



Minutes of the Meeting of the Academic Council
Thursday, November 30, 2017

Don Taylor (Chair, Academic Council / Sanford School of Public Policy): Thank you, everyone, for coming. I hope everyone had a peaceful Thanksgiving. My 22 year old, my 20 year old, and my 17 year old got along better during the 72 hours of Thanksgiving than they ever have so it was a redemption of a two-decade long set of events. (laughter) So it was good. Thanks for coming. This is our last meeting of the semester.

NON-APPROVAL OF THE NOVEMBER 16 MEETING MINUTES

Taylor: We're not going to approve the minutes from two weeks ago because we haven't had enough time to transcribe them with just the two week interval but we will do that in January.

VOTE ON PROPOSED MASTER'S DEGREE IN FINE ARTS IN THE DANCE PROGRAM

Taylor: So we'll move right along to our first item on the agenda. We're going to have a vote on the proposed Master's Degree in Fine Arts in Dance. Our colleagues Purnima Shah and Michael Klien are here to answer any questions if anyone has any questions. The supporting materials were posted again with our agenda. Any questions for Purnima and Michael before we vote?

(Proposal approved by voice vote without dissent)

Congratulations, it has passed. (applause)

EXECUTIVE SESSION FOR A VOTE ON PROPOSED HONORARY DEGREE CANDIDATE AND DKU UPDATE

Taylor: We will now move into executive session. We're going to do two items of business in executive session. We're going to consider an additional honorary degree candidate proposed for Commencement 2018 and then after that we will remain in executive session for a conversation about Duke Kunshan University.

All those who are not members of the Duke faculty, I need to ask you to leave our meeting – we hope we will be able to ask you to return in 25 minutes or so.

[Executive session for a vote on a proposed Honorary Degree candidate and an update on DKU]

MEETING RETURNED TO OPEN SESSION

BUDGET AND FINANCE PRESENTATION

Taylor: We are now going to have a conversation that's going to be led by Gráinne Fitzsimons, who is the Vice Chair of the Executive Committee of the

Academic Council. She's a faculty member in the Fuqua School and she represents the faculty on the Business and Finance Committee of the Board of Trustees. We posed a basic question for three key senior administrators. We asked them: what do you wish the faculty understood about Duke's finance model? Free shot to them. This conversation is drawn out of a lot of back and forth between faculty and committees and the goal of this conversation is to increase understanding. The three folks who are going to come are Jim Roberts, Executive Vice Provost for Finance & Administration (in the Provost's Office), Tim Walsh, Vice President for Finance (in the Executive Vice President's office), and Scott Gibson, Executive Vice Dean for the School of Medicine. Thank you all for coming and thank you, Gráinne, for leading the conversation. The goal here is for this to be a conversation.

Gráinne Fitzsimons (Fuqua School of Business / Vice Chair, ECAC): Thanks to our three guests for joining us and sharing their wisdom with us. We're just going to have each of them share their three items. I assume that if the audience has clarification questions, they're welcome. Otherwise we'll wait until all three of them have spoken because they may cover something we're going to get to, and then we'll open it up for any questions that you might have.

Tim Walsh (Vice President, Finance): I get to bat lead-off in this conversation. I'm going to share my three things, but before I do, we thought it would be important to share one important piece of context. That is, that Duke actually has quite a bit of money. That's just a reality. Anyone who would look at it objectively would know Duke has a lot of money. That said,

we have our issues that we have to grapple with, and I think that's really the nature of the things we want you to understand from our comments today.

In terms of our financial strength, we have a very good balance sheet. We have a great endowment, over \$8 billion, as you may have read in the most recent press release we had. We actually have a very large and stable source of revenue year to year. All those things sound very good. The first point that I want you to understand out of my three items is that despite all those great things about our financial prowess at the moment, we actually have very little – almost no – what I would call "excess resources." The resources that we have are almost all restricted as to use, either by external restrictions, like if donors gave us money and we are to use them for selected activities, but we don't have a lot of flexibility in what to do with that money. Or, the resources are restricted by organizational realities inside of Duke. Meaning that certain faculty members control those resources, certain departments control those resources, or certain schools control those resources, but very little of our resources is actually university-wide, flexible, excess resources. I know Jim will expound upon the fact that all those decentralized leaders who have resources will be quick to tell you that they don't have access to resources either. I mentioned this phenomenon, I described it to Don in our conversation, and his observation was it was like a "water, water, everywhere, but not a drop to drink" phenomenon. Because our balance sheet, again, is extremely strong. It reflects \$13.6 billion in net assets in the moment, and that's fantastic. We'd be the financial envy of almost any school you can think of,

outside of maybe five or six. But, we have very little excess resourcing, which is why you don't see us always doing dynamic things that you think we should be doing with all that money. So the first reality is that we don't have a lot of excess funding. We can spell that out in all the detail you want, but it would take a while. But that's the first high level reality.

The second fact – I mentioned those decentralized leaders. We have a decentralized management philosophy here in terms of our financial resources. Almost 98% of our revenue year to year flows out to the periphery of Duke. Anybody that looks at us and says, why doesn't the Allen Building intervene on this particular issue? Why don't they invest in this and make it better? The reality is the Allen Building has got almost no money from year to year to invest in new things, absent philanthropy. I'll come back to philanthropy. But of our stable revenue streams, very little of it is controlled centrally. The deans get their money, the department chairs get their money, faculty in some cases get their money for grants and such things, but that is earmarked for specific uses which doesn't provide a lot of flexibility, particularly for the Allen Building to intervene where you think they should to push our strategic priorities ahead. That's reality number two. The money is on the periphery of this place. Both the balance sheet money, sort of owned by those decentralized leaders, and the revenue year to year, almost all belongs on the periphery of this place.

The third reality is, we have thousands and thousands of businesses across Duke. All the research programs that you all oversee and get resources for in the labs, the educational programs that we have,

training programs that we have, virtually all those things lose money, believe it or not. There are really only three activities that the university has out of the thousands that we execute that make any real money. The first is our investment program. Everyone has heard of DUMAC [Duke Management Company]. DUMAC produces a great deal of wealth and financial strength for Duke. Last year alone they produced almost \$900 million of investment return for us through their investments. That's all fabulous. That's, again, owned by the units on the periphery of this organization. That is a source of our financial strength. The investment program is absolutely critical to our success. The second is University Development, our fundraising wing. That is really the source of the new initiative funding that we have seen. The campaign was fabulous in that respect. But we're always in search of new money to support the initiatives that we want to launch. Because again, all of our existing resources are pretty much accounted for. The third part of our model that makes money is DUHS. We won't speak on that too much today because we're focusing on university resourcing, but the clinical enterprise of Duke has put away over \$2 billion over the last 15 years. That's then been plowed back into facilities. Everyone loves the new Cancer Institute. Everyone loves the new Medical Pavilion. Those are great for our patients. That's where those resources go, typically. The other major beneficiary of those is the School of Medicine. The Health System throws lots of money over the transom into the School of Medicine and the university more broadly. So if DUHS was not as fabulous as it has been in terms of financial productivity, the rest of our ecosystem would suffer tremendously. Those three Ds are the real drivers of our

engine: DUMAC, Development, and DUHS. Everyone else should be thinking of themselves as a beneficiary of those three programs. That's really the way this place works. Again, my three takeaways were, one, we have no real free excess resources, two, virtually all the money at Duke sits at the periphery of the place, not centrally, and three, there are very few engines that drive this place and we should all be grateful for them.

Jim Roberts (Vice Provost, Finance and Administration): I guess I'm part of the periphery. (laughter) I've been in this kind of role for almost 30 years and I thought there would be a time when all of our schools would be sailing along smoothly, financially, but the reality is, budgets are always tight in the schools and we've deliberately created a management structure where the deans are empowered to be both academic leaders and financial leaders. We have wanted them to invest strategically in the academic outcomes, which are the most important of the institution, while at the same time maintaining a good financial balance. Sometimes you get a little bit out of kilter. Some adjustment is required, either to develop some new revenue initiatives or to slowly dial back on expenses. So there's always a little bit of tension in the system. It's kind of a healthy tension because our deans are pushing the envelope in the ways that they can invest. So it turns out, I've never been able to rest easy. We're always wrestling with one set of problems or another. It's not always the same schools. It's not always the same schools in the same period. But it's always something that we are working on in the Provost's office, to advance the cause, but there's not always enough money to do what we want to do. That requires the deans

making tradeoffs within their schools. Despite these tensions, the track record is actually good. There may be concerns about how we'll be balancing our budget this year, how we're going to do it, but when we close the books in the actuals, since 2010, in our schools, not counting Scott's areas, our schools have been able to put about \$65 million into their reserves. That doesn't count agreements they may have with departments or individual faculty to incent them to get grants, et cetera. Despite the worries, we always make it through. The problem is, sometimes the worry is that the way we did it this time might not work the next time. We're always looking for that fine line of true sustainability. That's my first point. We're never quite out of this need to manage the financial tensions in the system.

The second point is that one of the tensions in the system is that the Provost and Executive Vice President have the responsibility to take care of the whole university. Our management system is structured to really put the focus on the deans and to empower the deans to be strong entrepreneurial leaders. That means that each school essentially keeps the revenue that it generates and pays the associated expenses. If they have a surplus at the end of the year, they get to keep it. The price of admission into the system is that they have to pay their fair share of university academic and administrative support costs. All of Tallman's areas have to be paid for by other parts of the university because for the most part, they don't generate revenue. Part of Sally's domain includes not only the non-medical schools, but also the library, student affairs, et cetera. So each year they have to make judgements over time about how much of the cost of

those activities they're going to ask the schools to pay. And of course what the schools have to pay for for those things, they can't use for the activities that are under them. So we watch this burden, if you want to call it that, very carefully, for those shared activities, it's about 20% of the schools' operating expenses over time. So we keep an eye on that to try to keep it at a consistent with the growth of the institution as a whole. But it's always something that the dean will say, you're killing us with your allocated costs, and we have to say, well Tallman and Sally have to take care of things besides what's happening in the schools.

The third point is a long term challenge for us that's kind of unique in terms of budget pressures, which is our institutional commitment to need-blind admissions and meeting full needs for undergraduates. So this is a very distinctive and proud tradition at Duke. There are relatively few institutions that have made this commitment. It's an investment in the academic quality of our programs overall because it helps bring the most talented students. The way it works is, there's no fixed budget for it. So the director of financial aid has the responsibility for implementing a set of policies and packaging parameters that Sally has approved. But then she applies those to all incoming students. Then we have to see what the implementation of the policies will actually cost us. That leaves us open to surges in expense. We had a big surge in expense in the economic downturn. So we tried to protect the undergraduate schools from the full impact of this responsibility, so we backstopped the program. In the height of the recession, we were backstopping the financial aid program to the tune of about \$60 million that would

otherwise be central reserves. We have worked our way out of that. We fell very low in the percentage of our schools on aid. It is now back up so we're starting to again need this kind of back up. So it's the single most challenging thing to manage because of the fact that the cost follows the principles and the application of them. So those are my three things to remind you from my 30 years here at Duke.

Scott Gibson (Executive Vice Dean, School of Medicine): I've been here for 18 years, long enough to see the Medical School grow quite a bit. Three interesting facts that you may not know about our financials are: The school has about \$1.3 billion in revenue. And remember, we're talking about the School of Medicine, not the Health System. It's not the private diagnostic professional practice organization. That's the for-profit physician practice organization. Those are separate entities. Just the School of Medicine is \$1.3 billion. About 70% sponsored research. And of that, about 64-65% is federal, the rest is industry and foundation. We have, I think, the largest portfolio industry and foundation research in the country among academic medical schools. The interesting fact is, the industry research, which is predominantly clinical research, very important to our faculty, certainly to Duke Health, because it's reputation, it brings patients in, helps our faculty change patient care. It doesn't count in the US News ranking. So only NIH research counts in how we're evaluated by US News. We're tied for number seven. If they ever change that criteria to include industry research, we'll shoot up.

The second thing is: of the 15-20 research-intensive schools, so I'm talking about the really high-powered research

institutions, of that elite group, the School of Medicine is above the 80th percentile in terms of reliance on sponsored funding. So, if you think about the other sources of funding that support research, clinical dollars that come from, as Tim said, the Health System, philanthropy, debt transfer, et cetera, our peer institutions have far more of it relative to their sponsor portfolio than we do. I look at this in a positive way. Our faculty are very entrepreneurial and very efficient at getting sponsored research per dollar of internal funds. Now, the downside of that, of course, is it creates more volatility for us when the NIH stays flat for a long period of time, which they have. It's impactful in our financial structure because so much of our revenue is driven to the individual program and faculty level. Only about 20-25% of the total budget is managed by the dean. The rest of it is sponsored research. Something between 80 and 85% of our philanthropy is grateful patient related. It also goes to faculty and programs. So it creates some dynamic tensions in our financial structure that are not dissimilar to campus experiences. Despite that, over the last two years, our NIH growth has been one of the largest in the country. It's been 16% over the last two years combined. In fact, we had the largest growth rate in FY 2016. A combination of existing faculty getting a lot funded, in particular some very large grants that were awarded in DCRI, Duke Clinical Research Institute. Which, by the way, is the largest academic clinical research organization in the world. It provides a tremendous amount of that industry-related money to us. And it's new faculty that we've recruited over the last few years that take a few years to get started in research. We're extremely proud of our

growth rate because that's market share change, versus our peer institutions.

The final thing is, I have to caveat this as I always do when I go over this with faculty groups that I talk about our financials with. I'm going to talk just one second about the cost of the research mission, but it's not a value statement. We know the research mission costs money. Our job is to find the resources to grow the research mission. We just accept the fact that every institution has to put institutional support dollars into that mission. In fact, the Association of American Medical Colleges estimated this summer at a conference, that on average across the country, it's about 50 cents for each dollar of NIH funding that you get. We do our own calculation. Duke thinks it's more like 30-35% for us, in part because you're mixing in a lot of big schools and small schools where you don't get the big economies to scale. But it's a substantial amount of funding for each dollar of NIH funding. Why is that important? It means that the growth of the research mission must be carefully balanced with the growth of the dollars that support it. The clinical mission and philanthropy. Over time, you've got to be making bets in the research mission, especially when you're dealing with buildings that take us three years from concept to build, you're making bets along fixed infrastructure investments that have to be balanced with those other factors that draw in the money. There's often confusion among the faculty, in the finance class that I do two or three times a year, and in Washington, around what that cost recovery is and what it means to schools and whether or not universities can recover their costs in research missions. I've always thought about it, if you think about a line graph where the x

axis is the growth of research dollars, the y axis is growth of institutional support, it looks like a staircase, step-wise. Because if you go horizontally around the x axis, it means you're adding grants without adding buildings and new IT systems and core labs and things like that. It's true that when a faculty says to me, I'm bringing in a new project, I'm not adding any infrastructure. I can grow the program. She would be absolutely right about that, along that x axis. Eventually, though, of course, you're going to hit a step where you have to add facilities and new faculty and administration and IT and so forth. That's where you hit this step. Over time, it looks like this. So when Congress is making the argument as they did this past spring that F&A is unnecessary to the university so we need to cut it, I was sweating bullets about this. Because we are heavily dependent on this flow of funds from the federal government. They're thinking along that x axis. People in my position think about it over time as the average, which is a straight line over the average. That's where you get that 30-50% support mechanism. F&A does not cover all of the costs of research. Anyway, the balance of our resources in the research mission is why the dean, myself, and others in leadership positions are motivated and very interested in the continued growth of the health system and the private diagnostic clinics. As they grow, we can grow. The truth is, we cannot separate our health from theirs. If they shrink in the future, their margins shrink in the future, the Medical School sizing is related to that.

Fitzsimons: Great, thank you. I'll open it up for questions to any of our three speakers.

Philip Rosoff (School of Medicine): I'm not quite sure if this is the right forum, but my understanding is that returned versions of the tax bills in the Senate and the House, at least one of them has a clause there that potentially could decimate graduate student assistantships in the future. How might this affect, as if I didn't know, how would this affect the finances?

Roberts: I don't have a quantitative answer, but it's obviously very high on the agenda of our Washington lobby folks. Mike Schoenfeld and Chris Simmons, our Washington representative, are working with our Congress people. We, in fact, just gave them some information about the total investment in graduate and professional financial aid, which is partly at stake here. I think we're kind of waiting to see what that turn of the dial is, but it's not looking good. I'm not exactly sure what advanced planning the Graduate School itself is doing, but you're obviously identifying a major issue for us.

Gibson: It's not the only bad thing in that tax bill. (laughter)

Peter Feaver (Political Science): Could you just expand – there's a lot of stuff in that tax bill. Can you talk about where we are with that? I was going to ask that in the "new business" section at the end of the meeting, but maybe now is the time.

Mike Schoenfeld (Vice President, Public Affairs and Government Relations): Happy to make predictions, which are worth pretty much what any other prediction is worth with the tax bill. Right now there are two bills, as you probably know. There's a House bill and a Senate bill. The Senate bill is more favorable to higher education and to the

issues we care about. But those things that are at stake include a potential tax on endowment income for institutions that meet a certain threshold for endowments. They include the potential taxation of graduate tuition waivers. The Senate bill is far more favorable to us than the House bill. They include a potential change or actually elimination of the tax benefit that occurs when individuals give gifts to a university that are recognized by the ability to purchase athletic tickets. There are a number of other things in there of a smaller nature or a different nature but those are probably the three biggest that would have an impact on Duke. Again, what happens? We'll know literally 24 hours from now, we'll have a much better sense of which of those will still be around. But as with any tax legislation, it's not over till it's over.

Kathy Andolsek (School of Medicine):
I'm curious about the cost of education. We can sort of think about education as the experience of our learners, and I know there's research tied into that and maybe it's tough to uncouple those, but if we looked at delivering a product of education, is there a way to sort of say whether we make money, lose money, or are neutral? Do you ever do deep dives within the schools or institutions? One concern I had is the rising cost of tuition, and if there were ways of finding that money and bringing it in more centrally than peripherally? Maybe looking at ways of decreasing the tuition for everyone?

Gibson: The cost of the education mission in the Schools of Medicine are something that my counterparts have talked about for many years and have done some studies about fully loaded – of course you have to careful about what you're considering fully loaded – you're talking

about chair packages as part of that – but there are certain programs where you can make a margin. If you look at the undergraduate medical education program in total, the calculations we run show that it costs about \$30,000-35,000 per student per year after tuition, that the institution then has to pay. Nationally, that figure is known to be \$80,000-100,000. We think ours is lower because the third year is less didactic, working there in the field. The tuition doesn't come anywhere close to covering the cost of a whole medical education program. Nationally that's true as well.

Andolsek: Is that sustainable?

Gibson: Is it sustainable? Well, it probably needs to come down a lot, because our entire economy is strained. So it's causing people to think about the way the curriculum is delivered. Some programs are looking at shortening it. So I think it will cause change.

Roberts: I would add, I guess, that in the undergraduate realm, Mike and I have collaborated over the years on a number of projects to look at this. Of course, a lot of assumptions go into it. A simple way to think about it is, about a \$90,000 per student investment, \$60,000 cost, and about a \$30,000 average cost after you take financial aid into account. So, as Tim was saying, none of the activities that we're involved in in the core are really self-sustaining, in average. Obviously some programs are less expensive than others. The idea that undergraduate education, and probably a lot of our programs, need a subsidy source, and that subsidy source may be the endowment or the annual giving or whatever, but we're investing a lot more in the education of each student than we're asking families to

pay. That's a key part of the value proposition. That even though we're a very high priced institution, we're making our education accessible and we're sort of adding to the investment that the students pay in their tuition with what the institution has accumulated historically. Whether everybody likes that bargain, it's really a market choice. But lots of people do.

Justin Wright (Biology): Going back to the cost of undergraduate education, obviously there's the cost of the faculty who are teaching the classes and then there's also the facilities and we've seen this tremendous growth in what I would call prestige facilities like the West Union, which, thank god for, I love eating there, and the Student Health Center, which is gorgeous and is serving a real need. I'm wondering, is there a reason we're making those so big and beautiful? Is there thought that there's going to be a return on investment or is that just part of the Duke experience that we're trying to create? Do we need those to compete, or what is driving that?

Roberts: I don't know if Dr. Trask would care to comment... (laughter) There are real functional needs but we're all proud of the beauty and the aesthetic of our campus and that's kind of the new aesthetic that Tallman has helped develop.

Tallman Trask III (Executive Vice President): In the case of the Brodhead Center, which is quite spectacular, the intention there was, unlike most of our peers who feed people in small groups in remote buildings, ours is all one central activity. I remind people, as nice as that building is, we spent less than half of what Yale has spent redoing its dining rooms in

the last five years. It's all relative. I think especially in the core of the campus where we want buildings to look good. We went through a period of building buildings that didn't look good and we regret that. (laughter) So it's a balance, but our buildings actually cost less than most other people's buildings. There's a lot of attention to detail.

Vince Price (President): If I could just add to that. I would think if we did a careful analysis of the principle drivers that are escalating costs, it would not be facilities but it's the basics. Investments in technology, and there are returns on those investments, but those are large, large investments. And then investments in human beings, principally faculty, but faculty, staff, delivering academic programs, and escalations in costs of human personnel for running the university, the research infrastructure and the administrative and instructional costs principally with technology, I think they would significantly dwarf the escalations in things like new dormitories or dining facilities. A favorite of critics of higher education are climbing walls. Climbing walls are not driving costs (laughter). I don't say this to excuse occasional investments that might look on the margins of being nonessential. But we can't lose sight of the big drivers. And the big drivers are literally not, at the end of the day, these things. In a competitive framework, there is an escalation in expectations of what students coming to a place like Duke demand of us. If you look at escalations in the cost of counseling and psychological services, there are absolutely escalations; student disabilities, for instance. And those are not just undergraduates, over half of that is driven by graduate students. So I think we just have to view this in some context.

Because the rhetoric that has put us in that terrible place, vis-a-vis this tax legislation, has been very damaging. Some of that is, these are difficult things to communicate. But there is a real difference in the program that we're delivering, which I think has improved over time. And one could ask, should we scale it back to a lower quality product? We could do that. But institutions have generally decided, no, we want to maintain the quality or if we can't extend the quality of the product and the cost of that is much greater, the quality of that extension is in services, education, personnel and technology, not basically enhancements to buildings.

Craig Henriquez (Biomedical Engineering): Tim mentioned that we're sort of always sitting on the margin of having a lot of money but we don't have a lot of money. I'm curious about the financial challenges moving forward, let's say in the next ten years. Because I heard we're in the process of having to do some things like fix the dormitories, not because they need to look nicer, but because there are some functional problems going on. Can you speak a little bit to the financial challenges and what it means in terms of our ability to meet those challenges, when we really are sort of living at this margin line?

Walsh: We try to be clear with what our needs are and we certainly have significant facility needs, both of housing and in the academic realm, that are quite pronounced, almost beyond the desperation phase in some cases. Jim mentioned the financial aid program, that's pretty much always a source of uncertainty for us. We want to funnel resources into the research enterprise because it's so important to our

reputation and we need to have a campus environment, not just the buildings but the rest of it, that is attractive to the best students in the world. All of those things are important to us. The challenge is, when you put them all next to each other, it's very difficult to make tradeoff determinations, because they're all so very different and all valid. So how would we win in that space? How do we get the resources to do that, given that we don't have a lot of excess resourcing right now? One, you could cross your fingers and hope that DUMAC delivers. DUMAC's leadership has been very cautious about our inclination to make big bets based on future returns because they feel there's a bit of inflation reflected in the market value. So we try to be conservative with the bets against future returns. Second is philanthropy. And that's where we have capitalized recently. Obviously we've been performing well beyond our historical norms in the fundraising space. We just crushed our own record year after year as part of the Duke Forward campaign. President Price has focused on at least maintaining that level and hopefully even building additionally on that in the future. If we can continue to bring in philanthropy and you direct it towards the right investments, we can win in that game. For example, with the dorms, we've have absolutely no historical success raising money for dorms. So we've been very limited in what we've been able to do. If we can change that historical reality in the future, that would free up other resources that would otherwise have to be dedicated to the absolutely embarrassing situation of some of our dorms. So it's all about the tradeoffs across those very difficult set of challenges and it's our ability to unlock flexible resources, unrestricted resources, by bringing in philanthropy to support

the needs that we have. If DUMAC performs, that can solve a lot of problems. But we can't put all of our eggs in that basket.

Pat Wolf (Biomedical Engineering):

Two comments about the way you divided up the university and who makes money and who doesn't. You divided that, or the administration divided that. You could have given a portion of the endowment to each of the schools and then the schools would then look very positive. It's only because all that \$8 billion was put into one department that that department is the one that makes money. It's just the way you divide it. I don't see the usefulness in that, in even saying that. And the same thing with the Health System. They have patients and billing and all that, so...

Walsh: It's a valid observation and I didn't mean to present it that way. I described two functions. The investment function is a function; I wasn't trying to give a unit the credit. It's basically the reality of our model, that the investment program drives it. You're right, the ownership of that investment model is very broad. Everybody owns that model. We just happen to have a small group that manages it for us. It's not a reflection just on them. It was on the function. Development, too, is not a single team. That's a university-wide function. We have Development officers within all the schools that contribute to that. It's not just Bob Shepard and his gang. Again, that wasn't an organizational comment, more of a functional comment as part of our model. The Health System is different. The Health System is a part of our organization. The Health System is driving its own success in that clinical enterprise, so that's a little bit different.

But you're absolutely right, I did not mean to highlight that we have ten heroes in this place. There are a lot of heroes along those three areas.

Roberts: But also, just to draw out one implication, most of the endowment is "owned" by the schools. So they are receiving the income from those endowments already. So Tim was aggregating it for one purpose, but it actually is very distributed. It's part of the peripheral comment, actually. The economic part is widely dispersed.

Jane Richardson (Biochemistry): I guess one thing that I would like to be enlightened on, because I'm sure you folks have some information about this, but having been here for 50 years, I've seen more of what used to be considered F&A accounting and secretarial kinds of tasks pushed out to the departments and even to PIs who are actually very expensive and not motivated and not very capable clerical help, and it seems that whenever a problem comes up, the response is to hire yet another high-priced administrator and form a committee, rather than put the money into the people who are actually doing the thing that's an issue. As I said, this is an impression that we get from where we sit. I'd like to hear your defense of the system.

Gibson: Since you're in the School of Medicine, I guess I'll start. I can tell you that it's a national complaint. It's a tremendous percentage of faculty time, nationally, that goes to administrative burden. I can't remember what the NIH said it was but it was like 20 or 30%, maybe even more. So I do understand that perception. Part of it is not justifying it because we would rather have systems, ideally we would rather have workflow

systems that took the burden away from the staff that are involved in research, certainly faculty, and we're trying to do that. Part of our challenge has been, there's such decentralization of money and resources, that departments approach these things. There are varied IT structures inside departments, different staff approaches, so part of it is just getting consistency of the staffing approach in the units. But I agree with you. We must do better. It is something that we talk about all the time. In a meeting that Jim, Tim and I are in called RACI, Research Administration Continuous Improvement, we talk about getting the administrative burden away from the faculty every week. That's our goal.

Walsh: The key is to have the right resources locally. That's the issue. And who is going to pay for those resources, because we don't want to see the bloat in the administration either. That's what you're talking about. Someone's got to do that work. We need well-positioned, well-trained professionals in the field, close enough to the faculty to effectively support them so that the faculty don't have to do this. We recognize this. Believe me, my wife is a faculty member in Medicine and I hear it all day, every day.

Richardson: There used to be more support or secretaries at the departmental level than there is now. This has changed notably.

Fitzsimons: We're out of time. Thank you all and thanks to our speakers. (applause)