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## Minutes of the Regular Meeting of the Academic Council

Thursday January 21, 2010

Craig Henriquez (BME, Chair of the Council):  
Welcome everyone, and happy 2010. I hope all of you enjoyed a bit of a break with the holidays and have had a good start to the new semester. Before we get to the approval of the minutes I have a few announcements.

As you know, if you saw the email from Sandra a few weeks back, this is actually the second official Academic Council meeting of the New Year. We held a special meeting on January 6th with one agenda item. I think it was actually the shortest Academic Council meeting in history — it was to approve earned degrees dated for Dec 30th graduates — some of you actually attended which was nice to see! Besides being the shortest meeting in history, it actually was historic because the first set of Sanford School graduates received their degrees.

With today's agenda, we have included the minutes from that meeting with the list of the approved degrees. From what I understand, it has gone to the next step which is the Executive Committee of the Board of Trustees at their meeting this past weekend. It is our hope that the graduates, particularly the nurses who need a certified transcript to apply for a job, will get the ball rolling and start their job searches. We plan to use this approach again at the end of the summer for the summer graduates so we will have another special meeting sometime at the end of August.

### *Annual Faculty Meeting*

I also want to remind you that the annual [University Faculty Meeting will take place on Wednesday, Feb 10, 4:00 – 6:00 PM at the Nasher Museum](#). Council members, and all regular rank faculty, should have received an email invitation yesterday — with an electronic RSVP — trying to get a head count. (I tried it and it seems to work.) We are hoping for a good turn-out — and certainly hope most of you, as members of the Council, will join ECAC and myself and your colleagues, at this event. As we discussed before, we are doing an experiment this year. This meeting is now separate from the traditional Academic Council meeting. We are having it at a separate time, a nice locale — the Nasher — so we are hop-

ing that will draw more faculty in, not just council members, but faculty throughout the University, to come and attend. And actually, just before the meeting Sandra got a phone call and of the 140 who responded, 70 have agreed to come. So at this rate, we may have to kick ourselves out of the Nasher, I think the Chapel or Cameron are the only two places that will hold the rest of the faculty! So if you haven't RSVPed please do so because space is running low.

As you will see, this is actually the President's meeting. There will be a brief, I like to place emphasis on the word *brief*, presentation from me on Academic Council happenings over the past year. There will be a moment of remembrance for faculty that have passed, there will be some brief acknowledgement of faculty accomplishments, and the President will give a State of the University address followed by a reception in the Nasher. So again, we hope you can attend this on February 10th.

### *Council Election*

I also want to remind you that our annual election process for the Academic Council will begin soon. Like last year, you and your colleagues across the university are going to get an email from me directing you to nominate colleagues in your respective divisions and schools, and then, subsequent to that a few weeks later, we will actually have the election. So the first phase is nomination and then the election. We again will use an electronic voting process which actually was fairly successful, particularly in the smaller schools. Where it wasn't successful was in the Clinical Science Division of the Medical School where there are 1600-plus potential nominees. I don't know of any other election process in which there are 1600 candidates, but in this case sorting through the names and locating who you want to vote for was a somewhat tedious and arduous process. We have made some improvements; we've requested some improvements from the folks who built the software. We hope this will help, but as those who are in the Medical Center will probably appreciate, sometimes when you make a fix, there are unanticipated consequences. So we

hope that we have captured most of them and that this process will go smoothly.

### *Academic Council Handbook*

Finally, I want to say a few things about the new Academic Council handbook, which we sent to you this past week. When I started this position in July, I started a process of trying to understand how things operated in the Council, and how it conducts its business. I learned very quickly that very little is written down. We are a Council that has formalized little in our bylaws — yet we nevertheless conduct business in a relatively smooth way, but it is still a process that has been handed down from Council to Council. Because I did not know all of these practices, I started a process of collecting this information from all sources that I could find, including little scraps of paper in the file cabinets in the Academic Council Office trying to collect them, primarily for myself, to have it all in one place. With considerable help from Sandra and ECAC, we formed this Academic Council handbook and we thought it would be valuable to the entire Duke community, particularly those on Council where you will have one place to go look for everything regarding the Academic Council. I would like to say that this document is unique among faculty senates in the United States, but that would be lying (laughter). Many universities have documents like this so we are late to the game. But I also learned that many University Councils have formalized many more rules in their bylaws and if this is something we would like to do, we would probably need to discuss this further — but at least it's now all in one place.

I think it captures the key information, I think it will be useful, as I said, to understand faculty governance at Duke. In it, along with the official list of University committees with their charges (which was actually much harder to get), there is a first-ever public list of duties of the officers and council members. We have included a glossary of typically used acronyms and terms used in Academic Council. For lack of a better name we have called it a [Provostopedia](#). So now when the Provost talks about how our virtual equity generated SIP funding or how we rank with other COFHE institutions or the SHYMP cohort you will be, hopefully, slightly less confused (laughter). At some point, we will make an online version of this handbook. Please let me know if you have any suggestions as to what else might be included.

Our first item of business is to approve the minutes from the December 3 meeting. May I have a motion to approve? [The minutes were approved by voice vote without dissent.] Thank you.

### *Faculty Oversight of Athletics*

Our first two presentations today concern the faculty oversight of athletics. If you are looking for a little light reading after you finish the Academic Council Handbook, I recommend that you download the 431-page NCAA Rules and Bylaws Manual. In that manual, it states that:

It is the responsibility of each member institution to control its intercollegiate athletics program in compliance with the rules and regulations of the Association. The institution's president or chancellor is responsible for the administration of all aspects of the athletics program, including approval of the budget and audit of all expenditures.

So this is mandated within the rules of the NCAA, and part of the institutional control of athletics is through the Athletic Council, which is chaired by Professor [Michael Gillespie](#), from the Dept. of Political Science. The Athletic Council is a broad-based committee made up of faculty, students, alumni, trustees and deans. It has a number of responsibilities, including monitoring and compliance with NCAA rules, all 431 pages of them, providing general oversight of the budget, and even deciding whether to accept invitations to post-holiday or post-season tournament play. The Chair of the Athletic Council is expected to make two presentations to Academic Council, and this is the first of those two.

Until recently, my understanding of NCAA rules and athletic department budgets and fiscal constraints was pretty limited. Although I have been a fan of Duke Basketball longer than Coach K, I cannot say that I have really spent much time thinking about the financial impact of athletics on Duke. My sense, like many here, was that Athletics — particularly basketball — brings in a lot of money to Duke and has created a sense of community that connects students to alums, university employees and the city of Durham, and that for the most part it has been an overall positive for Duke — at least until last night perhaps (laughter) — at least over the 30+ years I have been watching. While there are a number of athletic programs out there at other Universities where the connection between the academic side has been embarrassingly weak, Duke has been consistently among the top Universities in graduation rates — and we learned that in November. And on the court, Duke has achieved a level of success in one of its two major revenue generating sports that is unparalleled for any top-10 University over the past two decades. The benefit we have gained from that is somewhat difficult to quantify, but it's real and significant. There is much to be proud of regarding Duke Athletics.

For your education and interest, I included in today's materials a white-paper I found discussing the tradeoffs of athletics and academics — another piece of reading for you. I have read a number of articles and books recently and I found this paper to give a very fair view of the tradeoffs and current issues facing athletics. I think if anything, faculty should be more informed about athletics, particularly because there are a lot of misperceptions.

For example, one of those misperceptions, as we learned in November from the VP of Athletics, Kevin White, was that athletics is a cash cow. That perception is not correct. Almost all Division 1A programs apparently lose money when you account for all the sports that they oversee. When you think about it, this is not surprising, as most of the 24 sports at Duke generate very

little if any revenue and they cost something to operate—in terms of scholarships, travel, coaches' salaries, etc.

Now Duke's subsidy for athletics is not trivial. It is currently \$14.6 M — down from a high of \$15M. The subsidy has two parts. The first is based on the value of full scholarships for 146 athletes (about 7.9M), which has been a long standing commitment (10 years); and the second which is about 6.75 M. That was recently added as part of the strategic plan for athletics and comes from SIP (Strategic Initiative Planning) funds, and that was discussed in UPC and with the trustees. As I noted, this now 14.6 M is down from its high of 15, because there was a reduction in the SIP component, as all SIP component funding was cut due to the financial situation.

As a point of reference the total Athletic-related student aid is about 13.4M dollars. So, if you want to scale that subsidy, that 14.6, is on the order of the total athletic related aid. As a point of reference, the total Athletic related student aid for UNC is about 6.9M—roughly half. So they run a program that is as big, if not bigger, but their financial aid for students is 6.9M — because their tuition is much lower. In fact, what's interesting is that UNC charges their athletes in-state tuition, rather than out-of-state tuition, so there is a hidden subsidy in there.

There was an article recently in *USA Today* looking at the change in the subsidy at a number of state schools across the country if you're interested.

To help to get a better sense of the budget and issues related to fund raising and planning for capital projects that were described in the strategic plan for Athletics, [Martha Putallaz](#) (The Faculty Athletics Representative), Michael Gillespie and I had an opportunity to meet with several folks in Athletics this past week. Actually, it was last Friday, when Coach Cutcliffe agreed to stay at Duke so everybody was in a good mood over there. I must say that Kevin White and his budget person Mitch Moser (who presented at Council) and Tim Walsh in Tallman Trask's office have been very, very responsive to my many questions over the past few weeks. I will probably talk a little about this if we have some time, about what I learned regarding the budget, in particular, after our first two presentations.

First we will have Michael Gillespie, Professor of Political Science and Chair of the Athletic Council, give us an update on the Athletics Council.

[Michael Gillespie](#) (Political Science): Thank you, Craig. I really don't have a great deal to say, I will be happy to answer questions. First of all, something about academic performance of athletes: we typically have a meeting of the Committee of the Athletic Council in the spring and I will report to you on that later this spring. One early alert about athletics and academics that we look at in the fall is the whole early alert system that we have for recognizing freshman who are having trouble with either D's or F's. Last year there were no Tier I athletes who were identified as problematic in that sense, and Lee Baker was very pleased about this. I warned him that that might not continue to be the case, because we had a very small recruiting class in football last year. This year, there were three Tier I athletes who did turn

up on early alert who did have a D or an F in their mid-term grades freshman year but that was out of 111 early alerts system-wide for freshman, so athletes still continue to perform at a much higher level than the regular student body in that respect.

Just to illuminate or add to a few things that Craig said about costs, it is important to remember that the costs of the Duke Athletic program are quite different than the subsidy provided by the University. Obviously we generate both in football and in basketball, considerable revenues; the University subsidy is about a quarter of the Athletic Department budget, and the costs of running a program like ours at other institutions that we like to compare ourselves to, for example Princeton, is about twice as much as it is at Duke. So, those revenues are real in terms of reducing the actual costs of running the athletic program.

In terms of fundraising, and I will repeat something that Craig and I learned, we are about 4% behind where we were last year at this time, hopefully with the improvements of the market, that will improve. Cutcliffe's deciding to stay certainly will help with fundraising. In terms of looking at the way in which the Athletic Department thinks about cost-cutting measures in dealing with the financial crisis, they have a pretty clear (I think Kevin talked about it when he was here) plan about what to do about potential levels of loss, and they have already gone through three of the first six steps. So it is not as if they intend to come at the end of the year with their hand out asking for more money. They have ways that they have built in to deal with this.

There has also been some confusion, I think, about two of the issues that came up with respect to future plans of the Athletic Department, and numbers that were bruited about in the newspaper. The first was \$300M to be spent on new facilities. What actually happened in that case was building on a strategic plan that the Academic Council and the Board of Trustees approved two years ago. The Athletic Department hired an architectural firm to go through and put numbers on the potential projects that they might complete over the next ten to fifteen years, depending on raising external funding. That's where the \$300 M comes from. There aren't any plans to spend any of that money until the money is actually raised. In contrast to many institutions, we have always insisted that the Athletic Department actually have the money in hand before it does the building. Many institutions float loans in the anticipation of future funding to pay off those loans to build facilities. Duke has not pursued that path.

There is also some question about the role of the Bostock group, which has gotten some play in the newspaper. This is a group of business men, mostly put together in order to help us learn what we can do in football and basketball to run a more business-like operation with greater revenues. So it simply aims at improving our revenue in football and basketball. The other thing that you received some information about and that we have talked about in the Academic Council, is the efforts that we have made to change what was called HPER (Health, Physical Education, Recreation) into Campus

Health Wellness, Physical Education and Rec. Sports. The department has been reorganized; it has been expanded so that there is more attention given to those areas that are not concerned with varsity athletics. They hired a firm to do a survey, which many of you may have taken part in, that determined what our future needs are in those areas, and I sent you the bullet points from, which I think came out with the information that came out before the meeting. There was a good response rate on the survey from employees, from faculty, from students.

The obvious answer is people would use facilities more if they could drive to them and park at them, and the likelihood of that happening anywhere on East or West Campus is pretty small. Consequently the Central Campus location seems to be the one that all of you, and everyone else, seems to prefer for the future development of recreational activities, physical education, and club sports. Consequently, that is obviously tied up with the plans for newer Central Campus and I think a lot will depend on how funding, raising money, for those things goes.

In terms of other potential building projects on the near horizon, probably the one that is of most interest to the Athletic Department, should be of most interest to the faculty and students, is what is sometimes called the Fieldhouse, or the indoor football practice facility. Football will have this three or four hours a day, it will be open for faculty, students, and general recreation the other 21 hours of the day. It would vastly expand our ability to have club sports, rec. sports, and things of that sort, just as having any new field will do.

Those are all of the main points I had. I am quite happy to answer questions about any of the other aspects of athletics, or anything else concerning athletics that you would like to talk about.

### *Questions*

Richard Hain (Mathematics): I have several questions and comments. I suppose that there has been some sort of disagreement about these figures that are on the Title IX Report. But the Title IX Report shows that last year, men's basketball lost \$2M, football lost \$6.7M, women's basketball lost \$2.8M and that totals \$11.5M. That's one, and the total budget was \$72M, and there is this claim that Princeton and so on spends a lot, but I just looked at their Title IX Report and they spend less than \$20M.

I know you can argue about what is in these reports, but there are reporting requirements that are designed to get some sort of consistency in the reporting and the growth in Duke's expenditure in athletics is huge — the growth is just staggering. And I've got all of the Title IX Reports back to 1991.

Michael Gillespie: Craig can probably speak to this more articulately than I can. My sense in looking at the Title IX reports is that they do not really adequately reflect for any institution the actual costs or revenues for those institutions. To give you an example with respect to the basketball case which you talk about, Title IX requires us to sequester funds that are raised from the Iron

Dukes, for example, and list them not as attributable to any particular sport, yet we know clearly that about \$10M of that money is basically something that people give to Duke in order to buy seats in Cameron Indoor Stadium. So, it's very difficult, and we've talked extensively to them on how we might get a more accurate picture on a sport-by-sport basis, but it's very difficult to know how to allocate those revenues, given the way that they are received and the requirements that we have from the Federal Government to report things in certain ways and not in other ways. But I think it is probably fair to say that we would be going astray if we trusted the Federal Government to tell us how every college and university in America was spending its money. I doubt that NSF could even tell us very clearly how most people who have research grants at Duke are spending their money. But in any case, Craig can answer that question as well.

Henriquez: I was planning to give a slightly more quantitative presentation after our second presentation so I am happy to answer that, specifically about the numbers.

Hain: The one sort of counter comment is that these forms have been designed to gain information, I mean, institutions do not want to be forthcoming and I think Duke fits that mold too. And there have been various loopholes that have been closed up, but it is the best data that we have.

Henriquez: I think the data are correct. It is going to take some time to interpret it, but I will do my best to try to interpret it as best as I understand it. This would be the basis of most of my questions over the past three weeks to Mitch Mozer and Tim Walsh, to try and get some sense of this report, which I have seen; and thanks to your website

<http://www.math.duke.edu/~hain/athletics/>  
I was able to go back to 1990 or 2000 and get the data all the way through and look at those data. So I will try to give an explanation, and then after that, if you have further questions, I will be happy answer them. I'll try to do the best I can to explain it.

### *Faculty Athletic Associates Program*

Next we are going to have a brief update on a program that was initiated a few years ago called the Faculty Athletic Associates Program, and this will be given by Professors Fritz Mayer of Public Policy and Suzanne Shanahan, Sociology and the Kenan Institute for Ethics and who is also a member of ECAC who serve as co-chairs.

As you may recall, the Faculty Athletic Associates program was initiated by Paul Haagen, former chair of this Council in 2006, I believe. The goal of this program was to connect faculty to coaches and to serve as another way of improving communication between the University's sports and academic programs. The roll-out of this program a few years ago was an experiment, and the first group of faculty associates left their terms at the end of the summer and a new group of associates was selected. There was some tuning to this program, which Suzanne and Fritz will tell us about and how it is now operating.

[Fritz Mayer](#) (Public Policy): Well thanks, Craig. You did a fine job of giving a bit of the background. Let me just say a few more words about the program and I will turn it over to Suzanne to talk a bit about what's happening now, as best we understand it. As Craig said, the history is that this was created by the Academic Council, driven by Paul Haagen's interest in the wake of the lacrosse incident. The spirit of this was to try and address the lack of communication, poor communication, misunderstandings on both sides, the gap between faculty and coaches, between academics and athletics, and the idea was that for each varsity team, there would be a faculty athletics associate, or in the case of a larger team, several athletics associates attached to the team with a pretty open-ended mandate in terms of what they would do, and how they would communicate and what was expected.

And so that ran for a couple of years and then Paula McClain (Chair, Academic Council following Haagen) persuaded Suzanne and me to take this over last year and we decided not to do anything last year and just to let it run, and grandfather it and take a look. Our charge from Paula was to look at how it was working, make some recommendations for changes as needed. And so we did that last year, we talked with faculty members who were in the program, we talked with coaches, we met with coaches, we tried to get a sense of what was working and what wasn't working last year.

Our sense was that it was a mixed bag. It was an experiment: in some instances there were very good relationships between faculty members, the FAA, and the coach, both sides were very pleased with this, each side felt that they were getting something from this — but that was more the exception than the norm. In many instances, because there were multiple FAAs, it was difficult for faculty to coordinate their meetings with the coaches. What was happening was that the FAAs were developing relationships with the student athletes, which was terrific, but not with the coaches. I had one encounter with a coach, introduced myself to her, said I am co-directing this FAA program and she said, "Oh that sounds terrific, what is it?" So that didn't seem to be a very good sign.

I don't want to paint too bleak a picture. It was definitely a mixed bag, and also, for whatever reasons, the membership of the Faculty Athletic Associates was heavily among people who don't teach undergrads or from the major departments in Arts and Sciences, Sociology for example, which teaches quite a number of athletes, had no one from the department, and so the mix seemed a little strange.

Last summer, in response to that and after meeting with the coaches and talking with Kevin White, we formed a committee of Suzanne and myself and Ben Ward, on the faculty side, and Kerstin Kimel, John Kerr, and Joanne McCallie, on the coaches' side, and we met a couple of times over the summer, to make recommendations about the changes.

So what came out of that was a determination to do three things. One was to clarify the goals of this program

and to set clearer expectations. The clarification was to reaffirm that the purpose of this was really to build a bridge between the coach and faculty member, not so much between the faculty member and the student athletes. That what we were really interested in was a two-way communication so that, not only do faculty know more about what is happening in athletics, that's a good thing, but the other way as well, that coaches would have a better window into what is happening on the academic side and that we would be much more explicit about expectations: how many times you should meet, what you should do, etc., but those people felt that they needed that guidance.

A second was that multiple FAAs was a bad idea, it wasn't working very well because of the coordination problem, which made it difficult to even arrange meetings with the coach. What was really happening was reinforcing this tendency to have relationships with the student athletes which was great, but the coaches weren't really interacting with the FAAs, particularly those for whom there were multiple FAAs.

The third thing is that we should really revisit the composition of the membership of the faculty who are in this, and place greater emphasis on faculty members who are in departments which typically teach undergrads, and also not to surround all of the usual suspects; as much as possible as to try to include people as much as we could who were moderately skeptical, who weren't themselves jocks of one kind or another. So that was a charge, that's what we agreed to do, and I will turn to Suzanne and let Suzanne talk about what we have done so far.

[Suzanne Shanahan](#) (Sociology and Kenan Institute of Ethics): So this fall we decided to repopulate the FAAs and began really with a letter to the coaches, because the coaches seem to have pretty specific interests in the kind of person they wanted. Some coaches wanted someone who knew nothing about athletics, some people wanted someone with a sense of humor, someone wanted someone who was fun (laughter). I think they wanted to be able to connect with someone they would actually think they would like. So some coaches, not all, sent something that said "I want someone high energy and fun", and we went out trying to find someone who engages regularly with athletes, who was high energy and fun, who might not have been involved in the program before, and I think really overwhelmingly, got a phenomenal response to people who we knew to be involved with athletes, people who were fairly skeptical, and they liked the idea that it was a pretty clearly defined relationship, between faculty member and coach, and between there, they could decide what to do beyond that. They also liked the idea that part of this was about bringing back the information to their faculty colleagues about athletics in general, and so it made it for them a clearer mechanism. And so we really repopulated it with this new group of folks.

To be frank, we have heard from some people, haven't heard from others. Also, we are not quite sure how it is going yet. Kevin White is going to host a gathering of Faculty Athletics Associates in February where we hope to get some preliminary feedback. We will be sys-

tematically soliciting feedback from everyone toward the end of the year, both so that we can create a mechanism where everybody can find out basic things about athletics and how it's going, but also just to hear how these sorts of changes are ongoing.

I think, basically, we tried to observe, put the committee together to look at what was working and what didn't and then try to tweak it a bit. I don't think we reinvented the wheel here, just wanted to tweak it again to see if we could get a little more consistency and have it be a little more effective for people.

Mayer: Kevin White has been very supportive, and really encouraged the coaches to engage. We will find out if it's working, we really don't know yet. I just wanted to mention that. Any questions?

### Questions

Hain: What's bothered me, and many other people about this program from the beginning, is its lack of symmetry. I would propose that faculty know more about athletics than coaches know about the rest of the University. I found, that personally, and other people, for example me and Fred [Nijhout], because we are both a parody of it, that the faculty are expected to go to athletics and learn all about athletics, why can't the coaches come over here and learn about what the faculty do? I mean, my point is, what is a university about? It's about students, it's teaching, learning, and research, and I'm not angry at athletics, I have done it all of my life, I just think that somehow things are out of balance. I think that they should come over here.

Shanahan: I think we tried to structure the program, people who are participating, the idea is to have two lunches with the coaches a semester, as you would with any other colleague, and I think the idea was, to a certain extent, to meet on common ground. The reason why this is a faculty program, it's faculty led, and so that first step, but both in our general meeting of the coaches and in our committee, we really talked about this as a reciprocal relationship. They in fact are quite eager to have. You know, I think Ben Ward, who is the epitome of Faculty Associate, perhaps a Faculty Associate on steroids, he's incredibly into it. One of the things that he has done quite effectively is bring his team, his coach, to his class, to his work, etc. and I think that is partly what we are trying to achieve here.

Mayer: The points we've suggested, we didn't build into the requirements, we suggested just that, that the coaches come to a class, for example.

John Staddon (ECAC/Psychology & Neuroscience): Only if they're fun and high-energy! (laughter).

Karla Holloway (English): I'd like to agree, and think that if we are going to rethink the strong amounts on the Executive Committee when it was presented to us as pretty much as a fait accompli, it would be important perhaps to not just repopulate it, but to reshape the ethics so that it does seem an exchange of ideas, rather than one where the faculty goes to the team. I applaud the effort to rethink it, but sometimes the structure, the idea that has regenerated the program, might also need your attention and direction so that we better understand that we

are going to get some high energy coaches, with goodwill, and fun, visiting our classes as well. Just so that exchange is there.

Mayer: We probably should have distributed the charge that went to the FAAs and the coaches, but it is written very symmetrically. Of course, in practice, it might not always be so. I think we both agree strongly that we really want this to be a two-way street, and I think that is one of the things we want to look at this year, especially in light of these comments.

Shanahan: I think that part of getting the coaches involved was to better facilitate it being a two-way street. We didn't want just a faculty member assigned to a team that then would provide athlete mentoring, etc., but that it might really develop a reciprocal relationship; that would be a good thing.

Henriquez: Thanks to Suzanne and Michael for your presentations. Actually, it's interesting that this reciprocal idea just popped into my head. One of my former students, who is getting trained at UNC in medicine, said that one of the programs they have, instead of having students shadow doctors, they are having students shadow patients, to actually see what the patients are going through. And I am wondering if we should have coaches shadow their players and see what their lives are like in the classroom. That is a possible reciprocal idea.

To the budget: as I mentioned, over the past few weeks, I have been trying to get a handle on what I could learn about the athletics budget, and this was prompted by a discussion at the end of our last meeting. Professor Joel Marcus (Divinity) noted a recent article in the *Herald Sun* by Professor Starn in which he reported the numbers that Professor Hain just mentioned, that men's basketball lost about \$2 million last year and football lost about \$6.7 million last year — for a total of \$8.7M.

Provost Lange, at the time, responded by saying that the numbers did not fully account for other revenues and he mentioned possible television revenues. There was a brief email exchange between Joel Marcus and myself, and Peter, and this prompted some discussion in which Joel indicated that these data came from this report that is submitted annually as a Title IX compliance called the Equity In Athletics Disclosure Act. So it's an EADA report and this is publicly available and there is a website that has this information. And so I started to look at this data, and if you look at all Duke sports, they lost a total, at least according to the way this is written out, of \$22.5M: \$8.7M by football and men's basketball combined and \$13.8M by the rest.

But there is another category, and it's a relatively large category that is called "non-program specific" revenues and expenses, there are two sides to this. The revenue that is generated by radio, internet, concessions, sponsorships, advertising, licensing, Iron-Duke giving, which is a significant amount, and NCAA broad-based support. This money, at least in the Duke report, isn't allocated necessarily to any sport but the sense is that it is driven primarily by the two giant revenue generators which are basketball and football.

I should note that TV revenues are allocated to sports, at least to my understanding. The non-program-

specific expenses are related to a number of things, fundamentally to direct maintenance and central administration staff support of the athletics department. So this is my best understanding of those categories. So now, you're going to have to take out your calculators, or your iPhones because we are going to get some numbers.

The amount of revenue generated by all items in the non-program specific category — minus the subsidy to Athletics — is about \$22.4M. So the revenue that is generated that is non-program-specific is \$22.4M. So if you assume 75% of that non-program-specific revenue is due to basketball and football, then the additional revenue for those sports is \$16.8M. In contrast, those programs also share the non-program-specific expenses and that is \$17.7M total. If you imagine that their component — and it turns out that because a lot of things are associated with that sport is about 25% — then they would have about \$4.4M of non-program-specific expenses associated with men's basketball and football.

So, the net impact of football and men's basketball from activities reported as non-program-specific on this EADA report could be estimated as about \$14-15M. So you could argue that instead of losing \$8.7M, football and basketball *make* about \$5.6M, and you could divvy that up any way you want.

When the athletics department mentions that basketball is a revenue generator and football is breaking even, or near breaking even, they are using this sort of analysis from these non-program-specific numbers.

I should also mention that there is a number in the budget that I didn't fully understand, maybe Tallman could enlighten us more, but there is a pass-through which has something to do with indirect facility maintenance which is actually part of the requirement by the EADA report, but I think that Duke manages this somewhat differently than some other schools do. Duke has to put it into the report, so it is a revenue, and then it is taken out as an expense, so it is just a pass through. So what it does is artificially inflate the bottom line budget for the Athletic Department by some \$6.2M, at least, that is my understanding.

So while all this may be somewhat more comforting, the University is still providing a sizeable subsidy. And in these times of economic belt-tightening, that subsidy looks mighty tempting. As I noted, most Universities provide some subsidy and as I pointed out, some is in a hidden form. So you can imagine that if Duke got rid of all its sports (not something that I am advocating) I don't think we would actually recoup that \$14.6M completely. A good chunk of that is for financial aid of the students and many of our other students, who would supplant the athletes who aren't here, or if they qualified as students in our other programs, they would also be on financial aid. And because the integration of Athletics and the University has been longstanding the benefits with regard to other fundraising, student experiences, community relations and even tee-shirt sales are real, but perhaps very difficult to quantify. Still the financial benefit one might assign to those things is not trivial. So it's a very complicated relationship, and a very complicated financial picture.

One of the goals, to my understanding, that was stated in the Council and the papers, and in other reports, is to lower the subsidy by building revenues or ticket sales or through some endowment. And the Athletics Department also has acknowledged that it needs to live within it means and curtail costs as many other units are trying to do, and they are budgeting accordingly. I think Athletics has been very open and responsive to this challenge — and clearly recognizes the seriousness of the current budget constraints. If you listened to what Kevin White said in November, even though they put a positive face on Athletics in November, if you read the words carefully, they acknowledge that it will not be easy and that some radical changes might need to take place as they move forward if the budget situation doesn't improve and if giving is down, as it already is down, and if the football team doesn't get better and revenues aren't generated, we could be in a situation where some things might have to change, including perhaps, cutting sports, and that was mentioned. The economy of sports is also changing from what I understand, and TV revenue is changing, and the market and business model for TV is changing, so all of this is a changing landscape and sports is in the middle of it.

This Council will need to be very vigilant in the coming years; and I think we are best served if the faculty and athletics work together and look for solutions that are best for Duke, and I emphasize best for Duke because every program, every university is different, their blueprint, their DNA is different at Duke than it is at UNC and the University of Alabama and the University of Texas. Having the Athletic Director come to this Council and meet with ECAC, I think is a very positive direction for athletics. Having a program where faculty engage with coaches, and coaches can eventually see what is happening with the faculty, I think is a positive direction. I have been told that Kevin White also regularly attends the meetings with the upper administration, so he actually goes to those meetings and has a connection to the academic issues.

I am not going to stand here and say that College Sports does not have its flaws, because it certainly does, and the increased professionalism and over-exposure in the media has made it even harder to figure out how to balance athletics with academics. But each University needs to figure it out for itself and decide on how to operate inside their world — and that will take real work by everybody — by the faculty, by the trustees, by the students, the coaches, and the administration. While I am still trying to figure it out, I believe we have a lot of the pieces in place, I think we are actually ahead of the game in terms of oversight and integration within. I think the divide between athletics and academics has been narrowed considerably, though it is still there. It doesn't work in a vacuum. They are operating in a way that they understand is within the priorities of the University. It's not a bad thing to remind them as often as we can.

I am happy to continue the conversation about athletics in Academic Council, answer questions as we did with the discussion on China, now — or we can continue

and collect questions and bring the appropriate people here so that we can continue to discuss it.

Kerry Haynie (Political Science): Now, Craig, is it possible that at the minimum that the faculty can get the numbers that you just recited?

Henriquez: Sure

Haynie: Instead of showing a loss, it's actually a gain by the individual sports.

Henriquez: As I said, the numbers I am quoting here are from the EADA report, so these are the public numbers that are presented that are consistent with other numbers that I have seen. Tallman might have something to say.

Tallman Trask (Executive Vice President): Those numbers actually provide...from the bottom of the financial statements, and I think that what I want to make sure is that there is no mystery here. When we had the conversation about the subsidy four or five years ago, I think some were quite surprised, we just gave them the budget. There are a lot of places where that's unknowable and so forth. This is an audited financial statement from whence those numbers come, (mumbling), I am happy to give it to anybody who wants it (handed financial information to Richard Hain — laughter)

Haynie: That's one positive change from the Athletic Council. We rarely saw those numbers, and when we saw them, they were collected: we got a chance to look at them and then maybe just randomly turn them in before the end of every meeting (laughter). So I'm glad that we can now have the numbers.

Hain: I have a specific request. Why do I keep all these Title IX reports? Because it is the only information that I could get about the budget. And I have a comment to make there too and I believe that it's important for the University. Then, it would be really helpful that if you could say there are these large lines not attributed by sport and how those are broken down. Take the Title IX report and some of the budget lines on that and expand them out and say this is what the pieces are, this is how they are attributed. I know about Duke pass-throughs and all this and what they can do to the budget to make it strangely bigger in some way, but that would be really useful data.

Trask: There are three things that make the data un-comparable that are the big issues, once you get past those you can sort of understand...One is, Division 1A, gives financial aid as athletic scholarships. Division 1AA, I'll call the championship group, does not. And so, if you look at Princeton's budget, you will see no athletic scholarships. All of the money goes to all of the players on all of the teams that plug into the financial aid office, not the mere athletics' purse. If you believe the myth that there are no athletic scholarships in the Ivy League, we can have a long conversation. That is one of the big differences.

The second big difference, and that's where the facilities piece comes in, historically a lot of university athletic departments have been allowed to basically manage and operate their own facilities. At Duke, that is not true, so we have the money in and the money out which

recognizes the fact that we charge them for the management of their facilities.

The third is this big lump of money which is essentially unallocated for lots of reasons and Craig's right, we could give you some rough guesses as to where it is allocated, but when you look at the contributions, NCAA distributions, then they are put in the budget as unrestricted funds and so in an accounting sense, they are not allocated. Basically, if you take those out, everything else looks the same.

Paul Haagen (Law): Tallman, you can also add student-activity fees which the state schools are in a huge portion of athletic revenue and taxes on the state.

Trask: One of the things we have to be very careful about is not loading the students with a bunch of miscellaneous fees, and so there is no student fee involved to go into athletics as there are in most big public settings.

Hain: But that deals with Duke carrying us to other places.

Trask: Well, the first thing we look at most carefully when we look at the subsidy, when we are trying to figure out is people like us. We are an academically respectable, private, research University of consequence who play major sports, which is now a set of about five. The numbers we looked at were implied subsidies at Northwestern and Vanderbilt. And then trying to get a sense of the implied subsidies in the Ivy League, and the places like us that play in this Division III league, which is Chicago, Emory, and that place. All of them are roughly the same amount. The two that are off the chart, you can argue whether they belong anyway, one is Stanford. Stanford's model provides no institutional subsidy because the entire program was endowed, which means, as of this year, the entire program is in complete disarray and they have laid off a third of the staff. That is their model. When it worked it was fine, but when it blew up, it blew up. And the other is USC, who has so much football income that no one thing could possibly affect it.

Hain: What really bothers me, I mean, if you just take Duke alone and take these reports and you've assumed that, maybe they're not comparable to this place or that place, but they should be internally consistent. They are prepared by the same person every year and subject to some rule change.

Trask: I will be happy to give you all the financial statements in that format in the staff parking lot.

Hain: How lovely. But it's the growth rate. I have been keeping track of this and roughly equate to my estimate, as far as I can tell, athletics is growing at twice the rate of Arts and Sciences. Again, you may disagree, but that is terrible, I could pull up the numbers here, according to these Title IX reports, athletics has doubled in amount in the past six years and that is a huge growth. I mean, how many people here are in departments that have doubled in six years? And then, the other part of it seems like basketball earns more money. So what happens? The coach's salary, Krzyzewski's salary has almost doubled in the past few years as far as I can tell. It's gone from less than \$2M to just less than \$4M and so they are not going as far in the NCAA, so less TV revenue.

It's not a criticism, but it's a fact of life. People sort of see this as some big goose that lays a golden egg and it doesn't. It soaks up, if it gets extra revenue, it soaks it up in salaries and so on. I am wondering how much retaining the football coach is going to cost. Serious question.

Trask: I believe the answer to that, although the discussions are not final, is zero.

Hain: It might be zero in salary, but are we going to bump up? I'll mention the field house, I didn't get to that I was very, very unhappy with the strategic planning because I would have made certain requests such that Faculty get a copy of the draft, I just found out that the very day of the meeting we couldn't look at it. To me, it is strategic planning designed in a bubble. The financial bubble. We are almost to the top of the bubble, we are going to pay for athletics by investing in football and people are going to donate money and so on.

Things financially have changed, and I think that the strategic plan should be revisited. There are all sorts of commitments there. I mean, why do we need a field house? These are things you need in Wisconsin when it gets cold in winter. You could say, oh they need it, but there are lots of things that people need in other departments that are more central to the mission of the University and I think that this growth of athletics needs to be brought under control.

On the flip side of that is something we got shoved into nearly a year ago, whenever the strategic plan was voted on, President Brodhead started becoming more active in reforming athletics because a lot of the problem was outside Duke. But as far as I can tell, nothing has happened, and you know, something has to be done. He has to become more active in the NCAA or something to try and curb this massive growth, for example, in coaching salaries. I mean, Krzyzewski's salary is twice the size of the structural deficit of Arts and Sciences. Arts and Sciences departments on average are being asked to cut \$100,000 from their budget. There are long term employees of the University who are losing their jobs. I mean, to me that seems, that there is something wrong.

One other comment: people like to say, "Oh, Duke's graduation rate in athletics is great." I agree, I think that it is higher than the student population in general. But it is not so for the basketball team, it is about 60%. And my prediction is that as football becomes better...Football has a fantastic graduation rate. My view of that is "it's great, these guys come in and realize that they are not going to the NFL, they're going to get a degree." If they start doing a lot better, they are going to see that they have a career in professional football; maybe the graduation rate will go down. That is cynical view, but it is what we see at other places.

Henriquez: Michael, you wanted to have one last....

Gillespie: Just to respond to one issue that Richard raises, there are lots of others that I am not going to say a lot about, the growth in the Athletics budget over the past twenty years, which I think is undeniable. The reports that Richard draws on are Title IX really, pretty much tell you the whole story of where expenses come from in athletics and that is the introduction of women's athletics

on a large scale. I think it's one of the best things that have happened to athletics and one of the best things that has happened to women in our University, but it does cost money. There is no question about it. If we really wanted to only run a men's football and basketball program, I can guarantee that we would make money on it. We don't do that, and I don't think we should. I don't think that is the right thing for the University to do. But I think it is true that Athletic department budgets have increased, but so have the participation of women, and I think that's a good thing.

John Staddon: Would it be possible to have a single graph which shows over the years the percentage of the University's budget devoted to Athletics total, Women's Athletics, Men's Athletics. A very simple graph that everybody can understand and so you could see the reality of what Michael says or not. Whatever it is. Is that possible to produce?

Hain: Can I make a comment? I think that argument has been debunked very well in various books about women's athletics. The growth is humongous. And a lot of the growth, you can see where it is. Just look at the men's. The growth in the size. I'm not saying whether they are running at profit or losses. The amount of money going through, say the men's basketball program has increased hugely in the last decade.

Susan Lozier (NSOE): Well, Title IX came in 1972, and I think the growth that Richard's talking about is in the last six, seven years or so. So I don't know, and I don't know the numbers myself, it seems unlikely that we can attribute that to Title IX.

Henriquez: The growth?

Lozier: The growth, I'm sorry.

Gillespie: I think this suggestion is a good one. To really ask someone to put together a graph...

Henriquez: This is a discussion that has been going on, at least 80 years, if not longer, and I don't think we are going to answer it today. But I do think we should continue to formulate questions. And this might be a historic exchange of data (laughter) that I think is an important step to show I think that there is an important step in increased transparency. All your points are well taken. I am not going to sit here and argue because it is very difficult to do so. I think a lot of universities are facing this very same question. College athletics is growing in a way that is sort of hard to manage. But at the same time, there is some benefit derived from it and it's balancing that, I think is the piece, and I think Duke needs to think hard about it for Duke, I don't think we could solve Texas growth or Alabama growth, we can solve Duke's issues.

Hain: By the way, I'm not opposed to Athletics. I am somewhat of a jock myself, that's not the point. It's the money...

Henriquez: I understand.

Hain: But there is one other thing that bothers me, and I will get it out here. This is a request. So, I first learned about these Title IX reports in about 1999. I set out to get them and it was like I was, just shoved all over the place. I finally found something on the web which explained the obligation of the Institution, which basical-

ly says that every institution is obliged to give these Title IX reports to anyone who asks, in a timely fashion, without asking them to jump through any hoops. I said that to the appropriate person and I had ten years worth in one day. And every time I keep getting the run around and then I finally get them, but I would love to have them just be sent to me every year. Duke used to post them on the Athletics web site and then they get terribly out of date, and then they were hidden and were extremely hard to find and now they are not there at all. And some universities post ten years on their website, not on the Athletics website, but say on the Presidents website.

Frankly, I think maybe the best place to post them would be on the Academic Council website so that anyone who wants to look can look at them and form their own conclusion. I happened to put them all up because I think they should be out there.

Henriquez: There is now a website dedicated to it and you can find the EADA reports on every institution.

Hain: Yeah, I don't know if they have all of the historical data that you can use to determine the trends.

Henriquez: Ok, well thank you very much. We will continue this as best we can. I appreciate the comments and the depth of the discussion.

### *Master of Engineering Degree Proposal*

Our final presentation is from Professor Jeff Glass, who is a Professor in Electrical and Computer Engineering, Director of the Pratt School's Master of Engineering Management Program, and because he doesn't have enough to do, he's the Senior Associate Dean for Education of the Pratt School. He's here to present a proposal for a Master of Engineering degree. The supporting documents were with your agenda.

If you are keeping track, this is actually the third master's program this Council has been asked to approve in the past 10 months. The first two were from Fuqua and this one is from the Pratt School. As with all such proposals, this one has gone through the gauntlet of school and University committees and has received all the necessary approvals. As I noted for the Fuqua degree program that we just recently approved, our role here is to consider the broader impact of a new degree on the rest of campus.

ECAC and I have been trying to get a handle on the growth of the Master's programs on campus and number of master's students. There are currently about 6500 undergraduate students. How many masters' students do we have on campus? Anyone want to wager a guess? The number of total enrolled master's students. (1,500). It's not the same size. It's about half. There are approximately 3300 MS, in terms of graduate students it's about the same size. But in terms of master's students alone. Of this 3,300, about 2,800 are professional master's students and 56% of those are in Fuqua. So 3,300 total. 2,800 professional Masters and more than half of those are in Fuqua. The new MMS program that we approved as a pilot last year was 100 additional students per year, the new Masters of Management in Clinical Informatics added another 25 to maybe 40, and there has also been some growth in other programs in the past year- particu-

larly in Nicholas which got a bump up, an unexpected bump up in the number of their master's students.

The new degree program from the Pratt school (the MEng) would also be a professional degree and will add to this number. The program will be run out of the Pratt School rather than the Graduate School. I should just tell you, maybe Jeff will tell you anyway, Pratt has a sizable MS student cohort of about 100 students, most of those in Biomedical, Electrical and Computer Engineering. The goal here is to create a new degree with some distinctive features that will better prepare Master-level students for jobs in industry. Jeff will present the program today and we will vote at the next Council meeting.

**Jeff Glass** (Electrical and Computer Engineering): Thanks for the great introduction Craig, I am not sure I need to present now. Hopefully this is not as quite as controversial as the last forty-five minutes or so but I really appreciate the time, not just for this committee, but for all the committees that we have been through, all the proposal and planning has gotten better at every stage so I feel like we are in very good shape now given those committees both internal in the school and then external.

I want to then introduce two people really quickly, Dr. **Brad Fox** who is Executive Director for the Professional Masters Programs at the Pratt School of Engineering and Dr. **LaTondra Murray** who is Associate Director of Professional Programs at the Pratt School. Both have had strong input into the proposal and into the planning, but the real hard work is ahead as we try to implement — assuming that things go well today and into the next month. Tom Katsouleas, our Dean, gives his apologies — he had a schedule conflict. This is actually the first meeting that he couldn't make in this approval process, he has been with us every single step of the way. So either he thinks we can handle it now, or he has thrown up his hands and said I give up. I'm not sure which. But he is very supportive about this.

The actual first time we started talking about the Professional Masters programs was not actually after he arrived, but during his interview trip. He noted the lack thereof and the need that was evolving in the marketplace, and started talking about it. It has evolved from there to be a very faculty-driven and very faculty participatory effort now.

I will present for a few minutes. I will try not to belabor anything, but for those of you who have not had a chance to thoroughly read the proposal (I think it started at 57 pages, Craig asked me to cut it down back a little for the Academic Council, I think I got it back to 41) but beyond that there was just too much information that I really felt needed to be shared. So I want to hit some of the highlights to show the need and how we are addressing needs that have evolved in Professional Master's education in the fields of Engineering.

First, why are we doing this? I think it fits very well with the knowledge-in-service-of-society theme. I think increasing the number of Master's Degrees increases Pratt's impact. A very important factor when we think about how we can help society, and the various problems that require engineering and technology solutions. Globalization: we're in a global economy now

which has grown very rapidly over the past five to ten years; the bachelor's degree is being replicated around the world, and therefore adding increasing value to a student's education through a master's program actually is ideal from both industrial and student perspective. [It helps us] to compete in the global economy. The 'T-shaped individual'<sup>1</sup>: this is something that came out of the National Academy of Engineering, a few companies looking at what used to be [expected] of an engineer. You would think of yourself as a very deep expert in a field. Now there are obvious reasons why not only do you have to have that deep expertise, but you need all of the ancillary skills to apply that expertise in the real world. Something, that as engineering faculty we had not really had to do up until about ten years ago, and it is becoming increasingly important, and the T-shaped individual is just a way to acknowledge that need now.

In core industry sectors, using distinctive specializations for which Pratt is known, we can address areas that can really make us compete in the world of University programs at the very highest levels.

The couple things that have shown us the market for a Professional Masters in Engineering: one is that the National Academy of Engineering sponsored a National Resource Council Report on Professional Masters Degree in the Sciences and there was an overwhelming need for Masters-level professional education. This had actually followed quite a bit of effort in Engineering, this was focused on the Sciences, but showed the same need across all technical fields and something that many engineering schools have already responded to that we are now responding to — I think in a leapfrog manner which I will talk about in a second.

Bachelor's degrees have been a discussion in the media now. Where twenty years ago, a high school level education was good enough to compete, then an Associate's degree, then a Bachelor's degree, and now, especially in certain fields of engineering, it appears that the Masters degree is going to become the entry-level degree. In many cases, especially if you are not going on for a Medical degree or for a PhD, then this Masters degree may still be necessary for practicing engineers.

And if you just look at the pure numbers, the growth of Masters is more than double the growth of Bachelor's degrees from the time period of 1971 to 2005.

So, just summarizing this, strong alignment with our mission, impact on society, if you have more graduates in technical leadership positions, stronger ties to industry which are very beneficial from both a research and a curriculum perspective, and leveraging the expertise and research strengths in Pratt to respond to both student and employer needs.

One of the things that Craig mentioned: we've been through quite a few processes, I won't try to read this slide, but it just summarizes all of the processes of when we started discussions, both at the Dean's level and the Dean's cabinet at the Pratt School of Engineering, and then went all the way through the School processes until it was given approval by the Engineering Faculty Council.

cil. The EFC was the final step in the School processes, and then we have been through the Academic Programs Committee, which was approved, and then through ECAC of course, as part of the general University Processes.

Now just very quickly, the Masters of Engineering Committee developed a curriculum, the curricular aspects of the proposal, and helped write the proposal, and was really the first group to vote on the proposal. It is shown here, and the only reason I wanted to show it is because what surprised me when the Dean asked me to take this Senior Associate Dean role and spearhead this, is I expected there to be a lot of arm-twisting necessary, especially faculty who are heavily involved in research and centers, and of course, department chairs.

In actuality, the first volunteers were an amazing array of faculty who have strong research programs, have administrative responsibilities, a wealth of diversity within that pool of faculty. For example, David Brady, the Fitzpatrick Chair, Professor Chilkoti who is head of the Ciemas Center, George Truskey, the Chair of Biomedical Engineering, Tod Laursen, the Chair of Mechanical Engineering, Mark Wisner, who has had the recent Center on Nanotechnology and the Environment, etc., etc.

[These represent] a great declaration of the importance of these Masters degrees, not just for us to generate a new student body or to increase Professional Masters, but the linkage between the Masters degree, the research, and the industry ties that all of these faculty work with every day.

A brief summary of the degree: it is the same number of credits as the Masters of Science and the Masters of Engineering Management, that's thirty credits. It is offered within the Pratt School of Engineering. The administration will be through Pratt School Departments, with centralized support for some of the services to make it a world-class program. Our experience in the Master of Engineering Program within the past two years is critical for those centralized services; the content is midway between an MS in Engineering, and the MEM, the Masters of Engineering Management. It'll contain seven majors that are determined by the Pratt School strengths, not just by departmental lines, by the strengths that we have seen both in the interdisciplinary and disciplinary. The target population is early career technology professionals who seek to deepen their knowledge in technology. And we say early career, I think the vast majority will be straight out of their bachelor's degree.

The faculty oversight will be through departments and through the Engineering Faculty Council as required by the Pratt bylaws. The general flow of coursework is shown here. One of the leapfrog things that I mentioned is that we are actually going to require all of these Masters of Engineering students to have some business-fundamentals knowledge that will be required when they go into industry or into their organizations. These will be Terminal Masters Students. I don't particularly like that term but that is the vernacular that has come to pass. Generally they will want, when they come through, to plan on stopping their education at the Masters Degree

<sup>1</sup> This unfortunate term is apparently unstopable...

and going into industry. Therefore, they will need to apply their engineering to these organizations, and will need Business Fundamentals, and Fundamentals of Management and Leadership, and so we will have those as core required courses for every student who graduates from the program. There will be as well an internship or project in addition, to give them something that is applied, and habit-forming experience that will connect very closely to these two courses. There will then be departmental or cross-disciplinary requirements. Instead of departmental, I probably should have said disciplinary. Disciplinary and cross-disciplinary requirements, generally chosen from a list of courses, but from a limited set. And finally, the last three courses, or non-credits, will be from technical electives in a concentration area, this is where the strong tie to the Centers and research that is being done in the Centers will occur.

The admissions criteria: generally less than five years of relevant work experience, because we expect that that will be the target market. Certainly, if they have more experience, they will be counseled that their cohort group will have less than five. Typically, they wouldn't be turned away if they believe that despite their having more than five years of experience, this program would still be valid for them. [We will also require] a Bachelor's degree in Engineering or Science from an accredited institution, proficiency in English, letters of recommendation, statement of purpose about the student's fitness, acceptable scores — we use GRE verbal and quantitative — GPA and total scores in general. And if they have scores below a specific threshold (it's very similar to the Graduate School) will require centralized review within the Pratt School before those students will be accepted.

Just a comment, I won't try to go through this entire slide, but just a comment that we are very, very aware and believe in the importance of underrepresented groups within the program. We have done a number of recruiting activities within the Masters of Engineering Management program that will carry over into the Master of Engineering Program in order to enhance the recruitment of underrepresented groups — and that, in Engineering, includes women as well. Just to indicate that we have that on our minds and in the plans and that we have also written a joint proposal, under the great leadership of Lynn McGuire with the Nicholas School, to try and get some funding for that externally from the National Science Foundation.

And just to end, the metrics and assessment of the course are critical in any of these programs, and so we will have the same kind of metrics that we utilize in the Engineering Management Program, everything from the surveys of each of the subprograms within the program we entertain, will have their own metrics and assessments, generally surveys to the students, as well as full program surveys on exit and from employers.

Our students do sometimes tell us that they are surveyed to death, but we do believe that that is better than the other way around, and we certainly get a lot of valuable information from that.

And that is all I have to present, I am happy to answer questions, the really tough ones will go to Brad or

LaTondra of course, but happy to entertain any questions at this stage.

### *Questions*

Steffen Bass (Physics): Where is the difference to the Master of Science in Engineering?

Glass: Yes, sorry, that's a great question. Probably just took that for granted. We don't expect the Master of Science to go away, but the Master of Science will be the research-oriented Masters degree and the Master of Engineering is a non-research, terminal Master degree for moving right into industry. Many times students will choose the Master of Science degree if they are unsure whether they want to go on for the PhD but they think they might, they want to get the research experience, or if they have a specific career goal of conducting research at a Masters level, then they would choose the Masters of Science degree as well.

Julie Britton (Fuqua): Similarly, tell us if you would, how it is different from the MEMP program and how the business fundamentals of leadership management piece of that, how that fits in and where that is going to come from, some of those things?

Glass: Yes, great question. The really simplistic way of looking at it is that we have the MBA over here and MS over here, no research, very applied business degree, no technology, more or less. The MEM, Engineering Management, is in the middle, right in the middle of those two, now we have got the MEM and MS, and this MEng just right in the middle of those two. When I say in the middle, what that means is that all of those on the left are applied degrees, but in the middle, the amount of business contact...So in the case of the MEng compared to the MEM, the MEM has four core courses that are all business- and law-oriented, and four technical electives, which although they are technical electives, many times lean towards applying technology in an entrepreneurial setting or in an operational management setting, that kind of thing.

The MEng on the other hand, will have very strict requirements; the technical courses, which are now three-quarters, instead of half, are very much technically oriented towards the discipline or the interdisciplinary requirements of that major, so very strong technical components. Those are the main differences.

I think the similarities that you see in those two core courses are that we are trying to give them enough proficiency in the language of business and in the operations of an organization that they don't go in naively and without the ability to function to apply their engineering. In fact, those two courses, simplistically again, we can think of as squeezing down the four core courses from the MEM program into two, and in some cases we even have similar instructors helping us do that, and that will allow us to give them flavor and the semantics and a basic understanding, not the depth of the MEM program in those areas. If you want to add anything, or any other engineering faculty have anything to add, please speak up.

Pat Wolf (Biomedical Engineering): I think a little history is due here. In our department, Biomedical Engi-

neering, we had ten, or eight years ago, or even less, we had no Masters students, well, only terminal Masters and PhDs. And the Master's Program has been grown primarily as a money-making machine. And we have a hundred Master's Students in the school. Most of them are in Biomedical Engineering, and it's had an impact on our classes. We have had no similar growth in the faculty, so basically these students are all now in our classes.

So now we are going to have a Professional Master's Program and I'm not exactly sure whether it's the chicken or the egg, that the Engineering School makes more money when we have a Professional Master's program, as opposed to a Master's of Science program. But also, the students that come into our program are no longer research students; they are business students primarily. We are a research University, our faculty do research, and when we get distracted by other things, doing other things, like teaching a lot of other students so that we can make more money — we can argue, "ok, well we have really good ways to use that money" — but these are all things that are concerns, these are changes that are happening.

The students that come in — I don't want to say that they are necessarily of lesser quality — but they are definitely not the high quality that we get in our PhD student, for instance. And if we are now dependent on a Master's income to support our school, what happens to the quality of the students? Do we have enough applicants that we can say that we are going to keep 3.8 as the grade point average that we want; what if we don't get enough students? Are we just going to lower it to 3.6? We are dependent on the income for that, so we could argue that the same thing is true for the undergraduate program, we are dependent on filling the undergraduate program, and what are we going to do if not enough people apply there? I am not saying that we shouldn't have this program; I'm just saying that these are all concerns, that if we aren't careful we are going to change Duke University. So if the professional master's program grows to infinity, that's not a good thing, and we have to be vigilant, that's all.

Glass: I couldn't agree more, you know Pat, we have to stay vigilant. If I thought that this was primarily a money making thing, I would stay as far away from it as I could. To me — and I think we have to be worried about all of those things you said — but to me, and this is partly our Dean's philosophy, but to me, the first priority is student needs — and industry needs, and running a world-class program. If this were a break-even program, I would be as excited and enthusiastic as I am. Now it is not break even, which means that the impact can be exponential, more than, because it can go back to researchers and centers, etc. But I think, not only in my own opinion, but in the opinion of the Center directors, who are very focused on the research, and the industry affiliates — all have the same feeling. So I think with diligence, and with you keeping an eye on us through the Engineering Faculty Council (EFC) — I can I point out that you voted for the program, right?

Wolf: Yes (laughter).

Glass: I think that's really an important part of the faculty governance, through the EFC and through the program committee and through the departments, and that is where the vigilance has to come, and one of the conditions — I don't think I mentioned it here, but I think it's in the Q and A in the proposal — one of the conditions set by the EFC is that if it grows beyond the projections, we have to go back to the EFC and request them to assess that growth. Another point which helps with the vigilance that you are talking about, is that the departments themselves control admission; the Dean doesn't control admission centrally, the departments do. So if the resources aren't there, if it starts to affect the department too much, the departments can stop that growth or even wind it down if they choose to. I think that is a very important part of the philosophy and the faculty governance issue. Agreed, and hopefully, some of those controls are in place.

Bass: This is just a clarification, so do you expect, that in the end there will be a net revenue of 1.5M roughly a year?

Brad Fox (Engineering): Sounds about right in our years, not in year one, but in our years.

Glass: And the surplus: philosophically, the Dean's office would like the surplus to go to new faculty, to help show our departments and areas that need new faculty, there has been discussion about that. I think BME has already hired one faculty member based on Masters revenue, and some of the other departments see other needs, and those are still being discussed, but philosophically we would like that to go to new faculty hires.

Henriquez: Can you give us some sense of the distribution of domestic students and foreign students?

Glass: We have target goals this year, and the goal for this program will be similar to the MEM program which we are in pretty good shape this year, but it fluctuates year to year.

Fox: I think in the ideal world, we would like to have 50% domestic students and 50% international students, with no single international country dominating the population. I think that is where we'd like to be. This past year, the Engineering Management Program was pretty much in that range, we had 50% domestic, 50% international, and just under 20% Indian, which is our major population. As we look at admissions, departments again get to control and monitor that and we will be very active in our recruiting and try to obtain a diverse student body that is not dominated by any particular country or any particular group.

Henriquez: This presentation will be voted on at the next meeting, so if you have any questions regarding this program, send them to me, and we will try to get the answers before the next meeting. We hope to see you [February 10th for the University Faculty Meeting, and the next Council meeting has shifted to February 25th.](#)

Thank you everyone.

Respectfully submitted,  
John Staddon  
Faculty Secretary, February 9, 2010