning to the nuts and bolts of the process, as general rule when technology is commercialized, it's all about connecting technology to people and money. So the technology needs to advance from research to development and then to productization, followed by manufacturing and sales. The people involved in the different steps in this process change in the various phases, from research, development, engineering, manufacturing, to sales and marketing. And there can be money issues as well. A NSF or NIH grant will not allow money to be put into commercialization so sources of money for this must be found, whether federal and state funding, or private venture funding. This is a complicated process and the reason why the University needs to partner with a company that will bring both human resources and capital resources that will get the product to market so it can have an impact on society.

Another part of technology commercialization is that a lot of technology emerging from research that is not directly licensed to corporations. Over the last ten years Director Kubisen said he has been involved with helping universities in this area, and corporations now license fewer innovations directly from a university. When they do, they want the technology further advanced. As a result, there has been a move toward more startups that will advance the technology and then move it into commercialization. The good news for the University is that the technology is further along so it has higher value. The other part that is good news since it is lower risk, is that there are more people who are willing to work with the University to commercialize the technology.

Dr. Kubisen next outlined some of the benefits of technology commercialization. Not only money is involved, although that is certainly an important factor. The money received can be used to further the three important areas of the University's mission, those being education, research and service. In terms of research, if commercialization is successful, the University will get money back that can be plowed back into research efforts. In terms of education, not only interns in the Technology Transfer Office benefit, but graduate students in the various principal investigator's labs have the opportunity to participate in the development of a new business, and that will create jobs – it might even provide a job for them.

Today, the U.S. and the world are looking for innovation. This is needed to solve problems and people look to universities to help do that. However, the technology must be transferred to the marketplace first. Studies in this area show that success here leads to more research, particularly productive research that can solve society problems. The service element, of course, is satisfied because research that leads to successful technology transfer solves real problems in quite a number of areas.

The commercialization process does not happen overnight. Dr. Kubisen displayed a chart that plots out the time it takes from technology commercialization to the receipt of royalties or other funds. Of course, this depends on the technology.

If it is software, it should be a couple of years, if it's a pharmaceutical it is typically 15 years. The University closed a major pharmaceutical deal about three weeks ago, and it is going into a phase III clinical trial; that is unheard of. This is a wonderful story and more will be coming out about it. The School of Medicine and Health Sciences and the principal investigator were very entrepreneurial in conducting the research studies and getting this to the point where, when Technology Transfer people went to the company to talk about commercializing this product and then went with them to the Federal Drug Administration. The FDA accepted the GW study as sufficient to go into a Phase III trial, and this cuts the timeline down quite significantly. This is quite an accomplishment for the principal investigator, the Medical School and the University, and details about this arrangement will be available soon.

In terms of technology transfer results, since the new team came on board the number of startups have basically doubled, so at this rate, GW is now two to three times the national average. The numbers are small right now; typically there is one startup for \$100 million of research funding. But this is a good direction. In terms of the financial numbers one has to look closely at the figures before 2013. There is some money there but it is low compared to the royalty income this year to date. It cannot be predicted exactly what the results will be going forward, but the numbers today are twentyfold above where they were before the new team was in place. There is no University in the country that has done that, starting from low numbers and achieving such an excellent trajectory.

Another factor is that the University has not before accepted equity, and equity is important when there is a partnership with a company because if they do well the University does well. At present, the University has about \$1.5 million in equity. What doesn't appear in the numbers because these are not run through the Technology Transfer Office is sponsored research that is affiliated with these licenses. This used to run from \$1 to \$2 million a year; now it is \$3 to \$5 million per year. So there is a payback already even though the current team has not been in place that long. In the end, these results are attributable to great faculty and a new team that is working very hard to be connected to both the faculty as well as to corporate partners.

Professor Parsons said he wanted to add something cheerful, which was rare for him. He endorsed what Director Kubisen said about the rewards connected for technology transfer, particularly for faculty in the STEM fields. He said a family member who is a rather successful geneticist, and he receives substantial royalty checks for his invention. There is definitely money to be made by individual faculty members who are successful through these technology transfer arrangements. Director Kubisen said that the current policy is that a 50% of the money that comes back to the University is shared with the inventor (sometimes this is more than one individual) and the rest of it goes back into the department, college and the University to help fund other activities.

Professor Garris advised the Senate that the PEAFC Committee is working with Dr. Kubisen and the Technology Transfer Office to develop a new Patent Policy and the

division of revenue between the University and the faculty member is one of the things that is being discussed. Something new in Dr. Kubisen's remarks was that equity would be included in the new Patent Policy, whereas it was not in the past.

Another interesting thing about Technology Transfer is that in the 1980's the federal government noticed that faculty working on government-sponsored research did not commercialize that technology and it was basically going to waste. The government was spending billions and billions of dollars on sponsored research and it wasn't being commercialized. So, around 1985 the government came up with the Bayh-Dole Act. This basically gave universities the right to patent intellectual property developed on federal grants and retain these patent rights. This was a remarkable development and spawned in many universities the kind of activity that Dr. Kubisen is initiating now. As usual, GW is a bit behind the curve; many universities started doing what he is doing 1985. Still it is gratifying to see that GW is moving ahead in this area in a good strong way.

Director Kubisen concluded his remarks by displaying a chart that depicts GW's remarkable upward trajectory in this area. This trajectory is unheard of, and it is because of the faculty and their partnership with Technology Transfer. Dr. Kubisen said he has talked to people from the Medical School to the Music Department and things have been patented that have had impact. Faculty members should not assume their innovations have no value, but should rather contact the Technology Transfer Office to discuss them with staff.

Director Kubisen concluded his remarks by displaying a chart that depicts GW's remarkable upward trajectory in this area. This trajectory is unheard of, and it is because of the faculty and their partnership with Technology Transfer makes this all happen. Dr. Kubisen said he has talked to people from the Medical School to the Music Department and things have been patented that have had impact. Faculty members should not assume their innovations have no value, but should rather contact the Technology Transfer Office to discuss them with staff.

Professor Williams said he wondered what he could take back to his GSEHD colleagues, for example, what might be patentable in education and international relations. Director Kubisen responded that he could only provide an example from his history in prior places. There was a faculty member in education who was world-renowned for working with infants with hearing disorders. He developed a protocol that utilized technology for figuring out how to recognize a problem that needed followup; this had a big impact because early intervention with infants is critical. A related use of technology is a text messaging system to help people. Telemedicine is a big field, and GW has four of five other deals in that field. What is patentable is not an easy question to answer, but people should not assume they have nothing until they talk with the Technology Transfer staff.

REPORT FROM THE SENATE FISCAL PLANNING AND BUDGETING COMMITTEE

Professor Joseph Cordes, Acting Chair of the Committee, presented the report in powerpoint format (included with these minutes). The report covered the overall state of the University's finances, trends in operating performance, budget information currently

available for fiscal year 2015 through the first quarter as well as a summary of borrowing and debt, financing for the Science and Engineering Hall, and current issues.

The first page of the report presents information on the consolidated financial statements of the University, essentially the balance sheet showing assets and liabilities and net worth. In general, the University's assets have grown over that period, and the net worth of the University is up.

The second page of the report presents information from the balance sheet about the composition of the University's assets. These include cash and investments, including land, buildings, and equipment (as distinguished from real estate in the investment category). With regard to cash assets, the University in 2005 had about \$19 million in cash and there has been a steady increase in this category since then. The value of land, buildings, and equipment have also risen over this period to the level of approximately \$40 million. In the years between 2005 and the present, up to \$500 million in cash was accumulated to be used for the completion of projects underway.

A breakdown of the composition of the University's net worth is provided in the report, broken down into three categories, unrestricted and restricted to a certain use (both temporarily and permanently). The importance of breaking out this information is that the University budget is largely driven by the amount of unrestricted operating funds available. There are two components to unrestricted net assets: the operating and the capital investment components.

At the end of each fiscal year, the University provides a full accounting of fund inflows and outflows; this is done not on a cash basis, but on an accrual basis. It can be viewed as an income statement statement for the institution. It is possible to see directly the relationship between the capital investment side of the budget and the operating side. Interest payments, for example, come from the capital side of the budget, and one can see endowment funds flowing into the operating budget as well.

In terms of trends and patterns, the good news is that the University's assets have increased 28.3% in FY 2010 and 12.7% last year, 2013-14. Professor Cordes provided in his report information not given elsewhere, and that is what he terms the operating margin, or surplus. That is essentially, on an accrual basis, the difference between fund inflows and outflows on the operating side of the budget. That was positive in 2012, broke even during 2013, and went into negative territory by \$35 million in 2014 – and that is the basis for the first concern about the budget stated in the report. The University has been wrestling for some time with a downward trend in the operating margin which has fallen over time. There has also been an increase in the University's debt.

Factors influencing the operating margin include net tuition revenues. Over time the University has made a concerted effort to return a portion of tuition to students in the form of financial aid. Clearly, the more tuition is discounted, the less net revenue the institution will have. Even if enrollments stayed constant that would be the result. Unfortunately, enrollments have started to level off and in fact have been declining, particularly at the graduate level. Another factor influencing the operating margin is that the University has also done a lot of hiring. In just one year there were 35 searches, the largest number in

memory. To some extent this was predicated on the idea that tuition revenues would be the solution, or at least they would stay somewhat constant. However, no one predicted that enrollments would level off in the way they have.

If these factors are considered together, in the last fiscal year revenues grew by 4%, but expenses grew 7.8%. That is not sustainable, and the University is in a situation where adjustments must be made to bring revenues and expenses back into line. This is a necessity for a number of reasons, not the least of which is that it is important to lenders that the University maintain an operating surplus rather than a deficit.

Professor Cordes next displayed information concerning the approved University budget (revenues and expenses) for FY 15 along with information available at the end of the first quarter. This information will change once the second quarter report comes out. For the first quarter overall, it appears that revenue was about \$2 million more than expected, but expenses were \$4 million more than expected. It appears that expenses for purchased services are a factor in this. Overall the approved budget foresaw that operating results for FY 15 would be positive by \$7 million.

Information concerning the University's debt, including a listing of the institution's bond issues, is also included in the report. It is important to keep in mind when looking at this that the University has been locking in present favorable interest rates, so refinancing at these low rates is a factor in the total amount of debt that can be taken on. Existing debt has also been rolled over. The University's total amount of debt is at this point about \$1.7 million. That makes it roughly equivalent to the amount in the endowment. This debt is included in the University's liabilities, so the institution's overall situation is still positive.

The report next details evaluations of the strengths and weaknesses of the University's financial position by two bond rating agencies, Standard and Poors and Moody's. Both rate the University as "stable." Standard and Poors evaluation lists strong governance and strong senior management, relatively stable enrollment characteristics, strong financial operating performance, and good revenue diversity and demonstrated successful fundraising as a basis for its A+ rating. Challenges include only adequate financial (expendable) resources to operating expenses and debt, recent high capital spending (see chart), somewhat high nominal debt as well as some uncertainty about future capital costs associated with the renovation over a number of years of the Corcoran Art Gallery that GWU is acquiring.

Moody's evaluation lists as strengths solid student demand, a net tuition revenue increase of 3.7% in fiscal 2013, a large financial resource pool totaling \$1.74 billion at the end of FY 2013, healthy monthly liquidity with \$634 million at June 30, 2014, improved prospects for donor support; gift revenue of \$55.6 million in FY 2013. Challenges include the uncommonly high operating leverage with pre forma debt of \$1.55 billion, the likelihood that the University will continue to generate thin debt service coverage (given FY 2013 operating cash flow of 11.3% covering debt service by 1.9 times, potential pressure on ability to grow net tuition revenue could challenge operating performance as student charges comprised 62% of operating revenue in 2013, the University's debt structure, and the concentration of financial resources in real estate investments near the urban campus with these holdings comprising a significant 37% of total investments at year end 2013.

The report also provides information on the financing of the Science and Engineering Hall. Taking figures from the report made by Executive Vice President and Treasurer Louis Katz to the Senate in December 2011, the original plan was that there would be \$275 in capital costs for the building, not including finishing the 7th and 8th floors, which would initially be shell space. 50% to 60% of the cost would be covered by revenue from Square 54, and the remainder was expected to come from philanthropy (\$100 million) and increased cost recovery funds from research.

That model has changed. At the time the plan was laid out, there was an assumption that the debt would be amortized at 5%. Three years later, costs are lower, at 4.13%, so that means that a higher percentage of the building's cost can be financed by this source. Philanthropy directed to cover the capital cost of the building has at this point only reached \$7million, and indirect cost recoveries are a fraction of what was projected. The result is that the University will now finance through Square 54 revenues approximately \$240 million. This was possible for two reasons: before construction started, there was an accumulation of funds of about \$40 million that was neither foreseen nor taken into account in the original financing plan. In addition, the annual amount that was come from Square 54 revenues was based capitalizing this revenue into the University's endowment and then spending it at the standard rate, which would yield approximately \$7 million a year. It turns out that the lease payments providing Square 54 revenue are actually more like \$9 million a year, and they are scheduled to grow over time as they include an index factor. A decision was made at some point to use the \$9 million annual revenue stream toward the building's capital costs rather than the \$7 million.

Professor Cordes concluded his report by reviewing current budget and finance issues facing the University. The University has a new five-year budget model which will provide specific information unavailable before and allow for more accurate projections. Increasing revenue and support can be derived from the Capital Campaign currently underway, the establishment of more online and off-campus programs, and increased indirect cost recovery funds from research. Restraining spending is also critical, and the current campus-wide belt-tightening underway as well as the revival of the Innovation Task Force will contribute to this. Finally, there are two unknowns in all of this, the first being costs associated with the Corcoran partnership, and the other, the results of the review underway of the University's salary and fringe benefit programs.

GENERAL BUSINESS

I. REPORT OF THE EXECUTIVE COMMITTEE

Professor Garris presented the report which is included with these minutes.

II. PROVOST'S REMARKS

Provost Lerman confined his remarks to providing information on enrollments. The University is still in the process of getting final applications, but the best forecast at this point is that undergraduate applications will be up slightly this year. GW started using the common applications a couple of years ago, and the number of these submitted are

increasing. This is the first year GW will admit a Corcoran student body class, the expectation is that the University will admit a class about the same size as this year's freshman class there. It is expected that the total number of new students for next year, including freshman and transfers, will probably rise somewhat from last year, with a modest increase in new freshmen. There will also be a slight larger continuing class than last year.

As mentioned by Professor Cordes in his report, graduate enrollments are a concern. The Deans continue to be focused on this, and discussions continue about how to get more applications, recruit more students, and in the longer term, particularly now that the five year budget planning model is in place, look at prospective new programs that bring in students who would not otherwise come to GW because it does not have programs that match their needs.

Another strength of the five year budget model is that information is provided school by school and program by program along with revenue forecasts. The deans and the faculty in each of the schools will be able to look at the composition of their future projected revenues. It will also facilitate laying out assumptions about costs and revenues associated with prospective new academic programs. The new budget model is a very important new tool in formulating long-term budget projections, and it will facilitate getting enrollment commitments from the schools based on forecasts for a much longer time period than was possible before.

III. CHAIR'S REMARKS

President Knapp thanked Professor Garris for pointing out that the Science and Engineering is now open and operational.

Another opening scheduled for January 14th is the Colonial Health Center. This came about in part because of the Student Association's interest in this issue, which resulted in consolidating and co-locating the University's health and counseling services into newly-renovated space on the ground of the Marvin Center. 150 students were served on the first the Center opened just before classes began the past week. The Health Center is part of a broader initiative called "Healthy GW." This is an effort to try and wrap together everything GW is doing to enhance the health of faculty, staff, and students across the University. Another enhancement in this area is the addition of permanent counseling services at the Mount Vernon campus.

President Knapp announced that he will be announcing the members of the newly-established Benefits Task Force. The Task Force will be composed of six faculty members, 7 staff members, and one medical resident. Sara Rosenbaum, the Harold and Jane Hirsch Professor of Health Law and Policy and also the founding chair of the department of Health Policy in the Milken Institute School of Public Health, will serve as the faculty co-chair. She is obviously someone who is an expert in health care and will be an excellent member because one of the challenges the University faces in examining benefits issues is the rapidly changing landscape in the health care area along with accelerating costs there. The University's Human Resources Director of Benefits Strategy, Erica Hayton, will serve as the staff co-chair.

The Task Force will be charged with reviewing the mix of GW benefits and examining how they compare to those offered at peer institutions. As Professor Garris pointed, some very active benchmarking will have to be done. There are three main components to the benefits program, those being retirement, health care, and tuition benefits, and the question has been raised of what the appropriate tradeoffs are among these. Last year the Benefits Advisory Committee made a recommendation on how to balance these; President Knapp said the reason he decided a Task Force was needed was because there was a sense that a broader consultation about these issues was in order.

The Task Force is expected to issue two sets of recommendations, the first for the open enrollment period to begin next October. These are to be ready for consideration by the Administration and the Benefits Advisory Committee by May 1, 2015. There is a second deadline of December 1, 2015, when the Task Force will deliver its recommendations concerning the tradeoff between salaries and benefits. The University has had a very clear and consistent to this over a number of years; the question is whether or not these are the right tradeoffs within the benefits pool authorized each year by the Board of Trustees.

Turning to budget issues, President Knapp thanked Professor Cordes for his very comprehensive report that day. It is important to emphasize that the real challenge the University faces right now is on the operating, rather than the capital side. That challenge has come about because of declining enrollments in the University's graduate programs. This came at the same time as growth in the size of the faculty that was predicated on the projected graduate enrollments that did not materialize. In fact, graduate enrollments declined.

This enrollment decline and its effect was not immediately apparent, chiefly because in contrast to undergraduate enrollments, graduate enrollments are not centrally coordinated and monitored as undergraduate enrollments are. Undergraduate enrollments have been consistently monitored and they have always hit the revenue targets projected. By contrast, graduate applications and enrollments are decentralized in each school. Going forward, much closer management must be put in place if the University is to maintain the kind of expenditures to support the growth of faculty in recent years. At present, the University graduate enrollments are 1,200 short of projections, and that is what is driving the entire operating problem it faces at the moment. It is critical to address this problem so that it is unnecessary in the future to tap reserves to make up a shortfall in this area.

BRIEF STATEMENTS (AND QUESTIONS)

Professor Squires said he understood that the Budget Task Force would be looking tradeoffs among benefits, and if this means that the possibility of expanding the compensation pool would be excluded from its discussions. President Knapp responded that in the past, faculty have recommended to the Board that the pool be increased. This would involve tradeoffs budget-wise to increase the compensation pool, because the Board's role is to approve the University's overall budget. It is up to the Administration how much within that budget devoted to salary and benefits is allocated. Professor Squires said he understood, but if the size of the compensation pool is excluded from consideration, that will greatly limit the Task Force's discussions.

With reference to the graduate enrollment challenge, Professor Swiercz asked if there are plans to provide the Senate with more detailed information and explanations about what has transpired. President Knapp assured everyone that information would be forthcoming.

ADJOURNMENT

There being no further business before the Senate, the meeting was adjourned at 4:17 p.m.

Elizabeth A. Amundson
Elizabeth A. Amundson
Secretary

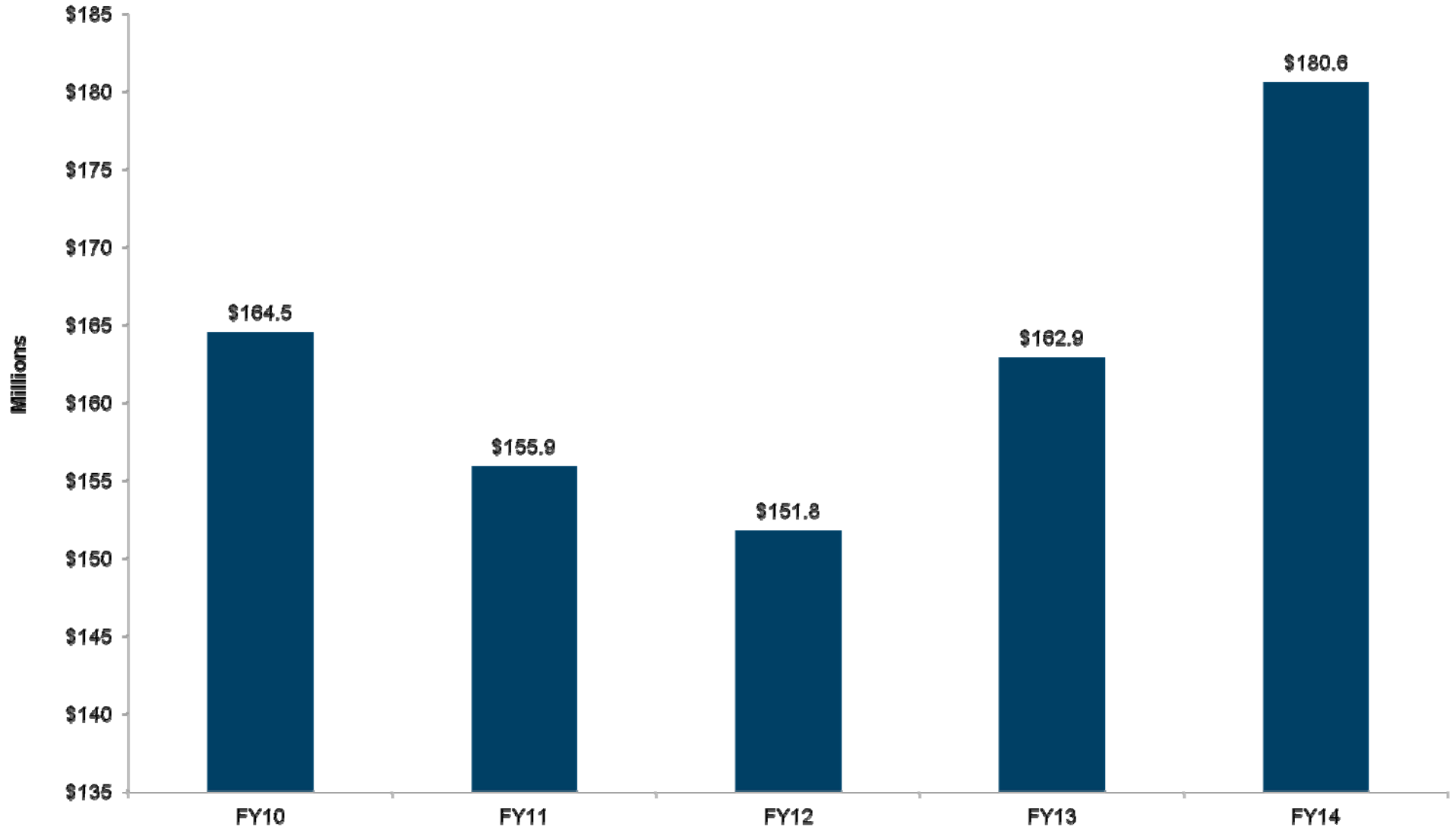


Update on Research Faculty Senate

Leo M. Chalupa
Vice President for Research
January 9, 2015



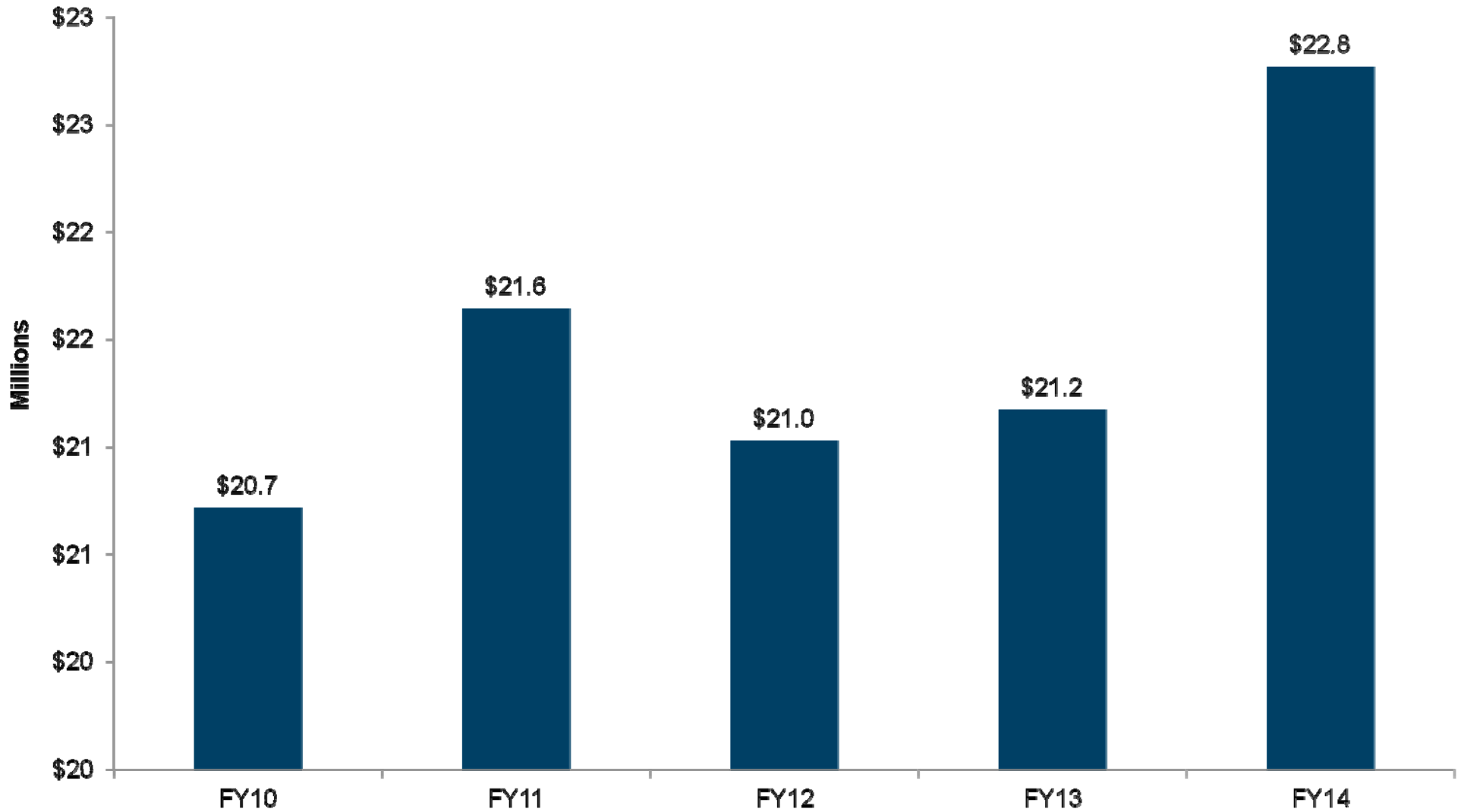
Year End Total Expenditures



Growth from FY13 to FY14: +10.9%



Year End Indirect Costs



Growth from FY13 to FY14: +7.5%

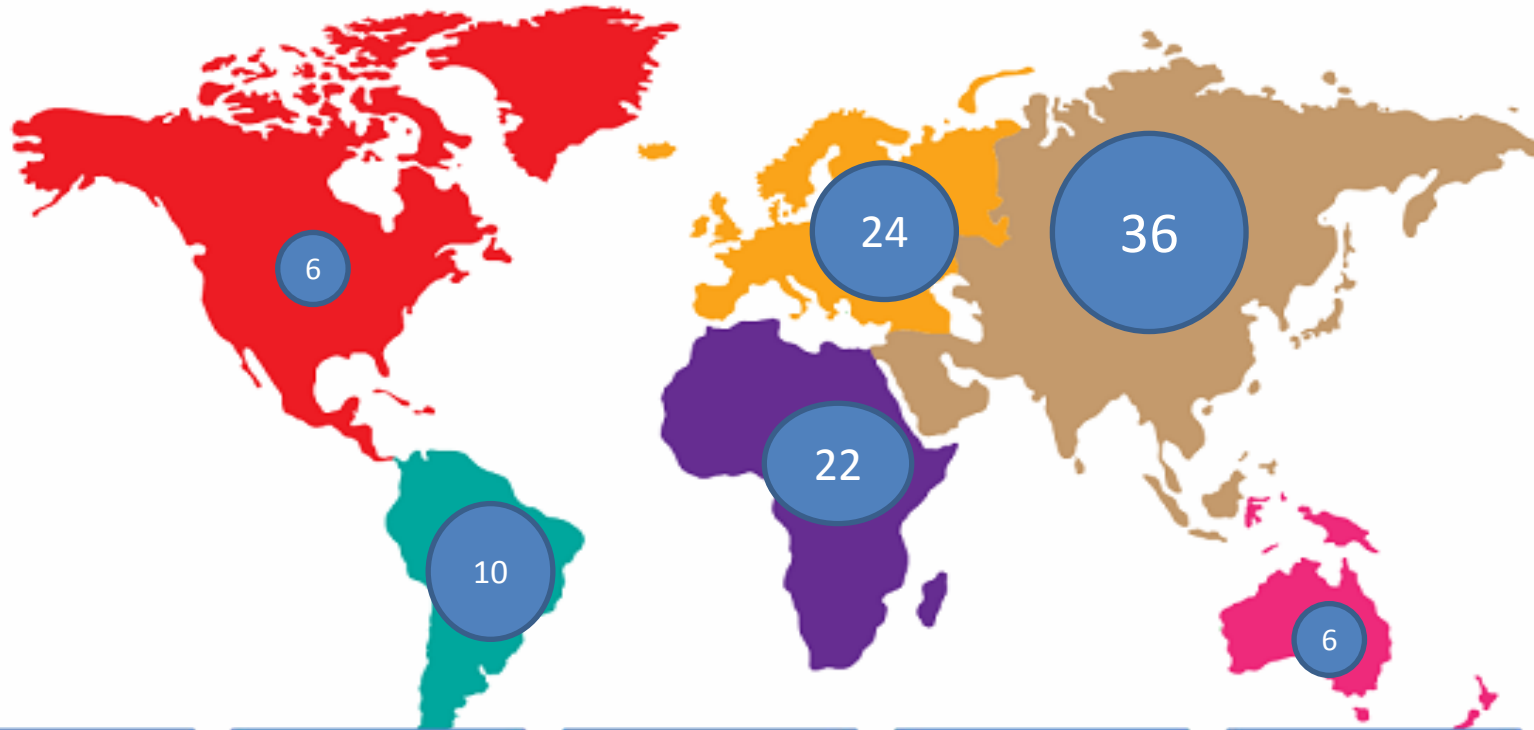
Interdisciplinary Initiatives

- Arts**
- Autism and Neurodevelopmental Disorders**
- Cancer**
- Computational Biology Institute*
- Cybersecurity*
- Big Data for Science and Engineering**
- Food*
- Genomics**
- Global Women's Institute*
- Institute for Neuroscience*
- Sustainability*

*Operational with Director in place

**Search for a Director in progress

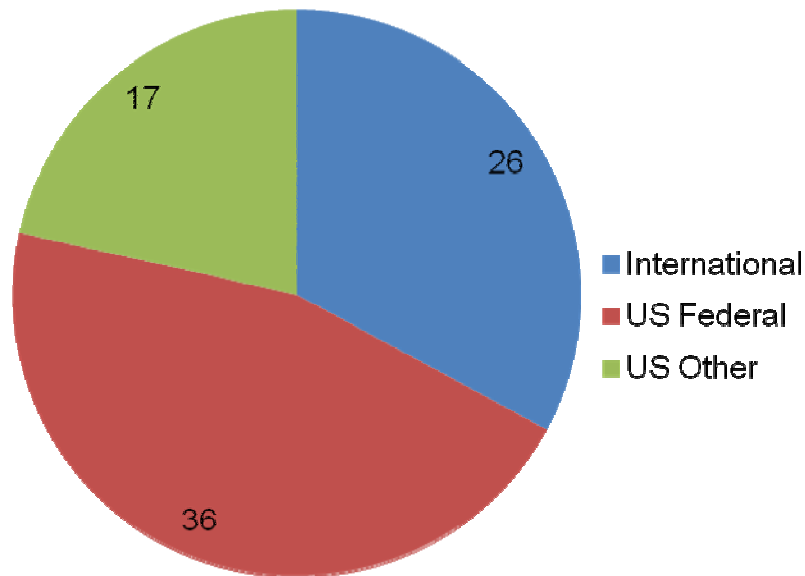
Locations of Research Collaborations



| North America | South America | Europe | Africa | Asia | Australia/Oceania |
|--|---|--|---|--|--|
| <ul style="list-style-type: none"> • Canada (4) • Mexico (2) | <ul style="list-style-type: none"> • Brazil (7) • Colombia (1) • Ecuador (1) • Peru (1) | <ul style="list-style-type: none"> • Belgium (1) • France (1) • Germany (5) • Netherlands (1) • Russia (10) • Sweden (1) • Switzerland (2) • UK (2) • Ukraine (1) | <ul style="list-style-type: none"> • Botswana (1) • Egypt (1) • Ethiopia (1) • Ghana (1) • Kenya (1) • Malawi (2) • Morocco (1) • Mozambique (2) • Nigeria (2) • Senegal (1) • South Africa (1) • Tanzania (2) • Tunisia (1) • Uganda (2) • Zambia (1) • Zimbabwe (2) | <ul style="list-style-type: none"> • China (4) • India (3) • Japan (3) • Jordan (2) • Malaysia (3) • Korea (2) • Kuwait (2) • Kyrgyzstan (1) • Lebanon (1) • Nepal (2) • Pakistan (2) • Saudi Arabia (2) • Thailand (4) • Turkey (1) • Vietnam (2) • Yemen (2) | <ul style="list-style-type: none"> • Australia (4) • Guam (1) • New Zealand (1) |

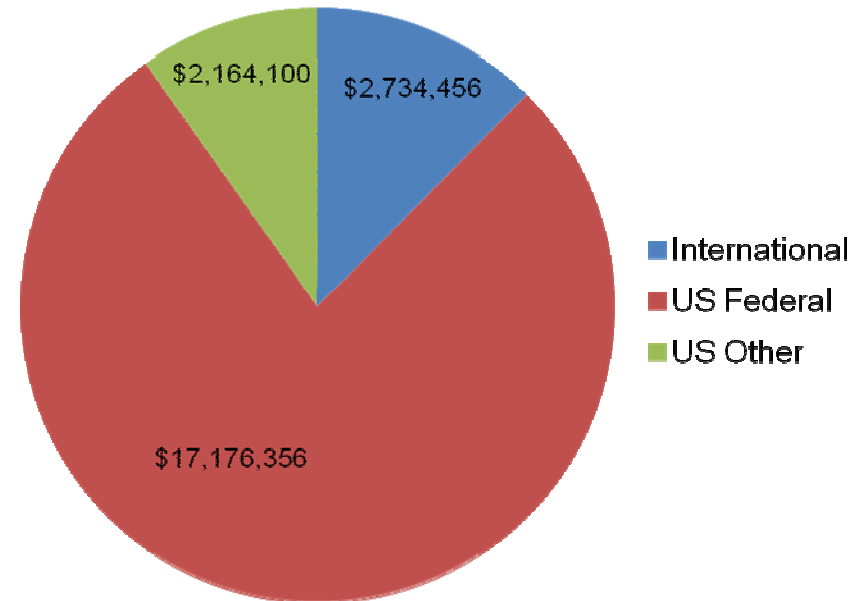
International Research Collaborations by Funding Source (FY14)

Number of Projects



8.3% of externally sponsored projects have an international component (79 of 957 projects)

Total Expenditures



12.2% of total expenditures are due to international collaboration (\$22.1M of \$180.6M expenditures)



U.S. Federal Sources of Funding for International Research Collaborations

| U.S. Federal Funding Source | Number of Active Projects | Total Funding Amount/ Active Projects |
|---|---------------------------|--|
| HHS/NATIONAL INSTITUTES OF HEALTH (NIH) | 14 | \$30,098,019 |
| DEPARTMENT OF EDUCATION | 2 | \$5,681,118 |
| DEPARTMENT OF ENERGY | 1 | \$4,910,556 |
| DEPARTMENT OF STATE | 5 | \$4,198,664 |
| NATIONAL SCIENCE FOUNDATION (NSF) | 6 | \$3,375,080 |
| NAVAL POSTGRADUATE SCHOOL | 1 | \$3,199,183 |
| HHS/HEALTH RESOURCES AND SERVICES ADMIN. (HRSA) | 1 | \$2,525,429 |
| JAPAN - US FRIENDSHIP COMMISSION | 2 | \$1,658,313 |
| DEPARTMENT OF THE NAVY | 1 | \$453,512 |
| HHS/PROGRAM SUPPORT CENTER | 1 | \$440,926 |
| DEFENSE THREAT REDUCTION AGENCY (DTRA) | 2 | \$50,000 |



U.S. Non-Federal Sources of Funding for International Research Collaborations

| U.S. Non-Federal Funding Source | Number of Active Projects | Total Funding Amount/ Active Projects |
|---|---------------------------|---------------------------------------|
| UNIVERSITY OF CHICAGO | 1 | \$8,427,593 |
| ALBERT B. SABIN VACCINE INSTITUTE INC. | 2 | \$1,956,914 |
| CARNEGIE CORPORATION OF NEW YORK | 3 | \$1,806,338 |
| JOHN D. AND CATHERINE T. MACARTHUR FOUNDATION | 2 | \$724,073 |
| U.S. CIVILIAN RESEARCH AND DEVELOPMENT FOUNDATION | 1 | \$359,906 |
| UNIVERSITY OF WISCONSIN | 1 | \$350,011 |
| JOHNS HOPKINS UNIVERSITY | 2 | \$341,594 |
| RAYTHEON BBN TECHNOLOGIES CORPORATION | 1 | \$301,313 |
| SANDIA NATIONAL LABORATORIES | 1 | \$242,106 |
| HENRY LUCE FOUNDATION | 1 | \$200,000 |
| PHRMA FOUNDATION | 1 | \$140,000 |
| THE LEWIN GROUP, INC. | 1 | \$118,344 |



International Sources of Funding

| International Funding Source | Number of Active Projects | Total Funding Amount/ Active Projects |
|--|---------------------------|--|
| UNICEF-THE UNITED NATIONS CHILDREN'S FUND | 1 | \$2,861,783 |
| PAN AMERICAN HEALTH ORGANIZATION (PAHO) | 1 | \$1,412,303 |
| WORLD ANTI-DOPING AGENCY | 1 | \$939,716 |
| GLOBAL DEVELOPMENT NETWORK | 1 | \$850,354 |
| NATIONAL CANCER INST OF CANADA | 1 | \$667,950 |
| UNIVERSITY OF TROMSO | 3 | \$644,510 |
| CANADIAN INTERNATIONAL DEVELOPMENT AGENCY | 1 | \$600,078 |
| COMMONWEALTH OF AUSTRALIA | 1 | \$455,000 |
| CENTRO DE PESQUISAS RENE RACHOU | 1 | \$331,999 |
| QUEENSLAND INSTITUTE FOR MEDICAL RESEARCH | 1 | \$195,572 |
| KHON KAEN UNIVERSITY | 1 | \$185,602 |
| KUWAIT FOUNDATION FOR THE ADVANCEMENT OF SCIENCES | 1 | \$185,602 |
| EUROPEAN COMMISSION | 1 | \$165,825 |
| STICHTING AMSTERDAM INST FOR GLOBAL HEALTH AND DEV | 1 | \$153,299 |
| SODERTORNS HOGSKOLA | 1 | \$107,625 |
| ASIAN DEVELOPMENT BANK | 1 | \$96,500 |
| INTERNATIONAL BACCALAUREATE | 1 | \$93,750 |
| KYUNGPOOK NATIONAL UNIVERSITY | 1 | \$66,727 |
| THE EMBASSY OF THE KAZAKHSTAN REPUBLIC | 1 | \$50,000 |
| PEKING UNIVERSITY | 1 | \$43,964 |
| YONSEI UNIVERSITY | 1 | \$24,623 |
| ASSOCIATION OF SCHOOLS OF PUBLIC HEALTH | 1 | \$20,000 |
| INTER-AMERICAN DEVELOPMENT BANK | 1 | \$20,000 |
| DECODE GENETICS EHF | 1 | \$3,000 |

Summary

- There is a significant upward trend with respect to both total expenditures and indirect costs.
- Interdisciplinary Initiatives are yielding substantial benefits to GW and there is good reason to believe this will continue in the future.
- A considerable portion of our research funding comes from projects with an international research component and we will strive to increase this in the coming year.



“The best is yet to come.”

GW TECHNOLOGY COMMERCIALIZATION

GW Faculty Senate
January 2015

Steven J. Kubisen, Ph.D.
Director, Office of Technology Transfer



Office of Technology Transfer

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WASHINGTON, DC

STEVE KUBISEN BACKGROUND

CORPORATE EXECUTIVE



VENTURE CEO



UNIVERSITY TECH TRANSFER



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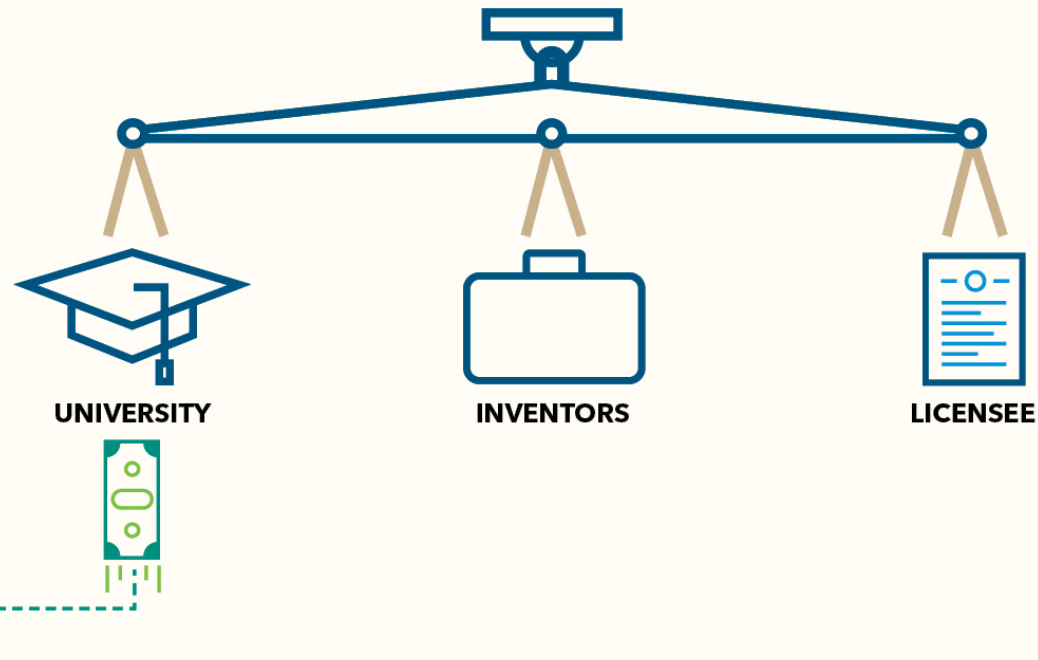
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HOW WE DO IT



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TECHNOLOGY

PEOPLE

FUNDING



Office of Technology Transfer

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TECHNOLOGY

BASIC RESEARCH

APPLIED RESEARCH

PRODUCT TECHNOLOGY DEVELOPMENT

MANUFACTURING & SALES

PEOPLE

FUNDING

INFRASTRUCTURE



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APPLIED RESEARCH

PRODUCT TECHNOLOGY DEVELOPMENT

MANUFACTURING & SALES

PEOPLE

FACULTY

R&D PERSONNEL

BUSINESS ENTREPRENEURS

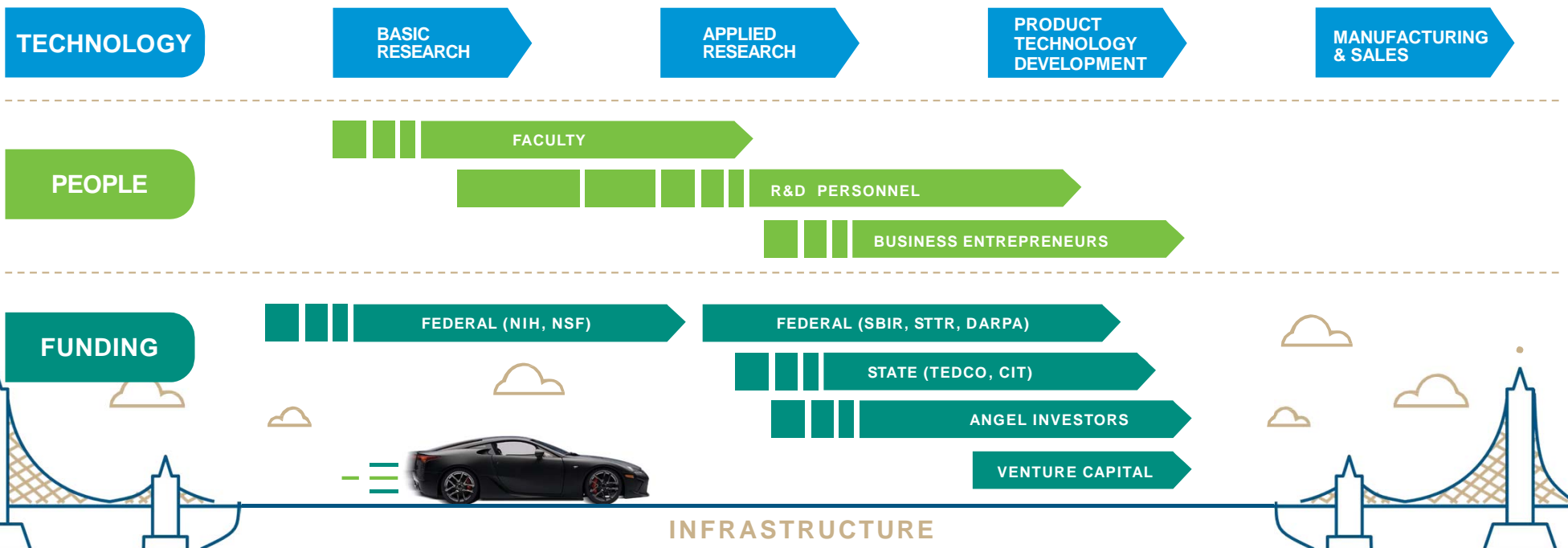
FUNDING

INFRASTRUCTURE

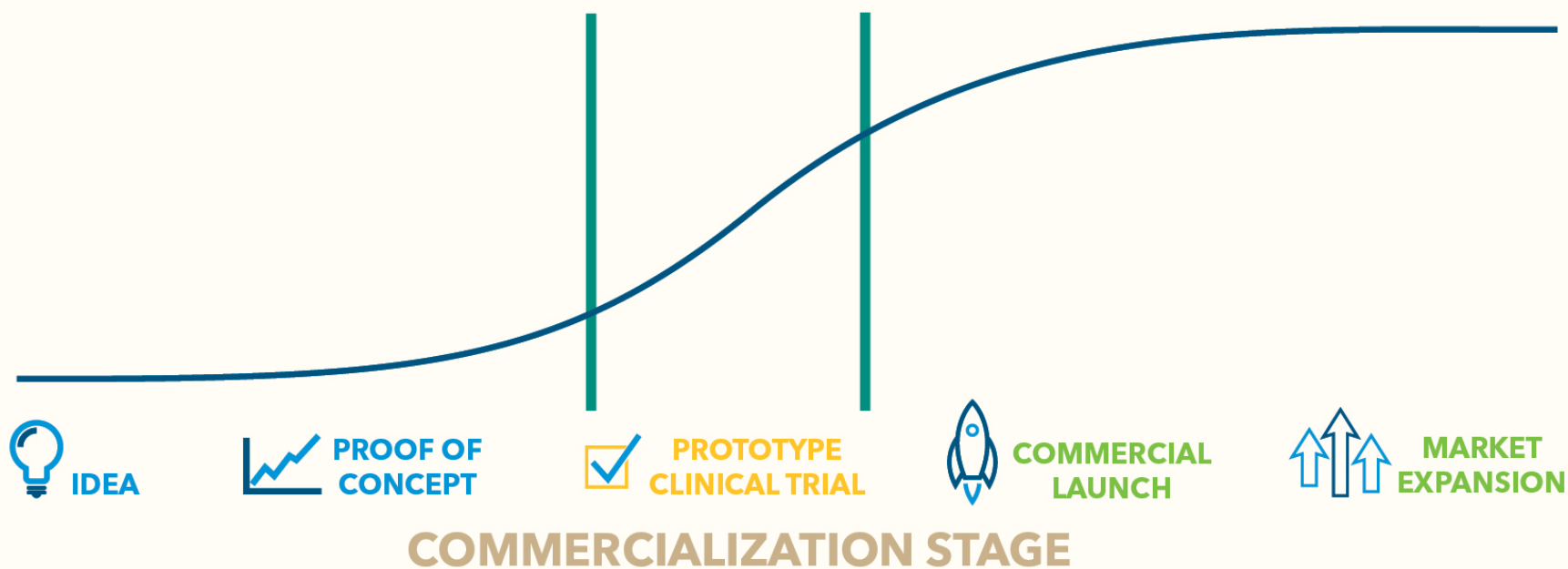


Office of Technology Transfer

BRIDGE TO COMMERCIALIZATION



TECHNOLOGY VALUE CURVE



BENEFITS OF TECHNOLOGY COMMERCIALIZATION



RESEARCH

- Milestone payments
- Royalty
- Equity
- Sponsored research



EDUCATION

- Student career opportunities
- Recruitment of top faculty and students
- Institution reputation

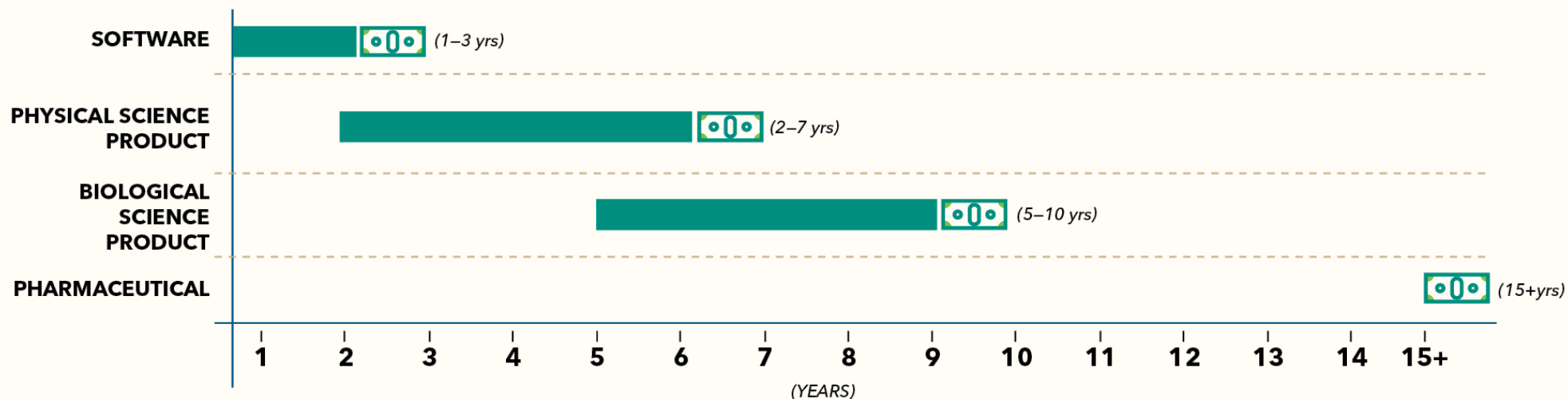


SERVICE

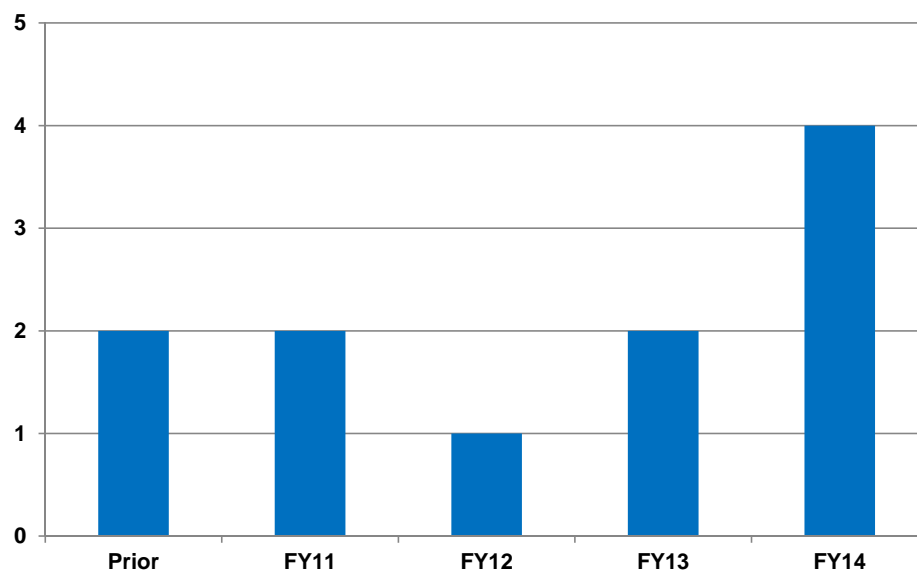
- Societal impact
- Addressing global challenges



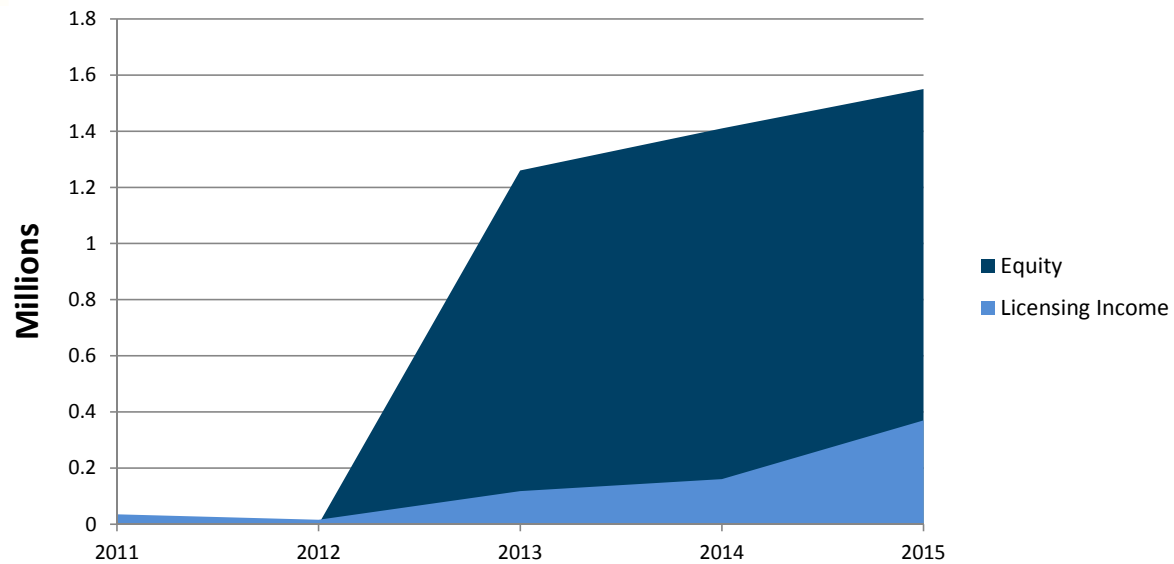
TYPICAL COMMERCIALIZATION TIMELINES



START-UPS



GW TECH TRANSFER INCOME STREAMS



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- Publications
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Questions?

Steve Kubisen



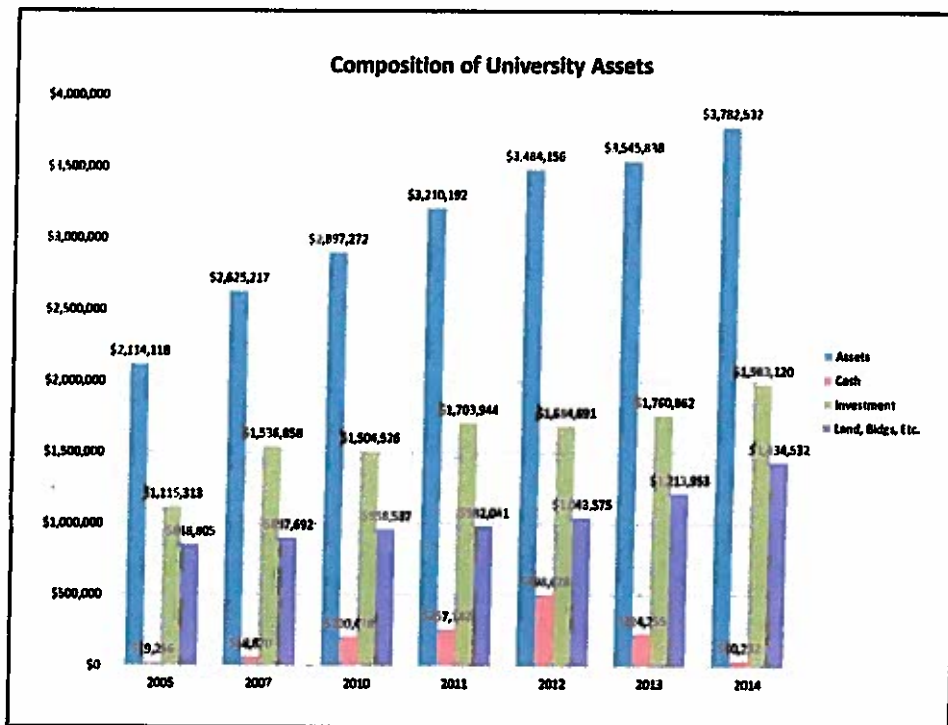
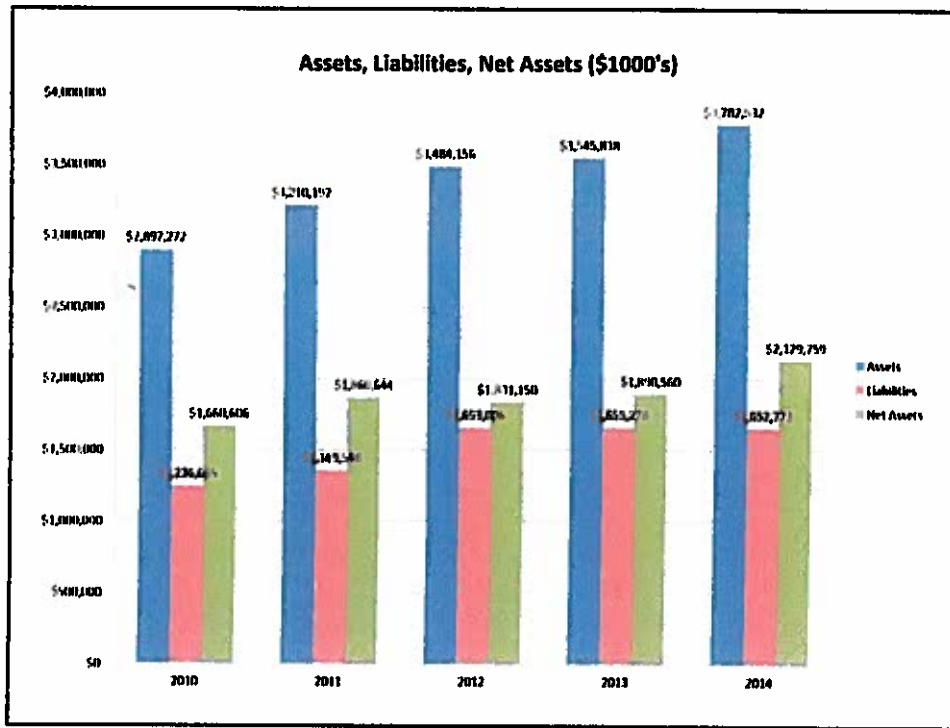
University Budget and Financial Update

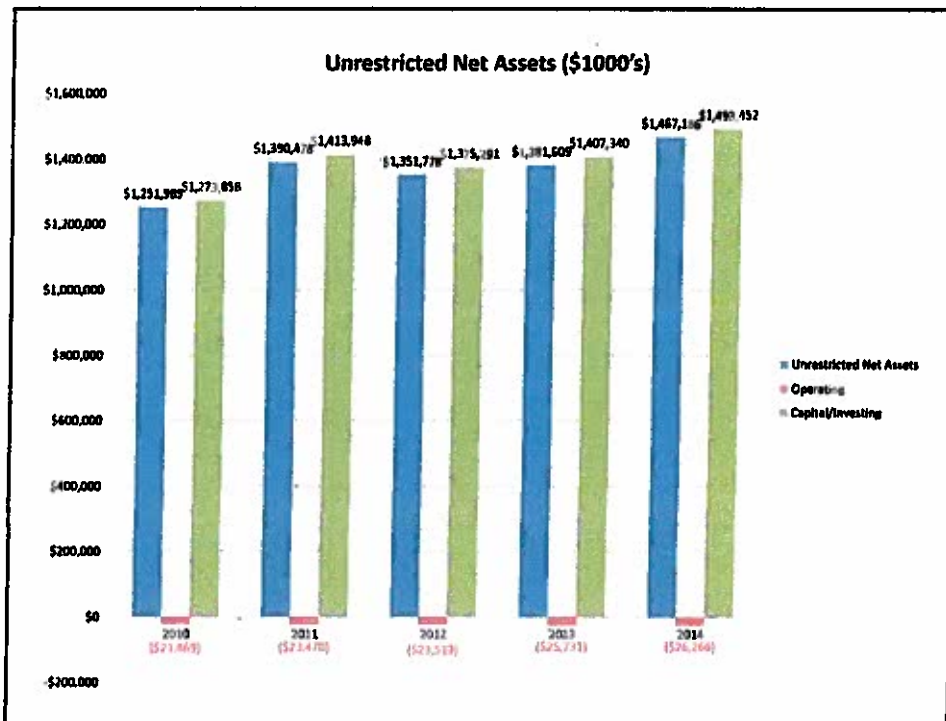
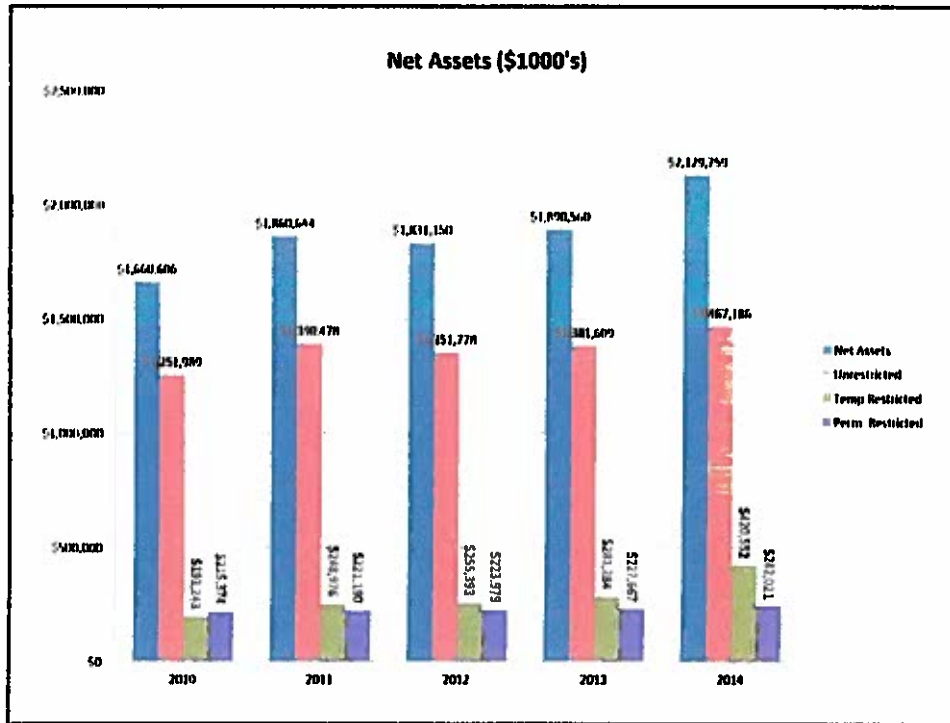
**Faculty Senate Committee on Fiscal
Planning and Budgeting**

Jan 9, 2015

Outline

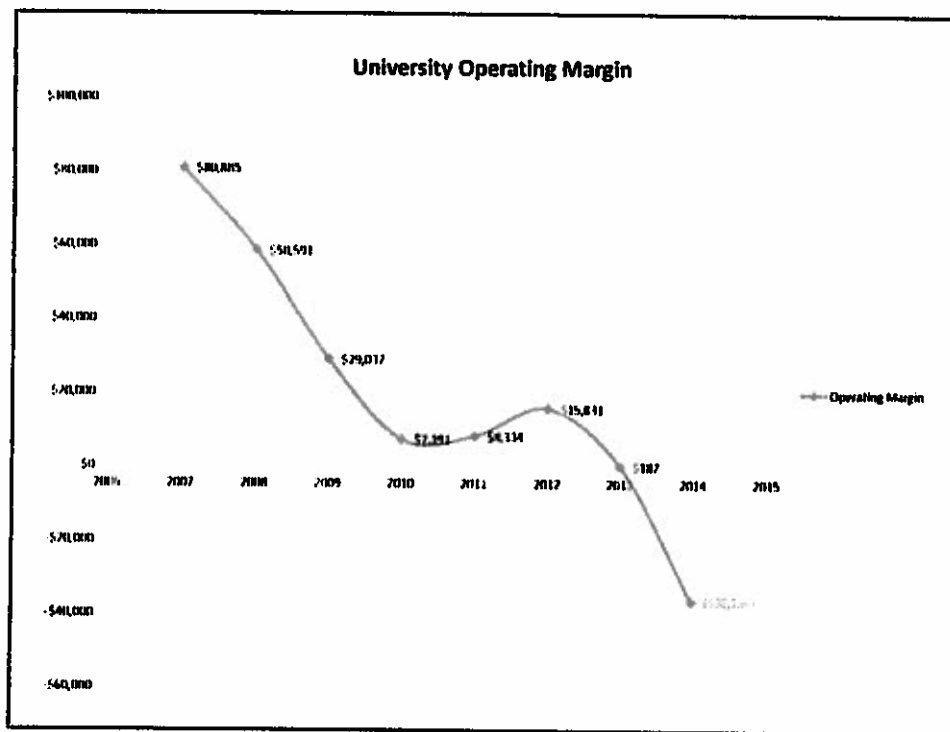
- **Overall university finances: FY's 2010-2014**
- **Trends in Operating Performance**
- **FY 2015**
- **Borrowing and Debt**
- **Science and Engineering Hall**
- **Current Issues**





UNRESTRICTED ACTIVITIES

| | OPERATING | | | CAPITAL/INVESTING | | | TOTAL UNRESTRICTED | | |
|---------------------------------------|------------|------------|-------------|-------------------|-----------|-----------|--------------------|-------------|-------------|
| | 2012 | 2013 | 2014 | 2012 | 2013 | 2014 | 2012 | 2013 | 2014 |
| REVENUE | \$920,926 | \$968,251 | \$1,007,790 | \$92,277 | \$181,212 | \$273,602 | \$1,013,203 | \$1,109,463 | \$1,281,392 |
| Pct. Change | 3.3% | 5.1% | 4.1% | -63.7% | 96.4% | 51.0% | -12.7% | 13.4% | 11.5% |
| Tuition | | | | | | | | | |
| Gross | \$789,371 | \$827,985 | \$847,060 | | | | \$789,371 | \$827,985 | \$847,060 |
| Pct. Change | 5.6% | 4.9% | 2.5% | | | | 5.6% | 4.9% | 2.3% |
| Univ. Funded Scholarships | \$220,409 | \$229,031 | \$238,932 | | | | \$220,409 | \$229,031 | \$238,932 |
| Pct. Change | 5.3% | 3.9% | 4.5% | | | | 5.3% | 3.9% | 4.1% |
| Net Tuition | \$568,962 | \$598,954 | \$608,128 | | | | \$568,962 | \$598,954 | \$608,128 |
| Pct. Change | 5.6% | 5.3% | 1.5% | | | | 5.6% | 5.3% | 1.5% |
| Income from Auxiliaries | 98,474 | 101,667 | 98,388 | | | | 98,474 | 101,667 | 98,388 |
| Pct. Change | 1.6% | 3.2% | -3.2% | | | | 1.6% | 3.2% | -3.2% |
| Program Funds | 136,303 | 183,340 | 171,784 | | | | 136,303 | 183,340 | 171,784 |
| Pct. Change | -6.4% | 5.2% | 19.8% | | | | -6.4% | 5.2% | 15.9% |
| Net Indirect | 21,077 | 21,171 | 22,768 | | | | 21,077 | 21,171 | 22,768 |
| Pct. Change | -2.8% | 0.7% | 7.5% | | | | -2.8% | 0.7% | 7.5% |
| Net Investment Income | \$31 | \$286 | \$58 | | | | \$31 | \$286 | \$58 |
| Pct. Change | | | | | | | | | |
| Investment Real Property, Rents | | | | | | | | | |
| Pct. Change | | | | | | | | | |
| Net Contributions | \$11,963 | \$14,805 | \$17,810 | | | | \$11,963 | \$14,805 | \$17,810 |
| Pct. Change | 2.7% | 23.8% | 20.3% | | | | 2.7% | 23.8% | 20.3% |
| EXPENSE | \$905,095 | \$968,064 | \$1,044,046 | | | | \$905,095 | \$968,064 | \$1,044,046 |
| Pct. Change | 2.4% | 7.0% | 7.8% | | | | 2.4% | 7.0% | 7.8% |
| Salaries | \$471,492 | \$506,304 | \$530,602 | | | | \$471,492 | \$506,304 | \$530,602 |
| Pct. Change | 1.4% | 7.4% | 4.8% | | | | 1.4% | 7.4% | 4.8% |
| Fringe Benefits | \$105,917 | \$110,322 | \$117,810 | | | | \$105,917 | \$110,322 | \$117,810 |
| Pct. Change | 1.0% | 4.2% | 6.8% | | | | 1.0% | 4.2% | 6.8% |
| Salaries + Fringe Benefits | \$577,409 | \$616,626 | \$648,412 | | | | \$577,409 | \$616,626 | \$648,412 |
| Pct. Change | 1.3% | 6.8% | 5.2% | | | | 1.3% | 6.8% | 5.2% |
| Purchased Services | \$165,439 | \$183,442 | \$223,096 | | | | \$165,439 | \$183,442 | \$223,096 |
| Pct. Change | 1.9% | 10.9% | 21.6% | | | | 1.9% | 10.9% | 21.6% |
| Occupancy | \$60,175 | \$58,574 | \$60,912 | | | | \$60,175 | \$58,574 | \$60,912 |
| Pct. Change | 5.2% | -2.7% | 4.0% | | | | 5.2% | -2.7% | 4.0% |
| Investment Real Property | | | | | | | | | |
| Pct. Change | | | | | | | | | |
| Interest | | | | | | | | | |
| Pct. Change | | | | | | | | | |
| "SURPLUS (DEFICIT)" | \$15,831 | \$187 | (\$36,256) | | | | \$15,831 | \$187 | (\$36,256) |
| Pct. Change | 90.0% | -98.8% | -19,488.2% | | | | 90.0% | -98.8% | -19,488.2% |
| OTHER INCREASE (DECREASE) NET ASSETS | | | | | | | | | |
| Debt Service and Other Mandatory | (\$51,288) | (\$56,889) | (\$66,367) | | | | (\$51,288) | (\$56,889) | (\$66,367) |
| Endowment Support | \$53,339 | \$62,551 | \$65,916 | | | | \$53,339 | \$62,551 | \$65,916 |
| Capital Expenditures | (\$18,168) | (\$18,980) | (\$20,639) | | | | (\$18,168) | (\$18,980) | (\$20,639) |
| Support/Investment | \$243 | \$10,973 | \$55,811 | | | | \$243 | \$10,973 | \$55,811 |
| TOTAL OTHER CHANGES IN NET ASSETS | (\$15,874) | (\$2,405) | (\$35,721) | | | | (\$15,874) | (\$2,405) | (\$35,721) |
| INCREASE (DECREASE) IN NET ASSETS | (\$431) | (\$2,218) | (\$533) | | | | (\$431) | (\$2,218) | (\$533) |
| NET ASSETS (DEFICIT) BEGINNING OF YR. | (\$23,470) | (\$23,513) | (\$25,731) | | | | (\$23,470) | (\$23,513) | (\$25,731) |
| NET ASSETS (DEFICIT) END OF YR. | (\$23,513) | (\$25,731) | (\$26,266) | | | | (\$23,513) | (\$25,731) | (\$26,266) |



University Operating Margin

- Main factors in drop
 - Net Tuition Revenue
 - Financial Aid
 - Enrollments
 - Increased expenditures on faculty/staff
- FY 2014:
 - Growth in operating revenues: 4.1%
 - Growth in operating expenses: 7.8%
- Importance
 - Operating margin is by no means the only indicator of financial performance, but important nonetheless

THE GEORGE WASHINGTON UNIVERSITY
FY 2015 Approved Budget and FY 2015 1Q Forecast
 (Dollars in thousands)

| | FY 2014 4Q Actuals | FY 2015 Approved | FY 2015 1Q Forecast |
|--|-----------------------|---------------------|------------------------|
| REVENUES | | | |
| Student Tuition & Fees | 847,060 | 881,702 | 886,741 |
| Less: University Fawcett Scholarships | (227,664) | (234,314) | (234,314) |
| Net Student Tuition & Fees | 619,396 | 649,388 | 651,901 |
| Indirect Cost Revenues | 22,768 | 23,407 | 23,407 |
| Auxiliary Enterprises | 98,368 | 98,311 | 98,311 |
| Contributions - Net | 31,538 | 37,200 | 37,200 |
| Medical Education Agreements | 58,236 | 58,886 | 58,886 |
| Other Income | 24,898 | 25,407 | 25,407 |
| Total Revenues | 885,222 | 892,600 | 895,112 |
| EXPENSES | | | |
| Salaries & Wages | 480,594 | 498,505 | 498,505 |
| Fringe Benefits | 106,315 | 107,196 | 109,609 |
| Purchased Services | 139,721 | 127,918 | 130,009 |
| Supplies | 11,362 | 12,122 | 12,122 |
| Equipment | 13,184 | 12,932 | 12,932 |
| Rent | 3,043 | 2,840 | 2,840 |
| Occupancy | 5,788 | 56,002 | 56,002 |
| Scholarships & Fellowships | 14,152 | 13,777 | 13,777 |
| Communications | 4,995 | 5,126 | 5,126 |
| Travel & Training | 21,893 | 20,643 | 20,643 |
| Other | 31,093 | 30,384 | 30,384 |
| Total Expenses | 886,240 | 884,720 | 891,314 |
| OTHER CHANGES IN NET ASSETS | | | |
| Debt Service - Mandatory Purposes | (66,367) | (77,274) | (77,274) |
| Endowment Support | 67,451 | 69,538 | 69,538 |
| Capital Expenditures | (18,449) | (19,469) | (19,469) |
| Support/Investment | 48,381 | 21,333 | 21,404 |
| Total Other Changes in Net Assets | 31,016 | (5,872) | (3,801) |
| NET OPERATING RESULTS | - | - | - |

Debt: Recent GW Bond Issues and Due Dates

| Bond Issue Date | Amount (\$) | Due Date |
|-----------------|-------------|--------------------|
| 2007 | 50,000,000 | 2017 |
| 2009 | 200,000,000 | 2019 |
| 2010 | 138,000,000 | Various: 2010-2020 |
| 2011 | 150,000,000 | 2021 |
| 2012 | 300,000,000 | 2022 |
| 2012 | 168,000,000 | 2017 |
| 2013 | 170,000,000 | 2043 |
| 2014 | 300,000,000 | 2044 |

12

Debt and Borrowing

- With July 2014 debt issue of \$300 million, GWU total rated debt equals approximately \$1.66 billion.
- Both S&P and Moody's continue to affirm A+(S&P) and A1 (Moody's) ratings and maintained outlook as "Stable."
 - <https://finance.gwu.edu/sites/finance.gwu.edu/files/downloads/Moody%27s%20George%20Washington%20University%20New%20Issue%20Report%20July%202014.pdf>
 - https://finance.gwu.edu/sites/finance.gwu.edu/files/downloads/RatingReport_S%26P_7-28-14.pdf
- Ratings reflect both strengths and challenges

13

How the Credit Rating Agencies See Us: S&P

The 'A+' rating reflects S&P's view of the university's:

- Strong governance and stable senior management team
- Relatively stable enrollment and strong demand characteristics for its comprehensive academic programs
- Strong financial operating performance
- Good revenue diversity and demonstrated successful fundraising

Partially offsetting factors include:

- Only adequate financial (expendable) resources to operating expenses and debt;
- Recent high capital spending to renovate and expand campus facilities, including a new \$275 million science and engineering facility scheduled to open next January and a new \$75 million building for the Milken Institute School of Public Health, funded through gifts, reserves, and current liquidity;
- Somewhat high nominal debt and debt burden, with large bullet maturities in outlying years due to the university's practice of issuing taxable debt mostly with 10-year bullet maturities, and at its debt capacity for the present rating; An investment portfolio with a heavy allocation to real estate
- Some uncertainty about future capital costs associated with the renovation over a number of years of the Corcoran Art Gallery building that GWU is acquiring, pending court approval, along with the art school program that currently has approximately 300 students, while the National Gallery of Art is acquiring the gallery's art collection.

14

How Credit Ratings Agencies See Us: Moody's

STRENGTHS

*The large urban comprehensive university continues to have solid student demand, enrolling 21,132 full-time equivalent students in fall 2013. Net tuition revenue per student increased 3.7% in fiscal 2013 to \$27,056.

*Large financial resource pool totaling \$1.74 billion at the end of FY 2013 provides a healthy cushion to debt and operations. Expendable financial resources of \$1.5 billion covered pro forma direct debt by 0.98 times and annual operating expenses by 1.38 times.

*The university maintains healthy monthly liquidity with \$634 million at June 30, 2014 equating to 224 days' cash on hand.

*The university has improved prospects for donor support. Total gift revenue was \$55.6 million in FY 2013.

CHALLENGES

*The university has uncommonly high operating leverage with pro forma debt of \$1.55 billion, approximately 1.41 times FY 2013 operating revenue.

*George Washington University is likely to continue to generate thin debt service coverage with FY 2013 operating cash flow of 11.3% covering debt service by 1.9 times.

*Potential pressure on ability to grow net tuition revenue could challenge the university's operating performance, since student charges comprised 62% of operating revenue in FY 2013.

*The university's debt structure includes over \$1 billion of bullet maturities in general obligation and non-recourse debt including over \$400 million in bullet maturities through the end of fiscal 2018. The university's debt strategy relies on ongoing market access to refinance bullet maturities.

*The university's financial resources include relatively concentrated commercial real estate holdings near the urban campus, with the holdings comprising a significant 37% of total investments at the end of fiscal 2013.

15

Financing Science and Engineering Hall: A Brief Summary

- Report from Executive Vice President Katz (Dec. 9, 2011)
 - Initial financing of SEH to come from internal and external borrowing
 - Sq. 54 revenues cover 50-60% of estimated \$275 million construction costs
 - Remainder to come from:
 - Philanthropy (\$100 million),
 - Increased sponsored research recoveries (\$55 million)
- Financing as of Dec. 31, 2014
 - Cost saving from lower interest rate
 - 4.13% vs 5%
 - Capitalized value of interest rate savings: = \$29 million
 - Philanthropy:
 - = \$7 million
 - Increased financing from Square 54
 - Capitalized value of approximately: \$190 million
- The bottom line
 - Cost of financing SEH: \$275 million - \$29 million - \$7 million = \$239 million
 - Revenue from Square 54: = \$230 to \$240 million

16

Current Budget/Finance Issues

- **Budget and Financial Planning**
 - New budget model
 - 5-year budgeting
- **Increasing revenue/financial support**
 - Capital campaign
 - On-line and off-campus programs
 - Sponsored research
- **Restraining spending**
 - Campus-wide belt-tightening
 - Innovation Task Force
- **Budgetary impact of integrating the Corcoran**
- **Fringe benefits**

REPORT OF THE EXECUTIVE COMMITTEE

Charles A. Garris, Chair

January 9, 2015

ACTIONS OF THE EXECUTIVE COMMITTEE

- Faculty Governance

The Executive Committee met with Dr. Madeleine Jacobs and Mr. Ryan Evans on December 19 to discuss the preliminary recommendations of the Faculty Governance Working Groups. We had a very fruitful discussion and were favorably impressed with the dedication and hard work of the working groups, which were well represented by faculty. Since the suggestions presented by Dr. Jacobs were in a rough draft and will be subject to considerable revision, both from within the working groups and upon receiving detailed input from Faculty Senate committees, it was agreed to postpone disseminating the recommendations at this time. It is expected that there will be a presentation and extensive discussion at the February Faculty Senate meeting. I am pleased to say, however, that the Executive Committee found the preliminary recommendations to be reasonable and, in some areas, major improvements in shared governance. Faculty Senate committees will be working hard over the Spring semester in collaboration with Dr. Jacobs and the Board of Trustees to arrive at a set of resolutions for the Faculty Senate and the Board of Trustees to vote on. While we hope to conclude this process by the end of the semester, it may be that some areas are ripe for decision at the May Board meeting, but others may require continued effort to get it right. Dr. Jacobs has repeatedly stated that it is more important to get it right than do it fast and Chair Carbonell has also expressed this desire.

At present, the Board of Trustees Working Groups are revising and consolidating their preliminary recommendations and will present them in writing to the Executive Committee on or about January 13. The written recommendations will be studied by Faculty Senate Committees and our response with suggested changes will be provided to the Board of Trustees prior to their February 5 meeting, at which time they will consider the faculty recommendations and provide feedback. In February, after receiving further input from the Board, we will be working hard to come to agreement and, hopefully, we will have resolutions for the Faculty Senate to consider in March. In order to effectively deal with the recommendations, the Executive Committee has distributed the responsibilities to Faculty Senate committees as follows: PEAFF will consider recommendations on participation in faculty governance and recommendations on dean search and review. ASPP will consider recommendations on appointment and tenure processes, and

nonconcurrences. The EC will also consider recommendations on dealing with nonconcurrences, review processes for deans, and school by-laws. Senate committee meetings have already been called to start work on these topics. It must be emphasized that at present, all recommendations from the Board Working Groups are negotiable and are just working draft material. The Faculty Senate's responsibility is to clearly and effectively articulate how and why certain recommendations can be improved upon, how new concepts may be introduced, or why Working Group recommendations might be discarded in favor of existing policy. We have established an excellent working relationship with the Board and our concerns will be heard and given substantial weight. While some changes may be better received by the faculty than others, I am confident that shared governance will be strengthened by this process and overall, the faculty will be pleased. Be assured that many of your Senate and faculty colleagues are working very hard to achieve that end.

- Benefits Advisory Task Force

The Executive Committee discussed with President Knapp and Provost Lerman the expected role of the newly formed Benefits Advisory Task Force and how its role would differ from the existing Benefits Advisory Committee (BAC). Our understanding is that the BAC is a standing committee which will continue and whose mission is to provide ongoing feedback regarding GW's full range of benefits and programs to the Human Resources and Benefits Administration. The Benefits Advisory Task Force is an ad hoc committee reporting to the President which will study a larger view of long-term national trends in benefits at peer institutions within the context of university budgets and benefit costs. Gregg Brazinsky and Paula Lantz of the Executive Committee volunteered to participate in the Task Force as did Joseph Cordes, Chair of Fiscal Planning and Budgeting. In addition, the Executive Committee recommended several faculty to serve on the committee who also came forward and volunteered.

- **A RESOLUTION TO ADDRESS THE BURDEN PLACED ON CURRENT UNIVERSITY EMPLOYEES WITH REGARD TO PROPOSED CHANGES IN TUITION BENEFITS (14/4)**

The Executive Committee discussed this resolution with the administration. There is no progress to report.

- Faculty Handbook

PEAF has expressed concern on certain wording proposed by the administration in the Faculty Handbook. The Executive Committee is

working with administration and PEAFF to resolve this difficulty. PEAFF will meet next week to discuss the issue. Hopefully, we will have resolution shortly and be able to release the Faculty Handbook soon.

- Academic Calendar for 2015-2016

The Executive Committee discussed three options for the academic calendar for 2015-2016 which proved unusually challenging because of the late (September 7) occurrence of Labor Day. The concerns for various schools and constituencies were conveyed to the administration in order to assist them in their decision-making process. The administration did select an option that was favored by the majority of the Executive Committee.

- Video Taping at Faculty Senate Meetings

At the December 12 Faculty Senate meeting, concerns were expressed on whether or not videotaping should be permitted at Faculty Senate meetings. While there is a desire to be open in sharing our deliberations with the university community at-large, concerns were raised that videotaping can be inhibiting of discussion for various reasons. The Executive Committee is working on a resolution to suggest a policy with guidelines for when videotaping would be allowed and when it would not. The policy would consider the purpose of the videotape and how it might be used.

- Annual Letter to the Deans

The annual letter to the Deans requesting that they convene meeting(s) in their schools to replace or re-elect Senate representatives whose two-year terms will expire April 30, 2015 was sent in campus mail. As usual, information from the *Faculty Organization Plan* outlining the required process for these elections is included in that letter. It would be helpful if Senate members could monitor this process in their schools to see that it is underway well before the deadline of March 15 for reporting the results to the Senate Office.

- Templates for Promotion and Tenure Decisions

Shortly following its November Faculty Senate meeting, the Executive Committee provided Provost Lerman with proposed templates to be used by school-wide personnel committees and the deans of the schools in their preparation of materials concerning administrative nonconcurrency with faculty recommendations for promotion and/or tenure. The Provost indicated that he was in the process of reviewing these drafts and getting input from deans. It was planned that he would return edited versions to the Executive Committee with his input. The EC was informed that the response from the

deans has been favorable and they have found the templates to be helpful. The EC had hoped that the templates would be available this year for School-Wide Personnel Committees and deans who are contemplating nonconcurrences with departmental promotion and tenure recommendations. Unofficially, they have been released and are available for deans and school-wide personnel committees to use as guidance. However, there has not yet been any official adoption, either by the faculty or the administration, and, to date, we have not received edits from the Provost's Office. When the templates are returned from the Provost, the EC will distribute them to PEA and ASPP for further input and hopefully, official adoption by the university.

- Upcoming Faculty Senate Activities

February Faculty Senate Meeting: At the February meeting of the Faculty Senate, we are planning on a detailed presentation of the status of our work on faculty governance issues. We also will have a presentation from the Executive Director of Sustainability Kathleen Merrigan concerning Sustainability issues and initiatives. Sustainability, of course, is an important element of the GW Strategic Plan. In February, we also expect a resolution from the Libraries Committee entitled: "A RESOLUTION TO ADOPT AN 'OPEN ACCESS' POLICY FOR RESEARCH PUBLICATIONS AT THE GEORGE WASHINGTON UNIVERSITY."

March Faculty Senate Meeting: In March, we anticipate receiving the annual Core Indicators of Academic Excellence report by the Provost as well as further discussion on faculty governance including resolutions.

GRIEVANCES

A grievance from the Graduate School of Education and Human Development has been filed. The grievance is currently in the mediation stage.

GENERAL COMMENTS

We are very pleased that the Science and Engineering Hall is now open. Faculty have wasted little time in making their labs functional. Please check it out. The facility is quite impressive.

We wish you an excellent and productive semester.

Thank you.