

**MINUTES OF THE MEETING OF THE
BOARD OF REGENTS OF THE UNIVERSITY SYSTEM OF GEORGIA
HELD AT
270 Washington St., S.W.
Atlanta, Georgia
March 8 and 9, 2005**

CALL TO ORDER

The Board of Regents of the University System of Georgia met on Tuesday, March 8, and Wednesday, March 9, 2005, in the Board Room, room 7007, 270 Washington St., S.W., seventh floor. The Chair of the Board, Regent Joel O. Wooten, Jr., called the meeting to order at 1:00 p.m. on Tuesday, March 8, 2005. Present on Tuesday, in addition to Chair Wooten, were Vice Chair J. Timothy Shelnut and Regents Connie Cater, William H. Cleveland, Michael J. Coles, Joe Frank Harris, Julie Hunt, W. Mansfield Jennings, Jr., James R. Jolly, Donald M. Leebern, Jr., Elridge W. McMillan, Martin W. NeSmith, Patrick S. Pittard, Doreen Stiles Poitevint, Wanda Yancey Rodwell, Richard L. Tucker, and Allan Vigil.

Chair Wooten welcomed new Regent Tucker, as well as Regents Leebern and Rodwell, all of whom had been sworn-in by Governor Purdum that morning at 11:00 a.m.

ATTENDANCE REPORT

The attendance report was read on Tuesday, March 8, 2005, by Secretary Gail S. Weber, who announced that Regent Hugh A. Carter, Jr. had asked for and been given permission to be absent on that day.

APPROVAL OF MINUTES

Motion properly made and duly seconded, the minutes of the Board of Regents meeting held on February 1 and 2, 2005, were unanimously approved as distributed.

NATIONAL CHAMPIONSHIP TEAMS IN 2004

Chair Wooten called upon the Chancellor to begin the presentation to honor the national championship teams and their respective institutions.

Chancellor Meredith stated that the Board of Regents regularly recognizes outstanding achievement in the University System of Georgia. At this meeting, the Board would recognize the System's national athletic champions. He first introduced Kennesaw State University's ("KSU") Interim Vice President for Advancement, Wesley Wicker. KSU won three national championships this year:

National Collegiate Athletic Association (“NCAA”) Division II women’s soccer national tournament, NCAA Division II men’s basketball national tournament, and the Division II National Cheer Association championship.

Dr. Wicker noted that President Betty L. Siegel could not be in attendance because she was teaching at the University of Oxford in England. The women’s soccer team was also on an exhibition tour throughout England. He said that the women’s soccer team won the championship in only its second year as a collegiate team. In the first year, the team was undefeated until it lost in the national championship playoffs. Dr. Wicker congratulated the Head Soccer Coach, Rob King, and the women’s soccer team for their success. He then introduced the Marketing Promotions Director and Head Cheer Coach for Kennesaw State Athletics, Felecia Ingels, and cheerleaders Bethany Lee and Jami Walderman, who were representing the cheerleading team at this meeting. He also introduced the Head Men’s Basketball Coach, Tony Ingle, and players Tommy Thompson and Georgy Joseph, who represented the men’s basketball team. He noted that last year, the team won an NCAA record 26 games in a row and won more games than any team in the State of Georgia has ever won in a single season. Coach Ingle was named the NCAA Division II Coach of the Year, and player Terrence Hill was recognized as both the tournament MVP and an All-American for the basketball program. In closing, Dr. Wicker thanked the Regents for recognizing KSU’s national championship teams.

Next, the Chancellor called upon President Frank D. Brown to discuss the national champions at Columbus State University (“CSU”).

President Brown greeted the Regents and introduced the following members of the CSU Cheerleading Squad: Jessica Farrow, Nathan Norton, Britt Oxford, and Jessica Trainham. CSU’s small coed cheerleading squad won the Universal Cheerleading Association’s (“UCA”) Division II National Championship. President Brown noted that the large coed squad has finished in the top five for five consecutive years as well. In closing, he recognized the Head Cheer Coach, James “Jimbo” Davis.

Chancellor Meredith then called upon President Beheruz N. Sethna of the University of West Georgia (“UWG”) to discuss the fourth consecutive UCA championship win for its coed cheerleading squad.

President Sethna stated that in 1997, the UWG Cheerleading Squad had a terrible vehicular accident on the way to a meet. The coach and two cheerleaders were killed in the accident, and the team was devastated. He said that the team’s ability to recover from that tragedy is indicative of the spirit of UWG and is a tribute to Head Coach Sherry Cooney. President Sethna asked Coach Cooney to introduce the team members in attendance at the meeting.

Coach Cooney greeted the Regents and introduced the following cheerleaders: Molly Costello, Candice Abney, Gabe Delgado, and Ryan McKinnon. She said there are 16 students who cheer on UWG’s coed squad. She noted that the all-girl squad placed second last year and won the

championship two years ago. Following her introductions, President Sethna showed the Regents a brief video clip of the coed team competing.

The Chancellor next called upon President Michael F. Adams of the University of Georgia (“UGA”) to introduce the UGA women’s equestrian team, which won the national Varsity Equestrian Championships for the past two years.

President Adams introduced the Associate Athletic Director for Student Services and Senior Woman Administrator, Carla Greene Williams. He noted that Ms. Williams had been working at Vanderbilt University but is a graduate of UGA. He also introduced Head Coach Meghan Boenig, who has built the equestrian program into national championship quality. The current equestrian team is undefeated, and this year’s national championships will be held in Santa Fe, New Mexico, in the coming weeks. President Adams noted that the students were taking midterms at this time and were therefore unable to attend the meeting. He said that he was proud not only of the fine riders on the team, but also of the fine horses. For example, in 2004, the UGA stable acquired retired race horse Level Sands, whose pedigree includes Kentucky Derby winner Secretariat. Level Sands was named the 2003 Stallion of the Year by the Georgia Thoroughbred Owners and Breeders Association. The equestrian team has also been strongly supported by the School of Veterinary Medicine. (Level Sands sired the first foal in the equestrian breeding program last year.) President Adams stated that the equestrian program also has agricultural implications. In closing, he introduced a brief video of an equestrian performance.

Chancellor Meredith then called upon President Ronald M. Zaccari of Valdosta State University (“VSU”) to introduce the VSU football team.

President Zaccari said he was pleased to introduce VSU’s Athletic Director, Herb Reinhard. VSU won the NCAA Division II national championship. Additionally, Head Coach Chris Hatcher was named Division II National Coach of the Year by the American Football Coaches Association and has been invited to coach at the 2005 Hula Bowl. All of these honors have brought national recognition to VSU and the University System of Georgia. President Zaccari then showed the Regents a brief video clip.

Next, the Chancellor introduced the Vice President of Student Affairs of the Georgia Institute of Technology (“GIT”), William Schafer.

Dr. Schafer extended greetings from President G. Wayne Clough, who was out of town on that day. He said that he had an unusual national champion to introduce to the Board at this meeting. In fall 2004, GIT opened its Campus Recreation Center, which had recently won two national awards. As part of campus recreation, sports clubs play an important role for students, faculty, and staff at the university. Dr. Schafer announced that GIT has a national championship skydiving team. The Georgia Tech Sport Parachute Club (the “Club”) has been active since 1969, and since that time, it

has been one of the most successful civilian teams to compete with the U.S. military academies. Dr. Schafer said that many world-renowned skydivers started the sport as GIT students. Former members of the Club have gone on to win gold, silver, and bronze medals in both national and international competitions. Former members have also been involved in setting world records for the largest freefall formation. In late December 2004, the Club beat the Air Force Academy at the National Collegiate Skydiving Championships to become the first nonmilitary school to win in almost a decade. Dr. Schafer introduced the Sport Club Coordinator, April Goode. He then introduced Jonathan Bartlett (B.S., 2004), Craig Sellers (B.S., 2002), Brian Timberlake (M.S. and Ph.D., 2004), and Allison Yasitis, who will receive her B.S. and M.S. in Public Policy in May 2005.

Chair Wooten thanked all of the representatives from the national championship teams. He said it was quite a diverse and excellent group of athletes and students and that the Regents were very proud of them all.

GENERAL ASSEMBLY REPORT

Chair Wooten called upon the Senior Vice Chancellor for External Activities and Facilities, Thomas E. Daniel, to update the Regents on the 2005 legislative session.

Mr. Daniel stated that this report would be a good report, measured in both quantity and quality. He reported that over 1,060 bills and over 790 resolutions had been reviewed so far. Over 1,850 proposals were in play at this time. Mr. Daniel thanked the Chancellor for his extra efforts on behalf of the Board of Regents this year. With regard to the amended fiscal year 2005 budget, he reported that the conferees had signed the document, which was awaiting the signature of Governor Sonny Perdue. All of the Governor's recommendations were approved by the General Assembly. Mr. Daniel noted that the amended fiscal year 2005 budget includes \$9.4 million in reappropriated lapsed funds, including \$175,000 for the Carl Vinson Institute of Government at the University of Georgia ("UGA") to do a study on the Fulton County government and \$500,000 for the Georgia Tech Research Institute ("GTRI") to correct a calculation error. The amended budget also includes design funds for the next four projects on the major capital outlay list for Macon State College ("MSC"), Fort Valley State University ("FVSU"), Georgia State University ("GSU"), and UGA.

Mr. Daniel next discussed the fiscal year 2006 budget, which had been approved by the Georgia House of Representatives. Included in the House budget is \$103.4 million in formula funding and \$17.7 million for a 2% percent salary increase. Also included are construction funds for the next four projects on the major capital list at Georgia College & State University ("GCSU"), the University of West Georgia ("UWG"), North Georgia College & State University ("NGCSU"), and Savannah State University ("SSU"). In addition, the House budget includes construction funds for three Georgia Public Library System ("GPLS") libraries, design funds for the nanotechnology building at GIT, and \$64.5 million in major repair and renovation ("MRR") funds. Mr. Daniel noted that there is a \$500,000 difference in the House budget and the budget originally recommended by the

Governor, but he said that he is very encouraged that the Senate has agreed to restore that money. The House changes to the fiscal year 2006 budget include the restoration of \$99,409 for the Small Business Development Center at UGA, the addition of \$60,000 for the UGA experiment station in Griffin, the addition of \$200,000 for a GIT study of the Atlanta Belt Line, and the elimination of \$375,000 for the Georgia Academy of Mathematics, Engineering, and Science (“GAMES”) at Middle Georgia College (“MGC”). Overall, the House reduced the University System’s base budget by \$1.9 million, which the Senate intends to restore. The House also added construction funds for two libraries in Gilmer and Hall Counties, as well as construction funds for the Rock Eagle 4-H Center and six minor capital projects at GIT, Georgia Southern University (“GSOU”), Waycross College (“WC”), Kennesaw State University (“KSU”), the Medical College of Georgia (“MCG”), and Gainesville College (“GVC”). One significant action in the House version of the fiscal year 2006 budget was that the House expressed its intent to combine the University System of Georgia health benefits plans with the state’s health benefits plan. Mr. Daniel stated that the House did this in a very unorthodox way using language in the tracking sheet. This is something the University System Office staff feel requires much more discussion and attention. The Senate subcommittee agrees with this sentiment, and its recommendation to the Senate will be to return to the Governor’s position, which means that this issue will be reviewed as part of the conference committee discussion.

Next, Mr. Daniel discussed specific legislation. He reported that House Bill 340, the Donor Records Bill, passed the Georgia House of Representatives on March 3, 2005, by a vote of 129-30 and is pending in the Senate Higher Education Committee. Committee Chair Seth Harp has expressed his support for this bill.

Senate Bill 250 is the bill that would reauthorize the Georgia Education Authority (Universities), or GEA(U). Mr. Daniel stated that the University System Office staff support the reauthorization of GEA(U) but differ with the authors of this bill and the language contained in the bill, which would eliminate the use of university foundations as a third option for capital construction. This bill was passed by the Senate Finance Committee on March 3, 2005, and was pending in the Senate Rules Committee at the time of this meeting.

Senate Resolution 33 is the resolution calling for the establishment of a new System institution in Gwinnett County. Mr. Daniel reported that the resolution had been passed by the Senate and the House Higher Education Committee and was pending in the House Rules Committee.

Mr. Daniel noted that the Georgia House of Representatives was in recess until Thursday, March 10, 2005, in order to allow the Senate time to work on its version of the fiscal year 2006 budget during the recess. He added that there are only 12 days remaining in the legislative session and that the staff would be very busy. In closing, Mr. Daniel thanked the Regents for their advocacy on behalf of the University System of Georgia.

Seeing that there were no questions for Mr. Daniel, at approximately 1:35 p.m., Chair Wooten

adjourned the Regents into their regular Committee meetings. He noted that due to the workshop nature of this month's meeting, the Committee meeting agendas had been limited to only the most time-sensitive items.

WORKSHOP: TWO-YEAR AND STATE COLLEGE ADMISSIONS

At approximately 1:45 p.m., Chair Wooten reconvened the full Board meeting for a workshop on two-year and state college admissions, as well as potential policy changes and the possible ramifications of such changes if the Board sees fit to make them. He called upon the Chancellor to begin the discussion.

Chancellor Meredith stated that the System continues to struggle with issues of access and how to increase opportunities for students to attend college in Georgia. At the same time, the System continues to raise the level of quality at its institutions and in the high schools that feed into it. Educational attainment in the State of Georgia is not where it needs to be, said the Chancellor, nor is it where it needs to be nationally. At this meeting, he would give the Regents information to illustrate this point and then introduce a proposal for Board consideration at the April meeting.

Too few students graduate from high school, said the Chancellor. Moreover, too few students enroll in and graduate from college. Of every 100 ninth-graders in Georgia, only 56 graduate from high school. Of that 54, 34 enroll in college, 24 are retained as sophomores, and only 13 graduate within six years. Nationally, 68 of every 100 ninth-graders graduate from high school. Of that 68, 40 enroll in college, 27 are retained as sophomores, and 18 graduate within six years. So, Georgia lags behind the national average. Meanwhile, the U.S. high school graduation rate ranks sixteenth out of the 20 most industrialized countries. Only Sweden, Luxembourg, Spain, and the Slovak Republic rank lower. Of the 21 nations in the Third International Science and Mathematics Study, U.S. high school seniors outperformed students only from Cyprus and South Africa. The Chancellor had recently been a delegate to the National Governors Association ("NGA"), where they discussed redesigning the American high school. The Associate Vice Chancellor for Academic Affairs and Co-Facilitator of the Georgia P-16 Initiative, Jan Kettlewell, was also in attendance, as was the Chief Deputy State Superintendent of the Georgia Department of Education (the "DOE"), Stuart Bennett, and 44 of 50 state governors. The governors were very concerned about the fact that U.S. high school students are not internationally competitive, which makes it hard for the nation to be competitive at the postsecondary level as well.

The Chancellor said that the University System of Georgia has several current initiatives to close the gap. He had recently kicked off the Education GO Get It initiative ("GO"), and there are also many initiatives under the umbrella of the P-16 Initiative in partnership with DOE and the Department of Technical and Adult Education ("DTAE"). Georgia Performance Standards ("GPS") is the new curriculum for the Georgia public schools. The Partnership for Reform in Science and Mathematics ("PRISM") initiative is funded by a grant from the National Science Foundation. The PRISM grant

works with four regions of the state, including four universities and two of the two-year colleges, to improve the teaching of science and math in the state.

To improve retention rates, the System has freshman experience programs, learning communities, midterm assessments, and improved advising. To improve graduation rates, the Chancellor recently appointed a graduation rate task force. The System also administers the National Survey of Student Engagement (“NSSE”) and the Community College Survey of Student Engagement (“CCSSE”) to examine retention and graduation issues. So, the System is working hard to improve retention and graduation at the postsecondary level both on its own and in partnership with the DOE and DTAE.

Chancellor Meredith noted that the two-year colleges and state colleges have specific access missions. The Board of Regents may review admissions criteria to capitalize on the important role of these colleges in terms of access to higher education. Current admissions criteria vary by sector but are driven by the Freshman Index (“FI”) and minimum SAT or American College Testing (“ACT”) scores. The FI is a composite of high school grade point average (“GPA”) and the SAT or ACT score. Within two-year and state collegesectors, admissions criteria vary by type of institution and type of degree. This is based upon the conscious channeling of students into sectors in which they will have the best chance to succeed as well as a conscious effort to maximize effective use of System resources. The FI has historically been the best predictor of college success, and freshmen with a low probability of success are rarely admitted to a given sector.

The current two-year and state college admissions criteria include having a high school diploma or General Educational Development (“GED”) credential. Traditional freshman admissions criteria include an SAT scores greater than or equal to 330 verbal and 310 math or ACT scores greater than or equal to 12 English and 14 Math. The FI requirement is 1830 or greater, and students are required to have completed the college preparatory curriculum (“CPC”). The two-year colleges may admit as many as one-third of their students as limited admissions or presidential exceptions, meaning they can bypass these particular requirements.

The Chancellor said that one reason to keep the SAT/ACT requirement for admission to the two-year and state colleges is to raise the expectations of high school students and encourage them to prepare for college. Another reason is because if students score above a certain level, they may be exempt from placement testing for remediation. However, there are also reasons to stop using the SAT/ACT for admissions to these sectors. One reason is to maximize access for students. The University System of Georgia is one of only two state systems requiring SAT/ACT scores for two-year college admissions. Moreover, the SAT/ACT may not predict as well for students requiring remediation. As a consequence, the use of these scores may exclude students who might succeed and may admit students who are not likely to succeed.

Chancellor Meredith suggested for discussion purposes a two-year pilot program for freshman admission at two-year and state colleges. The pilot admissions criteria would include a high school

diploma or GED. He proposed the following combination of admissions criteria: a CPC diploma with a 2.0 GPA, a technical preparatory diploma with a 2.2 GPA, and reduction to only 20% presidential exceptions. All students would still be required to take placement testing. The point is to place increased emphasis on the courses students take in high school and decreased emphasis on SAT/ACT scores. Chancellor Meredith suggested appointing a task force of two-year and state college presidents and others to develop an implementation plan by April 2005. He further recommended evaluating the pilot admissions criteria after two years to determine whether a permanent policy change is warranted. He then opened the floor for Regent discussion.

Regent Jennings agreed that the System needed to broaden access to higher education in the state. He noted, however, that the DTAE colleges now offer some degree programs, and they do not require SAT/ACT scores for admission. He said that perhaps admissions criteria should remain the same and the DTAE could then serve the population of high school students who do not take the tests. He expressed concern about “dumbing down” the two-year and state colleges and remarked that the System had already done a lot of that.

The Chancellor said that Regent Jennings had a good point, but that he did not think that the proposed pilot admissions criteria would necessarily “dumb down” the colleges. DTAE does not offer any degrees that are offered within the University System of Georgia. Rather, DTAE institutions offer certain courses that are transferable to System institution. So, DTAE would have to duplicate even more System courses in order to do so.

Vice Chair Shelnut said that he understood that broadening access by eliminating the SAT/ACT requirement would necessarily increase enrollments at the two-year and state colleges. He asked how much room there is for growth at these institutions.

Chancellor Meredith replied there is some capacity for enrollment growth, but not at all institutions.

Regent Coles asked what happens to the students in these sectors at the end of two years.

The Chancellor responded that all the same requirements for admission to four-year institutions would apply to students matriculating from two-year institutions.

The Associate Vice Chancellor for Planning and Policy Analysis, Cathie Mayes Hudson, stated that students would be held to the same transfer criteria as they are now.

Chancellor Meredith noted that all students have to take the SAT or ACT for admission to a four-year institution.

Regent Coles said that in order to make a decision on this proposal, he needed to understand how to define the success of the pilot admissions criteria.

The Chancellor agreed and said that would be part of the charge of the task force.

Regent Jolly asked whether the two-year and state colleges can project how much enrollments would increase under the proposed admissions criteria.

Dr. Hudson stated that there is no information on this at the System level, though some institutions may be able to provide such information.

Chancellor Meredith stated that the staff have been discussing this with the two-year and state college leadership for a few weeks now.

Regent Hunt asked whether eliminating the SAT/ACT requirement would increase the numbers of students requiring learning support.

The Chancellor responded that he did not know but that he did not expect there would be an immediate effect.

The Senior Vice Chancellor for Academics and Fiscal Affairs, Daniel S. Papp, projected that there would be limited growth in the numbers of students requiring remediation. The GPA requirement should provide some balance to the elimination of the SAT/ACT requirement. Some institutions can track this kind of effect.

Chancellor Meredith said that the combination of adding the GPA requirement and reducing the percentage of presidential exceptions puts far more pressure on high school students to take the appropriate courses and make better grades.

Regent Hunt asked how the two-year and state colleges were responding to this proposal.

Chancellor Meredith responded that the response has been somewhat mixed. Some are very supportive, and others are very nervous.

Regent Jennings asked how many students are currently admitted as presidential exceptions.

Dr. Papp said that it varies by institution from 0% to 33%, with only four or five institutions using the full 33% allowed.

Regent Pittard asked whether admissions criteria in general are moving toward high school performance over measures of raw intellect. He said that he is concerned about the safety net that two-year colleges provide to those students who mature later in life. He asked how eliminating the SAT/ACT requirement would be better than the current admissions requirements.

Chancellor Meredith said that he believes the proposed changes would place more emphasis on what students are doing in high school. The current situation in high schools nationally is not keeping the United States competitive internationally. So, the idea is to place greater emphasis on the high schools and demand more from the students in high school.

Regent Pittard asked whether the data show there is more success for students with intellectual capacity or whether the data show there is more success for students with better work ethics. He noted that there was a recent study on brain maturity and how the brain does not mature in some areas of logic and reason until a person is 25 years old. If the admissions proposal excludes students who do well on the SAT/ACT, that person may now have difficulty getting into the two-year institutions.

The Chancellor responded that if a student is depending upon the SAT/ACT to get into college when he/she did not work hard in high school, there are still presidential exceptions for such students. He said that no president would turn away a student who performed very well on the SAT/ACT.

Regent NeSmith said that some students simply do not test well. He said that as an employer, he would prefer an employee who works hard to overcome such obstacles.

Regent McMillan noted that historically, two-year colleges are supposed to be access points for students who cannot gain admission to a four-year institution for whatever reasons. As the System increases admissions requirements for its four-year and research universities, there is a cohort of students who cannot meet those requirements and will be excluded from such a college experience. Two-year colleges exist for that purpose: to give those students access and an opportunity to move up to the four-year institutions. He agreed that this pilot is a good idea, especially because it is a pilot that allows for adjustment and review after a period of time. He said that he was a bit concerned that some two-year colleges were becoming more elitist because that is a departure from the original intent of the sector.

Chancellor Meredith said that Regent McMillan was exactly right on target. There is always tension between improving quality and maintaining access. The intent of the NGA is to encourage success and achievement at the K-12 level. The national problem is increasing the rigor of the K-12 system. Whether or not this proposal will have the intended effect is unknown.

Chair Wooten remarked that he had enjoyed the discussion and said that he agreed with Regent Jennings' concern that the System should not give false expectations to incoming students who are not prepared that they have a reasonable opportunity of getting a two-year degree or transferring to a four-year institution when they have not applied themselves and may not apply themselves in the future and they have a very mediocre high school performance. He said that he hates to see the System deny access to anyone, but he also would hate to see the System encourage mediocrity at either the high school or college level. There ought to be a certain minimal level of academic

achievement that the System demand be met. He liked the idea of a 20% level of presidential exception because some students may show special potential and may need that opportunity. However, he is worried that there would be an increase of students enrolled who will require learning support. He asked what the current percentage of two-year college students requiring learning support is.

Chancellor Meredith responded that 52% percent of two-year college students in the System require learning support because those students have been filtered from the four-year institutions into the two-year college sector.

Chair Wooten said that he worries that increasing the percentage of students requiring learning support could be discouraging to instructors and other students who do not need learning support.

The Chancellor reminded Chair Wooten that within the proposed admissions standards, incoming students would now have to have a 2.0 high school GPA, which they did not previously have to have.

Regent McMillan asked whether there were any data on the success rates of students who require learning support. He said that it is impossible to get away from the fact that there are large numbers of people who simply had absolutely rotten public school experiences to the point that they did not learn what they should have for whatever reason. There is a large percentage of those people who, given the extra support, can negotiate the college experience and move forward. He stated that we cannot assume that the SAT and ACT are the indicators of academic success. No one is suggesting “dumbing down” the two-year and state college sectors, he said. Rather, public higher education has a responsibility to teach the citizenry. He said even if the numbers of students requiring learning support increase, it is still better than if those students never went to college at all and cost the State of Georgia money in terms of incarceration or welfare. It just makes more sense, he said, to understand that two-year institutions must be the point of access to higher education for many people who, for whatever reasons, have not necessarily previously been academically successful. He noted that the safeguards and criteria in the pilot proposal and the work of the task force will serve an important function and that two years of experiment would not harm the System. He said it seems to him it is worth a try.

Chancellor Meredith said that learning support can only do so much to help young people who have been poorly prepared.

Chair Wooten asked what the success rate for students who come to the two-year colleges requiring learning support is.

The Chancellor asked Dr. Hudson to respond to this question.

Dr. Hudson stated that the System tracks learning support students in a variety of ways and can provide those reports to the Regents. Many students who come in with only a single learning support deficiency in either English, reading, or math do very well and can remediate those deficiencies. Students who come in with all three deficiencies are much less likely to succeed. Retention rates of learning support students lag those of students with no deficiencies somewhat, though they are not that far apart. With regard to three-year graduation rates, learning support students do not do as well as students without deficiencies. So, over time, the staff may want to look at learning support and whether exit rates are set at the right levels.

Chair Wooten asked whether two years will be the proper time to evaluate the success of the proposed pilot admissions criteria or whether it should be more like three years.

Chancellor Meredith replied that the staff have been debating this matter a great deal. They have arrived at two years, but he said it is not rocket science.

Vice Chair Shelnut said that four or five years ago, he sat in on a group discussion between private and public schools about the SAT and how important it is for access to college, how many students were taking it, and so forth. The comments that came out of that discussion indicated that the majority of private school students take the SAT because they know they are college bound. However, a smaller percentage of public school students take the SAT either because they do not feel they are that good at taking tests or because they are intimidated by it. From that standpoint, the SAT may be hindering the masses of students who might otherwise go to college. With regard to Regent McMillan's remarks, he agreed that this pilot program would not disrupt the System. There would still be other admissions criteria in place so there would not be a grave threat of "dumbing down" the two-year and state college sectors.

The Chancellor reiterated that the admissions emphasis would simply shift from the SAT/ACT scores to the high school performance and courses taken.

Vice Chair Shelnut remarked that this would actually give the high school students at large more opportunity for a few years.

Regent Pittard said that he was amazed at how much data is unavailable and that he did not know how to overcome that. The reality is that the data available has to do with progression; that is, going from high school to two-year institutions to four-year institutions. Nevertheless, a student is no worse for having gone to college for only one year, regardless of whether he/she finished or progressed. That person still gains a great deal from that one year in college and his/her life is still improved to some extent. In his opinion, basing success upon whether or not a student progresses is the wrong criteria. He said that his older brother and sister both attended college, but he was the first person in the family to graduate. So, he felt that even the one year his sister attended college should be considered a success. He said that the Board of Regents should encourage students to

enroll in college, not discourage them. He found it troubling that the Board of Regents is trying to affect the curricula of the high schools. The Governor and others are already working on the public K-12 system.

Chancellor Meredith stated that the Board of Regents is not putting any extra criteria on high school students except the 2.0 GPA requirement. He said that if the state wants change at the K-12 level, then the University System of Georgia should be more demanding. Those who have always tried to change education from the first grade up have worn out around the third grade. If the college standards are higher, the high schools must raise their standards to meet that demand. So, in this way, improvement goes down easier than it comes up.

Regent Jolly said that the Regents would like to see access increase, but they also have concerns about quality. He said it would be prudent for the Board of Regents to recommend to those institutions where presidential exceptions are not being utilized that they should be utilized in order to increase access that way. He noted that the graduates of his local two-year college performed better when they progressed to the four-year colleges than they performed at the two-year college. He did not know how prevalent the phenomenon is, but he felt that two-year college graduates are well equipped to pursue a baccalaureate education. So, he would be in favor of anything the Board does to increase access.

The Chancellor said that the Regents would hear more about the Education GO Get It initiative and GeorgiaCollege411.org at the next day's meeting. He said that many have inquired why the System is trying to attract more students when it already has overwhelming enrollments. He said that it is a wonderful problem for the State of Georgia to have the University System of Georgia at capacity or even over capacity because that shows that increasing numbers of Georgia's citizens want higher education. The System will figure out what to do with those students if it can only attract them. The problem has historically been attracting students. He added that recent data show that the percentage of students in two-year colleges who are traditional college age (i.e., 18 to 24 years old) is now at 42%, whereas it was around 32% a decade ago. So, more students are going to two-year colleges right out of high school, which was not the trend for a long time. He said that this is a good sign.

Regent Leebern asked what the State Superintendent of Schools and Chief Executive Officer for the State Board of Education, Kathy Cox, was doing to rectify the state's deficiencies in science and mathematics education.

Chancellor Meredith responded that the University System of Georgia was assisting in this effort through the PRISM initiative. The Georgia public schools have beefed up both their math and science components.

Dr. Papp added that the Board's Academic Advisory Committee for Mathematics very recently wrote a tremendously laudatory set of commentaries on the high school Georgia performance

standards for mathematics.

The Chancellor added that the System is changing its ways of preparing teachers of math and science, primarily through the PRISM initiative.

Regent Leebern stated that improving education at the K-12 level will help a lot. By design, the System two-year institutions have a learning support mission, which costs less than the social cost of not having those students in school. He asked Dr. Hudson how long it would take to collect data addressing the progress being made with these students.

Dr. Hudson responded that the staff could provide some baseline data about this year sometime early in the fall of next year. There is a lot of information that she could compile for the Regents.

Regent Leebern said that many students ask when the Board will eliminate the Regents' Test. He suggested that this exam may be an obstacle for the System's goal of access.

The Chancellor said that the staff are struggling with an "academic disconnect." Students can gain admission to System institutions, take courses and perform well, but they often cannot pass the Regents' Test, which is supposed to measure basic competencies. Something is wrong, he said, because they ought to be able to pass the test at that point. So, the staff are looking into this matter. He noted that the staff struggled with whether to propose throwing the test out altogether, but they cannot figure out whether the problem is the exam or what is being taught in the courses. Something is obviously amiss.

Regent Cater noted that the Regents do not have these answers, and yet, students are expected to pass the test. So, there is a problem somewhere.

Chancellor Meredith agreed.

Regent Coles asked whether part of the problem with the Regents' Test is the large written portion of the test. He said there is a question whether high school or even college students are really learning how to write very well, and this is the major obstacle in passing the exam.

Dr. Papp responded that the written part of the exam is a significant part of the problem.

Regent Coles asked whether the Regents' Test had not been expanded in recent years to give more credit to the non-written portion of the test.

Dr. Papp replied that students who earn above a certain score on the SAT/ACT no longer have to take the Regents' Test. However, the writing portion of the Regents' Test does create quite a few problems for many students. This may be due to issues of class size. The tendency is that when

classes are larger, there are less writing assignments. Therefore, students are not writing as much as perhaps they should in order to prepare for the Regents' Test.

The Chancellor said that the last three years of budget cuts have resulted in institutions with not enough faculty to do the job, larger class sizes, increased numbers of part-time faculty, and other ramifications. He said that he had hoped to have the data warehouse running by now so that all sorts of data would be readily available from the institutions and the System level. However, the budget cuts took away the funding for the data warehouse.

Regent NeSmith said that the funding partners must be part of the effort to improve access. He said he was not sure where they stood on the level of education they wanted for the citizens of the State of Georgia. He hopes that they will hear this discussion and give the Regents some guidance and funding.

Regent Cleveland asked whether the Chancellor expects enrollments at the two-year and state colleges to increase if the Board approves the pilot admissions standards.

Chancellor Meredith said that he does not expect the enrollments to increase significantly. Rather, he hopes the students who do enroll will be better prepared.

Regent Cleveland said the real issue is really how to get freshmen to stay until graduation, particularly freshmen with learning support needs. He said the Board need to look at what the System must do to strengthen its learning support programs and other programs that improve student retention. He said it is not only important to get people into college, but also to get them to graduate.

The Chancellor said that this was a very good point and that the staff are looking at whether the learning support programs are as effective as they could and should be.

Chair Wooten asked what percentage of Georgia high school seniors currently have the 2.0 GPA that the pilot admissions standards would require.

Chancellor Meredith said that he did not know, but the staff are gathering that data.

Chair Wooten next asked how many high school students are going to college and how many students do not even apply to college.

The Chancellor said that he did not know. Answering such questions would require gathering information from institutions outside of the University System of Georgia. He noted that participants at the NGA conference discussed tracking students from elementary school through college to try to identify what experiences lead to success.

If it has been determined that the SAT/ACT is not a good a predictor for success in two-year colleges, asked Chair Wooten, then is it a good predictor for success in four-year colleges?

Chancellor Meredith replied that the SAT/ACT is still a good predictor for success at the four-year college level.

Regent Tucker asked whether the proposal was to eliminate students' taking the SAT/ACT or to eliminate using that score for two-year and state college admissions.

The Chancellor stated that a student would not have to take the SAT/ACT to get into a two-year or state college. However, many students will still take the test because they have a desire to be admitted to a four-year institution or because they want to opt out of learning support placement testing.

Regent Tucker said that he believes it would be a mistake to let a student into the University System of Georgia without even attempting to take the SAT/ACT.

Seeing that there were no further questions or comments, Chancellor Meredith thanked the Regents for their helpful comments. He said that the staff would continue to explore the options pertaining to this issue and would return to the Board for approval in April 2005.

At approximately 2:45 p.m., Chair Wooten recessed the meeting until 9:00 a.m. Wednesday, March 9, 2005.

CALL TO ORDER

The Board of Regents of the University System of Georgia met again on Wednesday, March 9, 2005, in the Board Room, room 7007, 270 Washington St., S.W., seventh floor. The Chair of the Board, Regent Joel O. Wooten, Jr., called the meeting to order at 9:00 a.m. Present on Wednesday, in addition to Chair Wooten, were Vice Chair J. Timothy Shelnut and Regents Connie Cater, William H. Cleveland, Michael J. Coles, Joe Frank Harris, Julie Hunt, W. Mansfield Jennings, Jr., James R. Jolly, Donald M. Leebern, Jr., Elridge W. McMillan, Martin W. NeSmith, Patrick S. Pittard, Doreen Stiles Poitevint, and Wanda Yancey Rodwell.

INVOCATION

The invocation was given on Wednesday, March 9, 2005, by Regent Doreen Stiles Poitevint.

ATTENDANCE REPORT

The attendance report was read on Wednesday, March 9, 2005, by Secretary Gail S. Weber, who announced that Regents Hugh A. Carter, Jr., Richard L. Tucker, and Allan Vigil had asked for and been given permission to be absent on that day.

WELCOME TO GUESTS FROM CHINA

Chair Wooten called upon the Chancellor to make an introduction to the Board.

Chancellor Meredith noted that each of the Regents had been given a textbook titled *American Foreign Policy: History, Politics, and Policy*, written by the Senior Vice Chancellor for Academics and Fiscal Affairs, Daniel S. Papp, and two coauthors. He complimented Dr. Papp for his dedication to academic research and writing and congratulated him on this achievement. The Chancellor then introduced his student mentee this semester from Georgia College & State University. Brandie Tatum is a freshman psychology major from Canton. The Chancellor welcomed her to the meeting.

Chair Wooten said that he was pleased to welcome President Michael L. Hanes of Georgia Southwestern State University (“GSSU”) in Americus. President Hanes has served as President of GSSU since 1996. GSSU is the host institution for the Center for Asian Studies, a University System of Georgia recognized center for teaching and research. President Hanes is accompanied by GSSU’s Vice President for Academic Affairs, Cathy L. Rozmus, and special guests from China.

President Hanes greeted the Regents and stated that GSSU has a long tradition of involvement in international studies as well as student and faculty exchange programs. The campus is well known to many international students, and the student body includes representatives of more than three dozen nations. The guests at this meeting were from two institutions in China. Together, they are participating in a collaborative project sponsored by the American Association of State Colleges and Universities (“AASCU”). In fact, GSSU is one of ten American institutions invited to participate in this project, known as the Extended Sino-American Leadership Training Project (“EXSALT”). President Hanes introduced Vice President Ling, who is the Chief Academic Affairs Officer of Nanjing University of Economics. He also introduced Vice President Lu, who is the Chief Academic Affairs Officer of Nanjing University of Information Science and Technology. He then asked Dr. Rozmus to share a few words about her experience in China as well as the primary objectives of the project.

Dr. Rozmus said that last fall, she was a member of an AASCU delegation that attended an international meeting in China in which universities from around the world were represented. At that meeting, there were more than 70 universities represented from each of several countries, but only 30 AASCU institutions and 5 over American universities. She explained that EXSALT is a joint project between AASCU and the China Education Association for International Exchange. It was

designed for Chinese chief academic officers to travel to the United States and work with a chief academic officer at a U.S. institution. The goals of the program were to develop greater understanding of the role and responsibility of academic leaders in American higher education, to explore innovative ideas and best practices in higher education, and to develop an understanding of the organization and structure of American higher education. Ten American schools were selected to participate with 20 Chinese universities. The universities include the University of Tennessee at Knoxville, the University of Memphis, Central Florida University, and GSSU.

Dr. Rozmus reported that the visitors from China had spent almost five weeks looking at all aspects of GSSU from the business office to student affairs and, of course, academic affairs. They have visited a two-year campus in the System and would visit the Georgia Institute of Technology later that day. They were in attendance at this Board meeting to see the larger picture of the University System of Georgia. She said that AASCU is working on agreements for faculty and student exchanges as well as the AASCU-initiated “1+2+1” programs in which Chinese students spend one year at their Chinese university, two years at an American university, and their final year back in China. At the end of those four years, the student would receive degrees from both institutions. The intention is that such an experience will broaden opportunities for students in Georgia and in China with a better understanding between both cultures. In closing, Dr. Rozmus thanked the Regents for allowing them to visit at this meeting.

Chair Wooten thanked President Hanes and Dr. Rozmus for the recognition they bring to GSSU and the University System of Georgia. He also thanked the special guests from China for attending this meeting. He then called for Committee reports.

EXECUTIVE AND COMPENSATION COMMITTEE

The Executive and Compensation Committee met on Tuesday, March 8, 2005, at approximately 9:30 a.m. in the room 7019, the Chancellor’s Conference Room. Committee members in attendance were Chair Joel O. Wooten, Jr., Vice Chair J. Timothy Shelnut, and Regents Joe Frank Harris, Donald M. Leebern, Jr., Elridge W. McMillan, Patrick S. Pittard, and Doreen Stiles Poitevint. Chair Wooten reported to the Board on Wednesday that the Committee had reviewed one item, which did not require action. That item was as follows:

1. Information Item: Future Issues

The Committee had a general discussion of future issues for the University System of Georgia. No actions were taken.

COMMITTEE ON REAL ESTATE AND FACILITIES

The Committee on Real Estate and Facilities met on Tuesday, March 8, 2005, at approximately

1:35 p.m. in the Board Room. Committee members in attendance were Chair Martin W. NeSmith, Vice Chair Allan Vigil, and Regents Connie Cater, Michael J. Coles, Julie Hunt, W. Mansfield Jennings, Jr., Donald M. Leebern, Jr., and Richard L. Tucker. Chancellor Meredith, Board Chair Joel O. Wooten, Jr., and Regents William H. Cleveland, Joe Frank Harris, James R. Jolly, Elridge W. McMillan, Patrick S. Pittard, Doreen Stiles Poitevint, Wanda Yancey Rodwell, and J. Timothy Shelnut were also in attendance. Chair NeSmith reported to the Board on Wednesday that the Committee had reviewed four items, all of which required action. Items 2 and 3 had been withdrawn by the staff prior to the Committee meeting. Regent NeSmith remarked that the Committee had expressed concern about Senate Bill 250, which in its present form could hinder the System's ability to bring forth facilities to campuses. In light of the burgeoning enrollments, the Committee felt the approval of this bill would be very detrimental to the System's growth. With motion properly made, seconded, and unanimously adopted, the Board approved and authorized the following:

1. Amendment to Rental Agreement, 34 Peachtree Street, Georgia State University

Approved: The Board authorized the execution of an amendment to the rental agreement between SV Atlanta Peachtree Limited Partnership, Landlord, and the Board of Regents, Tenant, for a total of approximately 33,126 square feet at 34 Peachtree Street, Atlanta, Georgia, for the period May 1, 2005, through March 31, 2006, at a monthly total rent of \$46,279.50 (\$555,354 per year annualized/\$16.76 per square foot per year) with an option to renew on a year-to-year basis for three consecutive one-year periods with rent increasing 4% per year for the use of Georgia State University ("GSU").

Authorization to execute this amendment to the rental agreement was delegated to the Vice Chancellor for Facilities.

The terms of this amendment to the rental agreement are subject to review and legal approval of the Office of the Attorney General.

Understandings: In November 2002, the Board approved renting 22,084 square feet in this facility. This amendment will provide an additional 11,042 square feet of office space.

This space will permit the Department of Philosophy to vacate space in the Arts and Humanities Building for renovation and will additionally permit consolidation of the Department of Philosophy, the program in Religious Studies, and the Middle East Center for Peace, Culture, and Development from three different campus locations.

The rent rate per square foot remains the same as the agreement approved in November 2002. All operating expenses are included in the rent rate.

If this agreement is terminated prior to the third renewal term, an additional premature termination

payment will be due to the Landlord for these 11,042 square feet. This payment would be \$174,362.04 during the initial term, decreasing each year to \$58,120.68 during the second renewal term.

All other terms of the rental agreement approved by the Board in November 2002 remain the same.

2. Amendments to Rental Agreement, Technology Square, Georgia Institute of Technology

Withdrawn: This item was withdrawn by the staff prior to the Committee meeting.

3. Rental Agreement, 75 5th Street, Atlanta, Office of Economic Development, Board of Regents

Withdrawn: This item was withdrawn by the staff prior to the Committee meeting.

4. Easement Agreements, Electrical Substation and Electrical Distribution System, Georgia Institute of Technology

Approved: The Board authorized the execution of a nonexclusive easement, an intergovernmental agreement, or other interest necessary for the project from the State of Georgia to the Board of Regents for the installation, operation, and maintenance of underground conduits for electrical transmission and telecommunication lines and for storm and sanitary sewer under property of the State of Georgia between the site of the planned main campus electrical substation and the campus of the Georgia Institute of Technology (“GIT”).

The Board authorized the execution of a nonexclusive easement, or other interest necessary for the project, from Norfolk Southern Railway Company to the Board of Regents for the installation, operation, and maintenance of underground conduits for electrical transmission and telecommunication lines and for storm and sanitary sewer under property of Norfolk Southern Railway Company between the site of the planned main campus electrical substation and the campus of GIT.

The Board authorized the execution of a nonexclusive easement from Carriage House Associates, LP to the Board of Regents for the installation, operation, and maintenance of underground conduits for electrical transmission and telecommunication lines under property of Carriage House Associates, LP between the site of the planned main campus electrical substation and the campus of GIT.

The Board authorized the amendment of an existing sewer easement or granting of a new sewer easement from the Board of Regents (as successor in title) to the City of Atlanta for the replacement and relocation of an existing sewer owned by the City of Atlanta that must be relocated to

accommodate the new electrical substation.

These Board authorizations include the rights granted to the Board of Regents under the easements described in the items above, together with rights granted to the Board of Regents by ordinance of the Board of Aldermen of the City of Atlanta for the purpose of constructing, operating, maintaining, and placing utilities within the sidewalks and streets of the City of Atlanta in the Ground Lease between the Board of Regents, Lessor, and Georgia Tech Facilities, Inc., execution of which was approved by the Board of Regents at its September 2004 meeting.

The terms of these agreements are subject to review and legal approval of the Office of the Attorney General.

Understandings: In August 2004, the Board authorized easements to Georgia Power Company (“Georgia Power”) to align transmission lines on the boundary of the high side and low side substation property. In September 2004, the Board granted an exclusive easement to Georgia Power for the high side of a main campus electrical substation to support GIT. The Board also authorized the execution of a ground lease with Georgia Tech Facilities, Inc. (“GTFAC”) for the low side of a main campus electrical substation to support GIT. The Board also authorized a ground lease, or other appropriate agreements, with GTFAC for the electrical distribution system on the campus of GIT. The Board also authorized the execution of a rental agreement, or other appropriate agreements, from GTFAC for the low side of a main electrical substation and the electrical distribution system.

The railroad easements allow for five borings crossing under the railroad tracks (Norfolk Southern and CSX/State of Georgia): two borings for electrical conduits, one boring for telecommunications conduits, and one boring each for a storm sewer and a sanitary sewer. The Carriage House Associates, LP property easement allows for installation of electrical and telecommunications conduits.

The high side and low side of a main campus electrical substation and the electrical distribution system will modernize obsolete equipment, convert the campus to a single point of service from Georgia Power, and increase electrical services capacity and reliability.

The total anticipated cost is approximately \$34.0 million. If approved, construction is expected to commence in mid-2005 and be substantially completed by early 2007. Once construction is completed, the agreements will be revised to include contractor-certified surveys of the route of the electrical distribution system and a list of equipment assets in place.

5. Easement, Sewer System Extension, University of Georgia, Tifton Campus

Approved: The Board declared approximately 0.158 acre of real property on the campus of the University of Georgia (“UGA”) in Tifton, Georgia, to be no longer advantageously useful to UGA

or the University System of Georgia but only to the extent and for the purpose of granting a nonexclusive easement to the City of Tifton (the “City”) for the installation of a sanitary sewer line.

The Board authorized the execution of a nonexclusive easement with the City for the above-referenced tract of real property.

The Board declared approximately 0.069 acre of real property on the campus of UGA in Tifton to be no longer advantageously useful to UGA or the University System of Georgia but only to the extent and for the purpose of granting a temporary construction easement to the City for installation of a sanitary sewer line.

The Board authorized the execution of a temporary construction easement for the period of construction with the City for the above-referenced tract of real property.

Approval of this nonexclusive easement and temporary construction easement is subject to the City’s obtaining necessary wetlands permit coverage prior to beginning construction.

The terms of these easements are subject to review and legal approval by the Office of the Attorney General.

Note: Regent Julie Hunt recused herself from voting on this item.

Understandings: The City has requested this 20-foot-wide nonexclusive easement for the purpose of installing a sanitary sewer line to serve an adjacent neighborhood.

Consideration for granting these easements is \$650.00.

6. Approval of Georgia Public Telecommunications Commission Agreements

Approved: The Board accepted title to real property from the State of Georgia, subject to a reversion of title to the State of Georgia after 25 years.

The Board subleased certain real property from the Georgia Public Telecommunications Commission (“GPTC”) for a period of 25 years.

The Board accepted title to the towers and equipment from the State of Georgia, subject to a reversion of title to the State of Georgia after 25 years.

The Board authorized an intergovernmental agreement between the Board and GPTC for the use, maintenance, and operation of the real property, towers, and equipment.

A list of all these properties is on file with the University System Office of Facilities.

The terms and conditions of these agreements are subject to review and legal approval of the Office of the Attorney General.

Understandings: In 1997, the Federal Communications Commission (“FCC”) found that digital television (“DTV”) offers an opportunity for television service to promote and preserve free, universally available local broadcast television. In furtherance of this policy, the FCC adopted an aggressive DTV construction schedule. GPTC currently has an extension of the deadline set for noncommercial stations to construct their digital stations to October 2003. GPTC will be requesting a second extension from the FCC.

In the fiscal year 2003 amended appropriations, the General Assembly authorized \$32,120,000 in five-year bonds for use by the Board of Regents for the purpose of the FCC-mandated digital conversion.

Because most of the tower sites are currently titled in the State of Georgia with custody in the Department of Education, the custody of all tower sites that will have bond proceeds expended on them needs to be transferred to the Board of Regents. GPTC will then enter into an intergovernmental management agreement with the Board of Regents under which GPTC will assume control and management of the transmission sites.

Note: *At the conclusion of this Committee meeting, Chair NeSmith made the following statement:*

I appreciate very much [the Senior Vice Chancellor for External Activities and Facilities, Thomas E. Daniel’s] bringing to us a legislative update. I know you have done a lot of work over there, and also, I thank the Chancellor very much. I would like to say regarding Senate Bill 250 that we compliment the legislature on trying to find ways to not only streamline government, but also to make government more efficient. For that, we applaud them very much. However, on Senate Bill 250, we are concerned about all of the ramifications this bill in its current form may have as it relates to the University System and its ability to construct new facilities. Over the past several years, the University System of Georgia and the Board of Regents have spent literally hundreds of man hours trying to find ways to bring facilities in a fast-track method to our University System institutions in order to provide for the tremendous growth in our student enrollment. We have grown dramatically over the past few years, and as you may know, we are projected to add an additional 200,000 students in the next 11 years. So, it is critical that we have ways to bring facilities forth. Working with our staff and working with the different institutions, we think that we have some best practices to work with to form public-private partnerships in order to bring these facilities forward. We think that all of the members of the legislature have not had a chance to hear our side of the story and all the benefits we are providing and how we have made great strides in finding a

better way to bring facilities to the University System. So, I would like to ask that we slow down some on this process and not try to rush this bill through. I would like to ask our [Vice Chancellor for Facilities] and our [Vice Chancellor for Fiscal Affairs] to work with the Governor's chief financial officer and facilities person to find a best way to bring this legislation forward so that we can serve our students, so that we can do it more effectively and efficiently. I know that parts of this bill are good, but it does need to be fine-tuned. [Mr. Daniel], if you would work with them, I would appreciate it very much.

COMMITTEE ON ACADEMIC AFFAIRS

The Committee on Academic Affairs met on Wednesday, March 9, 2005, at approximately 1:43 p.m. in the Board Room. Committee members in attendance were Chair William H. Cleveland, Vice Chair Wanda Yancey Rodwell, and Regents Hugh A. Carter, Jr., Joe Frank Harris, Martin W. Nesmith, J. Timothy Shelnut, and Allan Vigil. Chair Cleveland reported to the Board that the Committee had reviewed one item, which required action. Chancellor Meredith, Board Chair Thomas E. Daniel, and Regents Connie Cater, Michael J. Coles, Julie Hunt, W. Mansfield Jennings, Jr., James R. Jolly, Donald M. Leeburn, Jr., Elridge W. McMillan, Patrick S. Pittard, Doreen Stiles Poitevint, and Richard L. Tucker were also in attendance. That item included 138 regular faculty appointments, which were reviewed and recommended for approval. With motion properly made, seconded, and unanimously adopted, the Board approved and authorized the following:

1. Administrative and Academic Appointments and Personnel Actions, Various System Institutions

Approved: The administrative and academic appointments were reviewed by the Chair of the Committee on Education, Research, and Extension and approved by the Board. The full list of approved appointments is on file with the Office of Faculty Affairs in the Office of Academics and Fiscal Affairs.

WORKSHOP: EDUCATION GO GET IT

After the Committee meeting reports, Chair Wooten called upon the Chancellor to begin the first of this day's workshops.

Chancellor Meredith stated that the State of Georgia has made a commitment to improving the overall educational attainment of its young citizens, but as the Board discussed the previous day, there is still a long way yet to go. At this meeting, the staff would showcase two new programs. The first of these programs is Education GO Get It ("GO"). The Associate Vice Chancellor for Academic Affairs and Co-Facilitator of the Georgia P-16 Initiative, Jan Kettlewell, and the Director of GO, Brian Dominguez, are two stalwarts moving this program forward. Mr. Dominguez would give the first presentation. Following the workshop on GO, the President of the Student Finance

Commission, Shelley C. Nickel, would make a presentation on GACollege411. The Chancellor said that the Regents would be amazed at how these initiatives encourage high school students to go forward into higher education.

Mr. Dominguez greeted the Regents and explained that GO is based upon the belief not only that our greatest natural resource is the minds of our children, as Walt Disney said, but also that it is the job of every Georgian to develop and cultivate this resource— to create a call to action, to “go get it”! Almost one year ago, Chancellor Meredith had a vision, said Mr. Dominguez. The Chancellor saw the opportunity to create the largest partnership ever put together in the State of Georgia to change a mindset. GO is a statewide, public-private partnership that recognizes that Georgia’s economic future rests in creating a more educated Georgia. Only 52% of ninth-graders graduate in four years. At this meeting, Mr. Dominguez would share with the Regents the strategies that GO is pursuing to change that.

Mr. Dominguez stated that GO has a broad-based partnership and is partnering on three levels. At the first level, the GO executive committee consists of the leaders of education, business, government, and community-based organizations who are guiding this effort, including the Chancellor, members of the Board of Regents, the Commissioner of the Department of Adult and Technical Education (“DTAE”), representatives of the Georgia Department of Education (“DOE”), representatives from the Governor’s Office, members of the Southern Regional Education Board (“SREB”), and corporate partners. At the second level, the advisory team consists of front-line thought leaders, such as K-12 principals, superintendents, counselors, and communications directors, as well as University System leaders. The third level is the growing network of organizations that are simply supporting GO through donations, such as Web design or media services, as their part of investing in Georgia education. Some partners have signed actual partnership agreements with GO, while others have simply given their services and others have contacted with GO because of the excitement generated by its kick-off, looking for ways to plug into this statewide partnership focused on changing a mindset.

Next, Mr. Dominguez discussed the GO mindset. He quoted Neil Shorthouse, President and Founder of Communities In Schools, who said, “The question should not be if your child will graduate high school, but where they will go to college.” That means high school graduation needs to be a given, and GO intends to motivate students to make that a reality. Another insight is that students need mentors and need to know how to find a mentor if there is not someone there for them. Of students surveyed, 83% responded that lack of parental involvement is a very serious or somewhat serious public school issue. It is easy to conclude that not all parents are mentors, he said. A final insight is about money. The current mindset is that it is not only that college is out of the question because it is too expensive, he said, but that students can quit high school and start making money now. GO intends to change that mindset so that students will know that their income will be nearly double if they stay in high school and graduate, and if they continue to college, they can earn over a million dollars more over their lifetime.

The GO office is housed in the P-16 Initiative (“P-16”) office of the Board of Regents because of P-16’s mission to work through partnerships to resolve systemic problems in education. Mr. Dominguez explained that GO serves as an extension of the P-16 office because GO seeks to maximize students’ success by enabling and motivating them; GO seeks to help students reach their potential with modules for pre-kindergarten through twelfth-grade students, looking at what it takes for success at each level; GO seeks to support educators by creating a mindset that education is critical; and GO will pay particular attention to populations traditionally underrepresented in education.

In addition to being a partnership, GO is also a brand, said Mr. Dominguez. “What does the GO brand mean?” he asked. He said that just as the Tide brand represents superior cleaning, the GO brand represents a superior quality of life. Just as other campaigns have promoted the idea that seatbelts save lives, the GO campaign promotes the idea that education builds futures. It is a call to action: go get education; you can do it; and there is help for you. This is a brand that partners can adopt, co-brand, or plug into for statewide momentum. So, everywhere in Georgia, GO can reinforce the mindset that education builds futures. GO three campaign strategies: a multimedia public engagement campaign, a variety of grass-roots initiatives, and the pursuit of partnerships. GO’s focus is on high school graduation, college enrollment, and Georgia’s economic prosperity.

Mr. Dominguez stated that GO is striving to accomplish two major goals. The first goal is to graduate 134,000 students by 2020. This is the total number of 18-year-olds predicted to live in Georgia in that year. In other words, the goal is to graduate 100% of the state’s 18-year-olds versus the 60% who now graduate. He stressed that the state cannot afford the cost of high school noncompletion, which is estimated to have a direct economic impact of \$17 billion annually. This goal will require the high school graduation rate to increase 3.3% each year until 2020. The second goal is to increase the number of students who enroll in college so that Georgia leads the nation. Today, only 28% of the state’s college-aged population of 18- to 24-year-olds are enrolled in postsecondary education, while leading states have 48%. That is the GO goal.

To overcome what economists call a partial information problem, the GO media campaign will take the information that people generally believe (i.e., awareness that education is generally a good thing) and turn it into a call to action. Mr. Dominguez said that taking the message to students is critical, but it is also critical to connect with those who influence the students, such as parents, guidance counselors, teachers, and mentors. GO will communicate that students can reach their potential through education. GO will get this message out through advertising and public relations, including radio, television, print, and Internet messages. The GO campaign will create the mindset that it is cool for students to get their education and that mentors can help students realize their dreams through education.

Mr. Dominguez noted that he is often asked how GO is different from existing initiatives. This

public engagement campaign is one reason GO is different. It is essentially advertising and pulling together rather than replacing other initiatives. In other words, all willing programs and resources will be a part of GO and be a part of the GO Web site (www.georgiago.org). GO completed an initial round of advertising development without spending much money about the benefits of college and the money available to get there, thanks to the membership in the 13-state GO Alliance through SREB. Now, GO is creating ads aimed at students earlier in the pipeline to drive home the mindset that students need to stay in school and graduate from high school for a successful and prosperous life. Mr. Dominguez showed the Regents some of the GO ads. They address two of the perceived hurdles of why students are dropping out of the pipeline: money and mentorship. Parents say money is the number one reasons their kids will not go to college, so messages about financial help have enormous appeal. This is one of the reasons that GAcollege411, which the Regents would hear about next, is prominently featured on the GO homepage and is one of GO's strongest partners. The ads also communicate the value of mentors. It assures students that there are mentors out there. It also encourages concerned people in the community to become mentors. Students with mentors who expect them to go to college and who support the effort have a better shot than students who do not.

Next, Mr. Dominguez showed the Regents the homepage of the GO Web site. The site answers the questions of why students should pursue education, why they should graduate from high school, and why they should consider college. It also tells them how they can reach their dreams. It tells parents and mentors how to convey the "stay in school" message to kids. The site showcases and provides a launch pad to partnerships, such as GAcollege411, the Latin American Association, and the United Way. Other features of the site provide lots of resources for Georgia communities, including an area for community partners, extensive data and research for each community, and an area for promotion of upcoming events. He showed the Regents the GO electronic newsletter, which 300 organizations will receive to promote partner programs.

Another way to reach students through multimedia is computer games. The Georgia Institute of Technology ("GIT") is interested in developing an online education game for the GO partnership that would drive home the mindset that high school graduation must be a given. It would be a reality-type game in which students would make choices given certain educational profiles. For example, if a person is a high school dropout and can expect to make a certain amount of money, which car would he/she select from the extremely limited options pictured? Which house or apartment would he/she select based upon his/her high school dropout salary? Research from Texas demonstrates that students, particularly first-generation students, require person-to-person support for completing high school and achieving entry into postsecondary education.

Mr. Dominguez stressed that these grassroots efforts are not a "one size fits all" model, but they can be customized and adopted on a local level. Part of the GO success is connecting, not duplicating, local efforts through tools such as GO kits, a collection of modules for use by parents, community members, teachers, etc. to motivate kids of all ages to stay in school. GO centers are centers at libraries and high schools where students can talk with a real person, use a computer to look at the

Web site, and get a referral for a mentor. GO theatre is a particularly innovative way to get out the message through performances developed by college theater groups to communicate the messages of GO. G-Force is an effort by college students and other volunteers who staff GO centers and who visit middle and high schools to show students that people just like them can graduate from high school and go on to college. GO mini grants are small amounts of seed money (about \$500 each) available to community-based organizations with innovative ideas to reach kids. For example, there is a GO pilot project in Southwest Georgia. The 100 Black Men of Albany received a \$500 mini grant as a part of this pilot. With the money, they conducted four workshops, two for parents and two for students, in which a high school counselor, a college financial aid counselor, a nurse, and a college recruiter spoke. Students were encouraged to attend college campus visits and SAT preparation workshops. Students and parents reviewed GO kits, and the 100 Black Men of Albany had a little fun giving students GO backpacks. Mr. Dominguez showed the Regents a picture of what a GO center might look like, branding existing high school counseling or career centers or areas in public libraries. He also showed them a picture of the G-force volunteer college students in Texas in their GO-branded t-shirts, who serve as peer mentors having just gone through high school graduation and college enrollment.

GO is first and foremost a partnership, stressed Mr. Dominguez. So, creating additional partnerships at every level is a core strategy. The growing GO network of partners contains over 155 members. GO has categorized these partners into five sectors: education, government, faith-based, community-based, and corporate. All are working together to make GO a success, and he said, there almost is not a day that goes by that GO does not add new partners. For example, churches are providing statewide contacts for distribution of the GO kits and Web site information, and the United Way will provide tutoring, substance abuse counseling, and other forms of assistance to students who are referred from GO.

Mr. Dominguez said that GO was kicked-off statewide on February 16, 2005. Six communities have been selected for the second phase of the GO rollout: Atlanta, Savannah, Columbus, Augusta, Macon, and Athens. Eventually, there will be kick-offs in almost every city in Georgia. Prior to kick-off, community summit meetings are held. There are six objectives for these meetings: 1) to provide local conveners with GO history, objectives, strategies, and components; 2) to reaffirm GO commitment to showcase local efforts through a partnership, not to duplicate or recreate; 3) to identify local barriers to school success; 4) to discuss GO and local community collective goals, identifying resources and services to remove barriers; 5) to identify local liaisons to interface with GO state office for kick-off and post-kick-off activities; and 6) to develop Community plans to continue the momentum post-kickoff.

There are a number of organizations that would like to participate on an executive committee level and on an advisory committee level, said Mr. Dominguez. So, a membership subcommittee has been established to identify some principles and to determine ways to move forward in a sustainable way. At the state level, GO has a development subcommittee to pursue additional funding. GO is already

engaging in a number of exploratory conversations with some agencies and foundations. He explained that next, he plans to expand GO into the second, third, and fourth tiers of cities; to expand the media and grassroots efforts; and to develop a sustainable partnership to achieve the long-term goal of creating a more educated Georgia. In closing, Mr. Dominguez said that he is delighted that the Board of Regents is a partner in GO and asked whether there were any questions or comments.

Seeing that there were no questions or comments, Chair Wooten thanked him for his presentation.

WORKSHOP: GACOLLEGE411

Next, the President of the Georgia Student Finance Commission (“GSFC”), Shelley C. Nickel, made a presentation to the Board about GAcollge411, a Web site that provides all the tools and resources students need to plan their high school education to meet the entrance requirements of colleges and universities in the State of Georgia. She greeted the Regents and introduced the Assistant Vice Chancellor for Information Technology, Kris Biesinger, who is temporarily working with GSFC as Project Manager for GAcollge411. Ms. Nickel noted that she herself formerly served the University System of Georgia as Special Assistant to the Chancellor. In that capacity, she had attended for a meeting across many educational entities in the state about providing a mentor Web site for students to plan, apply, and pay for college. Representatives from North Carolina were invited as well because North Carolina has similar demographics to Georgia. Not enough students in North Carolina graduate from high school and pursue postsecondary education. In cooperation with Xap Corporation (“Xap”), North Carolina established a Web site that serves as a portal to help provide more access for students to go to college, and she said that this is a great model for Georgia to consider as well.

Ms. Nickel stated that she had served on a joint study commission for the HOPE Scholarship program (“HOPE”). As a result of the commission’s work, last year, the Georgia General Assembly passed House Bill 1325, which provided another opportunity for GSFC to encourage college enrollment. As part of H.B. 1325, the high school grade point average (“GPA”) calculation was changed, requiring GSFC to calculate the new GPA. As a result, GSFC needed a mechanism to electronically transmit high school transcripts to it in order to be able to do this. The new Web site, www.GAcollge411.org, can do this as well as many other functionalities. When Ms. Nickel asked Chancellor Meredith to let her “borrow” Dr. Biesinger to develop this Web site, he reluctantly agreed. Ms. Nickel remarked that Dr. Biesinger had done a remarkable job developing the Web site. GSFC signed a contract with Xap in July 2004, and the Web site was officially launched on February 14, 2005. Dr. Biesinger was responsible for much of the quick development, noted Ms. Nickel, thanking her for her hard work.

One of the greatest things about GAcollge411 is that it is a partnership, said Ms. Nickel. It is a partnership among the University System of Georgia, GSFC, the Office of the Governor, the Georgia Department of Education (“DOE”), The Georgia Foundation for Independent Colleges, Inc.

("GFIC"), the Georgia School Counselors Association ("GSCA"), the Georgia Office of Treasury and Fiscal Services ("OTFS"), Georgia Public Broadcasting ("GPB"), the Department of Technical and Adult Education ("DTAE"), the Georgia Professional Standards Commission ("PSC"), and the Georgia Public Library Service ("GPLS"). Representatives from these partners have been working on this project for eight months. Ms. Nickel noted that the Web site was launched in February 2005 with some functionality, but the site will be fully functional in July 2005. The name of the program came out of the work of focus groups across the state. Ms. Nickel explained that "411" is a colloquialism often used by young people as a synonym for information.

Dr. Biesinger greeted the Regents and said that she was pleased to speak to them about GAcademy411, which helps students plan, apply, and pay for college. She noted that the Web site now has over 3,000 student accounts, which is remarkable in light of the fact that there has not yet been a lot of high-profile marketing. She then gave the Regents a quick tour of the Web site, noting which features were now available and which ones would be available this summer. Part of the reason for launching a site with partial functionality was to launch it simultaneously with the University System of Georgia's Education GO Get It initiative ("GO"). Since GO works with community groups to keep students in school and GAcademy411 works with groups to increase awareness of what college affords students and how to get into college in a more simplified manner, it made sense that the two complementary initiatives would go live at the same time. Since GO was positioned to launch in early 2005, GAcademy411 worked with its vendor to move up its launch date, too. That is why there will be a later launching of the fully functional Web site.

A person does not have to create an account to use some of the functionality of the Web site, explained Dr. Biesinger. However, because the site is very integrated, a person must create an account to use all of its features and in order to resume where one left off the last time. A person's account is the management center of everything he/she does on the Web site. The account is personal and private, and no one has access to that information without the person's permission. From an account, a student can identify institutions in which he/she is interested and ask those institutions to recruit him/her. Transcripts and applications will also be available on the Web site.

In the Career section of the Web site, Dr. Biesinger noted that the Web site provides students with an assessment survey to find out what careers may be most appropriate for their interests. They are then provided with detailed information about those careers, salaries associated with those careers, and the kind of education required to prepare for those careers. There are also links to all the institutions in the State of Georgia that provide those types of education.

The Student Planner section of the Web site has several components. Most colleges in Georgia require students to take some sort of entrance examination to be admitted. GAcademy411 offers comprehensive free test preparation courses, tutorials, and practice exams for the SAT, American College Testing ("ACT"), and Graduate Record Examinations® ("GRE"). Dr. Biesinger demonstrated how to use this section of the Web site and noted that this component also provides training for the

SAT essay component, which is being administered for the first time in March 2005. There are two other components of the Student Planner section. The Add Your Counselor component allows a high school counselor or other mentor to view a student's information to assist him/her in planning and applying for college. Dr. Biesinger noted that the Web site included tutorials in Spanish for students for whom English is a second language. The Student Planner Timeline component of the Student Planner section provides a timeline for planning for college with the tasks a student needs to be completing from the ninth grade through to a student's acceptance to college. This feature helps students compare their courses with the admissions requirements of their preferred higher education institutions to determine how prepared they are to enter those institutions.

The GA Colleges section of the Web site is the most highly used component of the GAcollege411 Web site, stated Dr. Biesinger. This section is in which all of the postsecondary institutions in the state can be compared to one another and be sorted across a number of categories. For example, a person can look at institutions in terms of student-faculty ratios, tuition and costs, etc. The information available in this section is derived from a database called Thomas Peterson's ("Peterson's") guide. All University System of Georgia institutions provide information to Peterson's on an annual basis. That information is imported into the GAcollege411 database in a consistent format in order to make it easy for students to find the same kinds of information across multiple institutions. Moreover, institutions may update this information at any time.

Dr. Biesinger noted that the Applications & Transcripts section of the Web site is not yet operational. This section is where the common online application to all System institutions will be available in July 2005. Electronic transcripts will begin to come available at that time as well. She explained that there are 11 different student information systems being used by the public high schools in the state. The transcript component will also include transcripts from private high schools. Therefore, the Web developers must create a mechanism whereby extractions of transcript data are uploaded to a server and made available for release by students when they apply to colleges. There will also be an integration with the college student information systems so that they may electronically transmit data. So, this component of the Web site is an extensive undertaking and will begin to emerge as systems become available.

The next section of the Web site is called Paying for College. This is in large part the work that GSFC does on a daily basis. GSFC provides information to Georgia citizens about financial aid, such as loans, grants, and scholarships. That information is provided through this site, and by fall 2005, online financial aid applications will also be made available. Students will be able to check the status of their loans and make payments online, too. Dr. Biesinger noted that the site includes tools to help students with responsible borrowing so that they can look at their career goals, educational requirements, and reasonable loan amounts.

The GAcollege411 site also includes a GA College Savings Plan section, in which people can learn more about the Georgia Higher Education Savings Plan, also known as the 529 Plan. The final section

of the Web site is the Adult Learner section, which is aimed at students who may not have finished high school or perhaps dropped out of college. This section attends to the needs of those students to encourage them to get back into school. This is a fairly unique approach that will employ a variety of resources. In closing, Dr. Biesinger reminded the Regents that the GAcollge411 Web site is a work in progress not only because it is not yet fully operational, but also because it aims to grow into a one-stop educational site for Georgia. Right now, its focus is on the high school and undergraduate college populations; however, the program will grow to include other postsecondary educational opportunities, such as graduate school and continuing education.

Ms. Nickel thanked the Regents for this opportunity to give them the “411” on college in Georgia.

Chair Wooten asked whether the Regents had any questions or comments.

Regent NeSmith said that he had a question pertaining to the previous presentation on the Georgia GO Get It initiative (“GO”). He asked the Director of GO, Brian Dominguez, if this initiative will be ongoing and who is funding it.

Mr. Dominguez responded that GO is a long-range plan with goals and stages through 2020. The funding at this time is primarily through the Board of Regents. However, a number of partners have come to the table with alternative funding and in-kind donations, such as staffing and pro bono services.

Regent Coles asked Dr. Biesinger who is the customer for GAcollge411.

Dr. Besieger responded that the site is designed to be student-centered first and foremost. However, applying to college is often a very complex responsibility that involves parents, counselors, and others. In July 2005 with the site’s full launch, there will be separate sections aimed at students and parents. For example, the Paying for College section may be used largely by parents. In fact, Xap may add a parent-driven component. There is a counselor component already to help counselors manage their students’ progress.

Regent Coles asked whether there will be tutorials to show students how to fill out college applications.

Ms. Nickel said that there absolutely would be.

Seeing that there were no further questions or comments, Chair Wooten thanks all of the presenters for these very informative discussions on these resources that they are creating. He then called for a brief recess at approximately 10:00 a.m.

WORKSHOP: RESEARCH AND THE UNIVERSITY SYSTEM OF GEORGIA

At approximately 10:15 a.m., Chair Wooten reconvened the meeting and called upon the Chancellor to introduce a workshop on research in the University System of Georgia.

Chancellor Meredith said that he is really excited about where the System's research institutions are headed in research and the extramural funds they are bringing to the System. The intent of this workshop was to give the Regents an understanding of the research process at the institutions. He then introduced the Senior Vice Chancellor for Academics and Fiscal Affairs, Daniel S. Papp, to begin this workshop.

Dr. Papp said that the research enterprise in the University System of Georgia is an incredibly exciting one. It is also an incredibly complex enterprise. This workshop would be divided into three parts. The first part would focus on university research in the United States to provide a context about where the System's research institutions are in the broader breadth of national research. The second part would focus on the University System of Georgia and its research efforts. The third part would be a discussion led by President Daniel W. Rahn of the Medical College of Georgia ("MCG"), President Michael F. Adams of the University of Georgia ("UGA"), and President G. Wayne Clough of the Georgia Institute of Technology ("GIT") about the complexities of running research institutions. President Carl V. Patton of Georgia State University ("GSU") was unable to attend this meeting.

Dr. Papp then began the discussion of university research in the United States. He explained that universities do research for a variety of reasons. Obviously, the greatest reason is to expand knowledge. Another reason is to communicate knowledge and educate students. Dr. Papp noted that a great deal of faculty research at universities crosses over into the classrooms to the students. Students often actively participate in university research, not only at the graduate level, but also at the undergraduate level. The research is used to improve and amplify instruction. Faculty members learn from their research and improve their teaching as a result. Research universities also educate the next generation of researchers. Throughout the University System of Georgia, there are approximately 9,000 faculty members. Regardless of the sector in which they teach, most of these faculty members were educated at research universities. Dr. Papp stressed that educating the next generation of researchers is an absolutely critical function of research universities. Another reason for university research is to improve the human condition. Much basic research becomes applied research and then becomes development to improve the human condition. Research also generates excitement on a campus, he said. Moreover, research expands funding. In the University System of Georgia, external funding generated approximately \$1 billion, approximately \$700 million of which is generated by university research. So, this is an incredibly important economic activity for the research universities. Gaining prestige is also a critical part of the research function.

Dr. Papp next discussed the types of university research. Basic research increases knowledge about

fundamental natural and human phenomena. Applied research often comes out of basic research, and its aim is to solve specific problems of industry and business. Development uses knowledge gained from research to produce useful materials or processes. Research can be measured in multiple ways. The reputation of research universities is absolutely critical, not only for funding, but also for attracting good faculty and students. Research income is the dollar value of grants and contracts awarded to a university in a given year. Research expenditures include the money expended on research in a year. Both research income and expenditures have different advantages and disadvantages in measuring research. Technology transfer, including disclosures, patents, licenses, and start-up companies generated, is another way to measure university research. Research can also be measured in terms of intellectual property income, or revenues gained from license income or cashing in equity of start-up companies. Finally, the overall economic and policy impact of research is another way to measure it in terms of its impact on local, state, or national economy and policy. Corporations turn to universities frequently to help increase their own productivity, and government frequently turns to universities seeking expertise.

In terms of overall research and development (“R&D”) in the United States, approximately 70% is done by corporations and businesses, while approximately 13% is done by universities. Industry funds about 66% of research expenditures, while universities fund approximately 3%. Dr. Papp noted that these figures are based upon 2002 data, which is the most recent federal data available. About 59% of R&D funding at research institutions is from the federal government, while only about 7% is from the state. Universities themselves fund approximately 20% of the monies they expend on research. In general, 18% of U.S. R&D is basic research, 59% is development, and 23% is applied research. At universities, however, 74% of R&D is basic research, while 22% is applied research and only 4% is development. University basic research therefore accounts for 54% of all basic research in the United States. Dr. Papp showed the Regents a bar chart depicting the top 15 states in the nation in terms of overall R&D, noting that Georgia is not among them. However, in terms of university research, the State of Georgia ranks twelfth. In the State of Georgia, university research is critically important for the state to be anywhere on the map in national research, he said.

Regent Pittard asked whether this figure includes private institutions of higher education in the State of Georgia.

Dr. Papp responded that it does include private schools, primarily Emory University and some of the Atlanta University Complex institutions. He noted that the research effort on the part of higher education institutions in Georgia by national standards is a relatively recent phenomenon. Most of the states that appear above Georgia in the rankings have been involved in university research going back to World War II and even earlier. Most research universities in the State of Georgia have only put emphasis on research in the past 30 years or so.

In the University System of Georgia, most research is performed in the research university sector: GIT, GSU, MCG, and UGA. There are different types of research universities. Specialized research

universities include MCG. There are also research-extensive universities in which there are large quantities of research and large numbers of doctoral students. There are four such institutions in the State of Georgia. There are also research-intensive universities in which there are a smaller number of doctoral students. The State of Georgia has no research-intensive universities. At research universities, research is a core mission along with instruction and public service. At regional and state universities, research is not a core mission, although some faculty conduct research and many pursue scholarship. At the state and two-year colleges, research is not a core mission, although some faculty conduct research and pursue scholarship.

There are several different research strategies in the University System of Georgia. The first of these is the focus of the institutions in terms of Board of Regents policy and mission. For example, MCG concentrates primarily on the medical professions, while GIT focuses primarily, but not exclusively, on engineering. There is also focus within each institution. Each university focuses on different areas of research within the Board-designated research foci. Collaboration among institutions is encouraged by the Board of Regents, as is collaboration with government and industry. Dr. Papp reminded the Regents of the February 2005 presentation to the Board about the Georgia Research Alliance (“GRA”), which facilitates a collaborative network among faculty, industry, and government. Another example of such collaboration is the Georgia Cancer Coalition (“GCC”). He noted that many faculty members at research universities wind up moving back and forth between academia, industry, and government. It is also critical to diversify funding sources, stressed Dr. Papp, because one source may dry up. Finally, research institutions, more so than any other sector, compete nationally and internationally.

Dr. Papp showed the Regents a bar graph depicting the incredible growth in overall external funding in the University System of Georgia over the past six years or so. The System approximates \$1 billion in research funding, \$700 million in externally generated research funding. Most of that external funding is generated at the research institutions, and all four System research institutions are trending upward. Almost three-fourths of externally generated research funding comes from the federal government. Next, he showed the Regents a bar chart depicting System research expenditures and noted that all four System institutions are trending upward in that regard. It is also possible to measure research by disclosures, patents, technology transfer, licenses, and startups. He noted that in general, the System research institutions are trending upward in these areas as well.

In closing, Dr. Papp reiterated that research in the State of Georgia is fairly new in comparison to most other big states. He then turned the floor over to President Rahn, who would discuss recruiting and retaining first-rate research faculty. Following President Rahn, President Adams would discuss managing and molding a first-rate research university, and then, President Clough would discuss technology transfer.

President Rahn greeted the Regents and said that he would focus primarily on recruitment. The retention process needs to begin at the time recruitment ends. Otherwise, the institution runs a risk

of wasting the investment. He explained that what is necessary to create an environment in which recruited faculty can be successful and wish to stay where they have been recruited is something that has to be an ongoing process, and as such, he would not talk much more about it.

It is very important that the mission and vision of the institution be clear, as should the relationship of research development to that mission, before making the kinds of investment decisions that are necessary to recruit high-caliber researchers. President Rahn said that it is necessary to focus thematically within institutions. There has to be a proper balance between opportunism and discipline and focus on the investment side. It is important to identify areas of research strength, then combine that with scientific opportunity to identify umbrella areas to guide all research recruitments. It is also very important to set quantitative targets, he said, in order to measure success and establish quantitative goals for annual increases in research funding. The institution should calculate its return on investment for previous recruits and project research grant support need for acceptable return on investment in current recruitment. Moreover, it is important to have a good business plan. Although this is creative science, it must be conducted in a business like manner if it is going to be a sustainable enterprise.

MCG focuses thematically on diseases, said President Rahn. As a health sciences university, MCG creates centers of excellence that unite clinical services, educational programs, and research in arenas that have the greatest impact on human health. Those areas of focus are as follows: neurological diseases, cancer, diabetes/obesity, cardiovascular disease, and infection and inflammation. President Rahn said that when he became President of MCG, he set a goal of growing the institution 20% per year and striving to have 60% of funding coming from federal sources. MCG has reached or exceeded those targets every year, but it will become difficult in light of federal retrenchment with regard to the National Institutes of Health (“NIH”) budget. Still, he anticipates that MCG will be on target for this year as well. This is important from a planning perspective, he said, because space is allocated based upon extramural funding. So, projecting research also helps with regard to facilities management and planning.

President Rahn next turned to the process of recruiting. The first step is to identify qualified candidates and try to assess their link to existing strengths in research areas of the institution. With regard to the individual, it is important to assess the importance of his/her field of work and potential benefit to the institution, which in turn would benefit human health and economic development. Once candidates are selected, campus visits are scheduled. Moreover, it is critical to identify potential collaborations within the institution and the state and look for fit (scientific, cultural, social, etc.). If there is agreement between a candidate and the leadership on campus, then it is time to clarify the package; that is, what and who the researcher will bring to campus and what will be necessary in terms of start-up funding, etc. From there, the institution and the recruit build an agreement that will clarify the commitment and expectations of both the recruit and the institution.

To illustrate the recruitment process, President Rahn discussed the recruitment of Dr. Jin-Xiong She,

GRA Eminent Scholar in Genomic Medicine and Director of the MCG Center for Biotechnology and Genomic Medicine, in 2002. Dr. She works in genomics and proteomics and is an outstanding geneticist in pathogenesis of type I diabetes/autoimmunity, which fits well with MCG's areas of research emphasis. Dr. She was very enthusiastic to build a large group and to collaborate with both clinical and basic science faculty and was anxious to extend his work to complications of diabetes (vascular, renal, retinal), sickle cell disease, etc., which also have relevance to MCG's other areas of research emphasis. So, Dr. She was a good fit for MCG and a good candidate for recruitment. In the process, the GRA Eminent Scholars Program became very important because it creates a community of scientists in the state that has a certain cache to it. This program is a very important tool for attracting accomplished scientists to the state. MCG looks for individuals who are not only interested in developing their own programs, but also in impacting on multiple research groups across the institution as "super mentors." That is one way MCG tries to leverage its investment in high-profile recruitments. The recruitment of Dr. She depended greatly upon a generous endowed chair package from the GRA. In addition, MCG had to make commitments for the approximately 20 postdoctoral fellows and 1 additional faculty member who would come with Dr. She, the allocation of newly renovated space, and future junior faculty recruits as part of the recruitment process. MCG also committed to funding the startup of additional junior faculty over time. Six faculty members over three years was the first commitment made. Altogether, the recruitment package included approximately \$1.5 million from the GRA and \$8 million to \$9 million from MCG over three to five years. The start-up funds from MCG were derived mainly from the operating margin of the health system. President Rahn explained that 40% of the operating margin of the health system is transferred to the academic institution on an annual basis, and he invests that money directly in academic and research infrastructure.

In order to make this investment in Dr. She viable, MCG had to set high institutional expectations. Before Dr. She came to MCG, the institution attracted about \$2 million in research funding annually for diabetes research. Over the span of approximately 1.5 years, that figure has grown to approximately \$6 million. This is the return on investment that not only generates funds to directly support research, but also generates infrastructure dollars to reinvest in the research enterprise. That triggers MCG's commitment to hire another three faculty members and additional postdoctoral fellows. Dr. She now occupies a floor of a research building, conducts international caliber research, has published in esteemed scholastic research journals, and has brought additional funding to the institution for his research.

In closing, President Rahn said that it is important to focus on retention because MCG invests in its faculty programmatically and wants them to continue to be successful and for MCG to be the environment in which they can do so. Individuals like this are recruited on a regular basis, and MCG has to deliver on its commitments in order to retain its recruits. MCG also benefits from creating a campus culture that fosters innovation and interdisciplinary research and results in a whole that is stronger than the sum of its parts. Researchers who have many collaborators are much less likely to leave that environment and start anew somewhere else. MCG must also continually invest in its

infrastructure in order to support world-class faculty with world-class resources. Finally, MCG must increase its technology transfer capability in order to help faculty move innovations to the marketplace.

Vice Chair Shelnut asked President Rahn to give a quick rundown of other key recruits at MCG in recent years.

President Rahn replied that in addition to Dr. She, MCG has recruited three additional GRA Eminent Scholars in his years as President: Dr. Lin Mei in Neuroscience; Dr. Kristen M. Harris in Synapses and Cell Signaling; Dr. Guy L. Reed III in Cardiovascular Medicine. Overall, MCG has recruited several hundred new faculty members over the past four years. Not everyone is expected to perform at the level of a GRA Eminent Scholar, but MCG looks for individuals of a national caliber in order to secure sustainable extramural funding. Right now, MCG is recruiting a cancer center director with assistance from the GCC, the Governor's Office, and the GRA.

Next, President Adams greeted the Regents. He said that he had been asked to talk about managing the research function at a large public university. The purpose of everything he would discuss at this meeting is to create and maintain an environment where faculty can conduct research that advances knowledge and benefits society. He explained that the Carnegie Foundation for the Advancement of Teaching categorizes almost 4,000 American institutions based upon the degrees they award and the research they conduct. UGA, GIT, and GSU are all categorized as Doctoral/Research Universities - Extensive, which means that they offer a wide range of baccalaureate programs and are committed to graduate education through the doctorate. Institutions in this category award 50 or more doctoral degrees per year across at least 15 disciplines. For the sake of comparison, he noted that only 151 of the 3,941 institutions surveyed nationally are in this category. MCG is in the Specialized Institutions category for Medical Schools and Medical Centers, which typically offer a majority of degrees in a single field and are located on a separate campus. Just 54 institutions nationally fall into this category. Research is clearly an important component of the mission of the universities in these categories, he said.

While there are faculty at each institution whose appointments are 100% research, the vast majority of faculty are simultaneously engaged in research and teaching. The benefit to students is clear, said President Adams. They are meeting on a daily basis with the people who are pursuing new ideas and answers to critical questions in the sciences, arts and humanities, and that energizes the classroom in ways that nothing else can. Faculty involvement in research spans the spectrum from full-time researchers, such as the GRA Eminent Scholars, to faculty whose appointments may be two-thirds instruction and one-third research. Almost 1,500 UGA faculty were involved in research on some level last year. In short, research and instruction are not exclusive functions at the institutions; rather, they are complementary.

Next, President Adams discussed the research budget at UGA. For fiscal year 2004, total research

and development expenditures at UGA were just over \$313 million. That number has increased steadily over the past ten years. In fiscal year 1995, total R&D at UGA was \$200 million. Over the past five years, institutional expenditures for R&D have remained steady, while external funding has risen almost 57%. That increase is due to the quality of UGA researchers and their proposals for funding in an extremely competitive environment, he said. Essentially, the research program at any major research university is the equivalent of a large, multifaceted corporation and requires the same level of skilled, day-to-day management. At UGA, this management is the responsibility of the Vice President for Research, Gordhan L. Patel. Dr. Patel, who has recently announced his retirement, has done an excellent job of making that office more effective in its support of UGA researchers. He manages an office of almost 50 people with an annual budget of \$28.8 million and which has sole responsibility for coordinating, enhancing, and accounting for every aspect of the research program at UGA. This \$28.8 million annual budget for the Office of the Vice President for Research is included in the \$313 million total research and development expenditure. That administrative investment is yielding, in effect, a tenfold return.

Given state rules and policies, at a state institution, there must be an organization that allows certain financing and funding mechanisms that can be carried out only by a separate foundation, explained President Adams. For this purpose, in 1978, UGA created the UGA Research Foundation, Inc. (“UGARF”), which is a cooperative organization with the primary goal of securing gifts, contracts, and grants from the various sources which support research. UGARF also performs the technology transfer function by taking assignment of inventions; obtaining patents, copyrights, and other intellectual property protection; and licensing inventions to the private sector in return for royalty income, which is shared with the faculty inventor to encourage further innovation and used to support the research mission of the university. Additionally, UGARF contributes to economic development efforts by funding endowments for eminent scholar positions and supporting small business development through its licensing program. As President of UGA, President Adams also serves as Chair of UGARF. Faculty and administrators comprise the majority of the board, and UGARF is fortunate to have people with specific expertise in R&D, finance, and technology transfer serving on the board as well.

On the private and foundation side, with support from the Office of the Senior Vice President for External Affairs, UGA also works to maintain the relationships that have been built in the process of seeking and receiving funding. Particularly in the area of biomedical research, the timelines are long and the funding needs are substantial. So, relationships as well as results are key to a steady stream of revenue in support of the research goal. The list of UGA’s funding sources is long, stated President Adams. UGA receives research funding from the State of Georgia, the federal government, a number of nonprofit organizations, and private corporations. Federal funding flows through many agencies, but the primary federal sources of funding at UGA are NIH, the National Science Foundation, and the U.S. Department of Agriculture. Funding to UGA from NIH has increased 175% over the past five years, the fifth highest rate of increase among America’s research universities.

A good example of the kind of challenge UGA faces in managing complex funding relationships is the Savannah River Ecology Lab (“SREL”), a UGA research facility located near Augusta on the grounds of the Savannah River Site, which is funded by the Department of Energy. SREL was founded in 1951 by Dr. Eugene P. Odum. At the time of his death, Dr. Odum was Director Emeritus of UGA’s Institute of Ecology. He was nationally recognized as one of the “fathers of modern ecology.” Dr. Odum worked with the then Atomic Energy Commission to conduct baseline ecological studies on that site. The program currently has a staff of about 150 people, most of whom are employees of UGA. Recently, funding for SREL had been cut in President Bush’s proposed fiscal year 2006 federal budget. President Adams remarked that this is the sort of thing that can happen in these relationships: the vagaries of budgetary or political cycles can have a direct impact on the research mission. Because of those factors and the federal funding structure, much of a recent trip he made to Washington, DC focused on conversations with Senators Saxby Chambliss and Johnny Isakson about that and other federal dollars for research at UGA. That is an example of the ongoing work that is required of a first-rate research program.

One area that must be remembered when institutions consider their research agendas is the direct economic impact that the research they conduct has on local communities and the state. Using a recent economic multiplier developed at UGA for an Intellectual Capital Partnership Program (“ICAPP[®]”) study, President Adams reported that the \$313 million research program at UGA generates another \$475 million in the Athens region and statewide economy. GIT, GSU, and MCG, of course, have a similar impact in Atlanta and Augusta. The economic impact of research is extremely significant, he said.

UGA has become more aggressive in technology transfer, which is the conversion of lab results to marketable products or services. One wing of the recently opened Center for Applied Genetic Technologies houses the Georgia BioBusiness Center. This facility is specifically designed to facilitate those findings that might have market potential and is currently home to seven new businesses. There is a similar facility downtown in the Bank of America Building called The Athens New Media Synergy Center, which works with UGA’s New Media Institute and companies to explore the possibilities of new communications technologies.

Licensing income at UGA in fiscal year 2004 totaled more than \$28 million, due in large part to the licensing of Restasis, a pharmaceutical product for the treatment of chronic dry eye. UGA averages about \$3 million to \$4 million per year. There were 110 invention disclosures last year, said President Adams. This is research going to the market in the form of products and services, which both creates jobs and generates income.

The GRA is a model program for supporting research that has market potential. President Adams reiterated that the GRA is a three-way partnership between the state, the private sector, and the universities that provides matching funds to attract world-class scholars to Georgia universities. The

GRA has its origin in the Georgia Research Consortium, which was established during the term of Governor Joe Frank Harris, now a member of this Board. To date, the GRA has invested some \$350 million at Georgia institutions attracting more than 40 Eminent Scholar chairs to the faculty of Georgia's colleges and universities. The Eminent Scholar chairs are a key component of GRA's success and its impact on Georgia. UGA is home to 14 Eminent Scholars, whose work ranges from the uses of cloning to improve agricultural stock, to drug discovery, to tropical and emerging global diseases. In fiscal year 2004, UGA received \$4.5 million through the GRA.

Next, President Adams showed the Regents pictures of some of the premier research facilities UGA has developed during his tenure and discussed the various methods of financing those spaces. In the scope of these facilities, he said, the Regents would see something of the challenge of managing a sophisticated research program. The Complex Carbohydrate Research Center ("CCRC") is a good example of a program that has seen growth in its agenda, its staffing, and its facilities. In 1985, the faculty of the CCRC, then at the University of Colorado, were convinced to move to UGA. As the first facility in the world dedicated to the study of complex carbohydrates, CCRC has grown as few people could have predicted. Twenty years later, the CCRC has already outgrown three home bases and now occupies a \$20 million, 135,000-square-foot facility in the Riverbend Research Village, with 160 faculty, staff, and graduate and undergraduate students conducting leading-edge research into the most basic elements of cellular structure and function. This research holds the hope for treatment of cancer, Parkinson's, diabetes, and other diseases. The CCRC brings in approximately \$6.8 million annually in research funds. Funding for the CCRC is provided by the GRA, NIH, the Department of Energy, the National Science Foundation, and other industrial nonprofit sources. The building was financed through the UGA Real Estate Foundation, Inc., another important component contributing to the overall research program at UGA. The Center for Applied Genetic Technologies ("CAGT") was dedicated in October 2002 and focuses on plant and animal genetic research. The building also houses the Georgia BioBusiness Center, which assists with technology transfer and commercialization of the research conducted there. The construction of CAGT was funded jointly by UGA, the GRA, and the Woodruff Foundation. The Paul D. Coverdell Center for Biomedical and Health Sciences (the "Coverdell Center"), now under construction on South Campus across from the College of Veterinary Medicine, will house UGA's Biomedical and Health Sciences Institute. President Adams asserted that biotechnology is the next great frontier of progress and that UGA is preparing to be a leader in that field. The Coverdell Center will encompass 135,000 square feet of research space. It will house primarily open lab space designed for "big science" and cross-disciplinary collaboration. This \$40 million memorial to Georgia's late senator is jointly funded with \$10 million from the General Assembly of Georgia, \$10 million from the U.S. Congress, and \$20 million to be generated by the overhead costs of the research conducted there.

To illustrate further the complexity of the UGA research program, President Adams noted that UGA operates research facilities in Tifton, Griffin, Sapelo Island, Attapulgus, Blairsville, Calhoun, Reidsville, and the Veterinary Medicine Bioresources Building in Athens, to mention just a few. Each of these sites represents UGA personnel, local economic impact, and the need for management. In

closing, President Adams stated that managing the research program at a major public university is a complex, challenging, and demanding task. That task, however, is ultimately focused on facilitating the positive outcome of the endeavors of the faculty. He said that he would be happy to respond to any questions or comments and stepped down.

President Clough greeted the Regents and thanked them for the opportunity to participate in this important workshop. He said that Presidents Rahn and Adams had set up his presentation very well because they had demonstrated that the research process is a continuum. President Rahn had noted that the majority of university research is in basic research; that is, research that does not have an immediate application to the marketplace. President Clough added that the vast majority of patents filed by industry cite basic research done by universities as the basis for their ultimate patents and commercialization processes. So, basic research is essential for the economic success of the nation.

President Clough stated that the System's research institutions are showing rapid growth and have established good competitive positions. He thanked the Board of Regents, the General Assembly, and the Governor's Office for helping the research universities get to this point because it required investments in order for them to carry out the activities that went into this success. GIT has a strong engineering component, and approximately 25% of its research is done in cooperation with industry. This represents approximately 3,000 research projects each year, or about \$400 million in research expenditures. So, GIT has to process 3,000 contracts per year and manage them successfully. GIT is audited continuously in management of every one of those contracts.

It is important that research be separated from teaching sometimes, said President Clough, as research universities are very much about teaching and educating the workforce of the future. Research is a learning process that enriches the experiences of students. He reported that 43% of GIT undergraduates participate in research for academic credit. GIT is working to increase this number to as much as 60% to 70%. Additionally, 52% of GIT graduate students are supported by funding from sponsored research. He said that if sponsored research disappeared, so would over half of the graduate student body. It is essential to have sponsored research in order to attract these students, because otherwise, they would attend other institutions.

President Clough said technology transfer is much broader than just start-up companies. In addition to licenses to existing and start-up companies, technology transfer is also produced in the form of peer-reviewed publications, skilled graduates, continuing education, and consulting. He showed the Regents an issue of *Science* magazine in which Regents' and Institute Professor Uzi Landman had an article regarding computer model predicting behavior on liquids at nano scale. This basic research will have enormous applications in a wide range of fields, said President Clough.

President Clough quoted the Southern Growth Policy Board's publication, *Innovation U: New University Roles in a Knowledge Economy* as saying, "Virtually every combination of industry relationship or economic development activity can be found at Georgia Tech, and in a very real sense

the school is an operating partner with Georgia state government. . . . Perhaps more than any other research university in North America, economic development is an integral, critical component of the mission of the Georgia Institute of Technology, and this has been true from its very inception.” He explained that this came out of an NSF study that examined about 50 institutions in the nation that were deemed to have quality programs in technology transfer. President Clough noted that this study was done approximately four years ago, when he did not think that GIT was particularly good at technology transfer. He felt that GIT could be better and was not working well enough with its sister research institutions. At that time, GIT began to work with the GRA and its peer research institutions on VentureLab, a one-stop center for technology commercialization that helps faculty understand how technology transfer works. This year, GIT has statistics of which President Clough is particularly proud. At GIT in fiscal year 2004, there were 277 invention disclosures filed, 61 patents filed (GIT “bundles” related ideas for cost-effective patenting), 34 patents issued, 22 software licenses (not including small licenses less than \$1,000), and 15 new start-up companies. He remarked that it was extraordinary to have 15 start-up companies, because on average 5 to 7 would be more in keeping with the volume of research at GIT. This record number of start-ups indicates GIT’s high level of productivity in commercializing research. Among the Southeast’s 59 research universities, GIT ranks first in start-up companies, fourth in research expenditures, fifth in patents issued, and eleventh in licenses and options executed. President Clough remarked that GIT is competing nationally and that he would like to see GIT rank as highly nationally in the future.

The 1980 Bayh-Dole Act (the “Act”) is one of the keys to making university technology transfer work. President Clough said that prior to 1980, the federal government kept all intellectual property generated by federally funded research. However, the federal government has very little capability to carry out technology transfer, to incubate start-up companies, or to license businesses. The Act now allows universities to take title to any intellectual property generated by federally funded research. However, it also requires universities to commercialize the intellectual property they patent, ensure that intellectual property is reasonably available for public use, alleviate health or safety concerns, and share any royalties with inventors.

President Clough stated that the commercialization process is not a linear process. It begins with research and identifying things in the research that have value in terms of patents. The purpose of the patent is to get research into the commercial sector. Universities are not manufacturers, he said. However, universities work with manufacturers to bring innovations to market. This is a collaborative effort in terms of the commercialization strategy. For every \$200 billion in research funding, probably 100,000 discoveries will result, which in turn will result in about 50,000 patent applications. Out of those patents, approximately 20,000 licenses will result and perhaps 125 start-up companies. (This is based on 2002 data.) This demonstrates that the process is rather long and somewhat complicated.

Universities are not in research for the money, said President Clough. Rather, they are involved in research to expand knowledge and help society. Research universities must protect their faculty

inventors, who share in the royalty streams generated by their work. A well-run technology transfer office is critical to recruiting and retaining top-tier faculty, he stated. Universities must also be true to their nonprofit status by reinvesting monies earned from research endeavors back into the R&D enterprise. They must also act with institutional integrity by keeping arm's-length relationships with licensees, managing potential faculty conflicts of interest, and managing institutional conflicts of interest.

President Clough next discussed GIT's commercialization resources. VentureLab identifies faculty discoveries with market potential and guides those faculty through the commercialization process. The Georgia Tech Research Corporation ("GTRC") is a contracting agent for sponsored research. It protects GIT's intellectual property, evaluates potential licensees, negotiates license and start-up agreements, conducts due diligence on licensees and start-ups, and administers research support programs. The Advanced Technology Development Center ("ATDC") is a statewide business incubator working directly with the GRA that incubates technology start-up companies and provides seed funding for faculty start-ups.

Over the past three years at GIT, 71.6% of licenses issued were in-state and 86% of start-up companies are located in-state. "Why do some go out of state?," asked President Clough. He explained that universities are bound by law to commercialize federally funded research, and in some cases, a viable in-state licensee may not be available. Intellectual property from industry-sponsored research is licensed, under appropriate terms, to the company that sponsored the research. For legal reasons, many high-tech companies incorporate in Delaware, even though their facilities are located in Georgia.

President Clough then gave two examples of technology transfer at GIT. The first was about Radatec, Inc. ("Radatec"). The research problem had to do with gas turbines in power plants. These are very complex and expensive pieces of machinery. If something goes wrong with one of the turbines, the whole thing can be destroyed. So, periodically companies take the turbines off-line to inspect and maintain them. However, it is extremely expensive to do so. To shut down a turbine for inspection and maintenance costs \$500,000, while a turbine breakdown costs \$4 million per incident. So, GIT researchers and graduates Scott Billington, now Director of Product Development for Radatec, and Jonathan Geisheimer, Director of Technology, developed promising radar-based technology to detect problems while the equipment is running. Their sensor can withstand extremely high temperatures, is unaffected by contaminants such as dust or oil, and is immune to electromagnetic interference. Radatec was incorporated in November 2001. GIT showcased this technology at GIT's 2003 Technology Day, which is sponsored by VentureLab. GIT began testing in 2004 with industry partners, and a commercial release is scheduled for this year.

The second example of technology transfer at GIT was CardioMEMS Inc. ("CardioMEMS"), which uses micro-electro-mechanical systems ("MEMS") technology to create a new generation of medical devices. President Clough said that Dr. Mark G. Allen, Associate Professor in the School of

Electrical and Computer Engineering, is a recognized authority on MEMS, which are electro-mechanical structures at the micron level (one-millionth of a meter). With funding from the federal Defense Advanced Research Projects Agency, Dr. Allen developed a micro-sensor to measure the pressure of air turbulence in jet engines on military drone aircraft. Dr. Allen learned from a colleague that the human heart has similar issues with pressure and that being able to measure that pressure would be very helpful. The problem was that a CT scan was the only tool for heart patients requiring life-long monitoring and CT scans can be expensive and time-consuming. Moreover, such treatment requires repeated radiation exposure and uses dyes that are toxic to kidneys. Together with Dr. Jay S. Yadav, Attending Cardiologist and Associate Professor of Cardiology, Vascular Medicine, Neurology and Radiology at the The Cleveland Clinic Foundation, Dr. Allen invented the EndoSensor, which could be implanted with a heart stent. An electronic wand waved in front of the chest sends radiowaves that activate the EndoSensor, which takes measurements and sends results by radio waves to an external monitor. CardioMEMS was launched in 2001. The company now has 30 employees; one-third of them are GIT graduates or GIT students working part-time. President Clough reported that CardioMEMS has raised \$16.5 million in venture capital since 2001 in very difficult investment climate. EndoSensor is now in Food and Drug Administration authorized clinical trials with patients, and GIT is hopeful that a company will manufacture the product. He said that this is a great example of taking a product originally developed for military machines and turning it into something that can help society as a whole. In closing, President Clough thanked the Regents for this opportunity to talk with them about technology transfer.

Dr. Papp remarked that these discussions demonstrated the complexities and importance of university research and how critical it is to position the research institutions at the forefront of national and international research. He thanked the presidents for their presentations and opened the workshop for discussion.

Regent Pittard asked President Clough whether start-up companies often begin at GIT incubators.

President Clough responded that they can.

Regent Pittard asked what the University System of Georgia's ownership of such start-up companies is.

President Clough replied that the first piece of ownership is the license of technology. ATDC now has a 501(c)(3) designation that allows it to take 2% to 3% ownership in the company. GIT has to have ways to provide a more diverse portfolio for funding R&D efforts in the future, and this is one way to do so.

Regent Pittard said that his former company had a 2% interest in the Internet search engine, Google, which ended up being worth over \$100 million in just four years. He also pointed out that historically, there has been a member of the Board of Regents on the board of the GRA, but that is

not the case today. He said that this is an important way to make the link between the GRA and the System stronger.

President C. Michael Cassidy of the GRA was in the audience and responded that the GRA had a board meeting recently in which it named a nominating committee and discussed reestablishing that linkage.

Regent Pittard said that would be great.

Regent Coles asked whether the research institutions consider the potential commercial revenue they may gain when determining their initial investment in research.

President Rahn responded that it is very hard to predict potential commercial revenue when working at the basic research level. The first criterion in any research investment decision is the caliber and importance of the science. At MCG, a second criterion is the research's relevance to human health and disease. MCG considers the return on investment to also come in the form of extramural grants that come to the institution that otherwise would go to a competitor institution. If MCG can attract nonstate funds that exceed the initial investment, that constitutes a good return on investment. The GRA and GCC also operate on the same philosophy. He noted that the research institutions are employing increasing numbers of researchers on soft money. The personnel budget at MCG has increased by approximately \$100 million during the past four years during a time of relatively flat state appropriations. So, that represents employment based upon other funding sources.

President Adams said that this is a critical question that sometimes depends upon the maturity of the product cycle. UGA has perhaps the most sophisticated turf grass operation in the country. If someone comes with a proposal to do the next iteration of that, UGA would likely consider the potential commercial impact. At the same time, if something comes out of the CCRC that may have implications with regard to curing cancer, then societal needs would be more important than potential commercial gains and UGA would certainly pour more monies into that research. So, it really is a complex process. That is why institutions have committees to provide thorough analysis and provide recommendations about research opportunities. This is another reason research can be done more efficiently and more flexibly through private foundations. President Adams reiterated that every dollar that is made in research is reinvested in research. So, there is not so much a profit as a regeneration.

Chancellor Meredith reminded the Regents that all four-year institutions are expected to perform research of some kind. What makes research hard to sell to the public is that there is no instant gratification. Some research projects can go on for ten years before there is a discovery that develops into a product.

Regent Leebern thanked the presidents for their hard work in funding facilities to attract world-class researchers.

Chair Wooten thanked President Cassidy of the GRA and said that the GRA is a tremendous asset to the state and to the University System of Georgia. He also thanked the presidents for their leadership and enthusiasm for promoting and facilitating university research that contributes to the economic development of the state. He said that he wished President Patton could have been present to update the Board on research at GSU.

UNFINISHED BUSINESS

There was no unfinished business at this meeting.

NEW BUSINESS

Chair Wooten called upon the Secretary to the Board, Gail S. Weber, to make four honorary degree recommendations to the Board.

Secretary Weber announced that President Portia H. Shields of Albany State University had nominated Joe Adams, President Frank D. Brown of Columbus State University had nominated Thomas B. Black, and President Betty L. Siegel had nominated Dennis Cooper for honorary degrees. Additionally, President G. Wayne Clough of the Georgia Institute of Technology (“GIT”) had requested that the Board waive its policy that honorary degree recipients must be living in order to award a posthumous honorary degree to Wallace H. Coulter. She noted that the Regents had been given Mr. Coulter’s bio and that the Depression had caused Mr. Coulter to leave GIT to seek employment before he could complete his degree. Throughout his life, however, he considered himself to be a GIT alumni. His successful work as an inventor eventually enabled his brother and him to form the Coulter Corporation. Secretary Weber remarked that reading his personal story was inspiring. He established the Wallace H. Coulter Foundation. Gifts of over \$30 million established the Wallace H. Coulter Department of Biomedical Engineering at GIT and Emory University. President Clough hopes that Mr. Coulter’s accomplishments presented a unique case that would merit exception to Board policy. On behalf of Presidents Shields, Brown, Siegel, and Clough, Secretary Weber submitted these nominations for the Board’s approval. With motion properly made, seconded, and unanimously adopted, the Board approved these honorary degrees.

PETITIONS AND COMMUNICATIONS

Secretary Gail S. Weber announced that the next Board meeting would take place on Tuesday, April 19, 2005, and Wednesday, April 20, 2005, on the campus of Armstrong Atlantic State University in Savannah, Georgia. She noted that the Regents would be getting invitations in the mail from President Thomas Z. Jones and that there may be a Regent activity planned for Monday, April 18, 2005, as well.

Secretary Weber reminded the Regents that there would be a social event at the home of Regent and Mrs. Coles on Tuesday, May 17, 2005.

Chair Wooten announced that the new art exhibit in and around the Board Room was comprised of photographs of Ossabaw Island by Paula Kaye Eubanks, Associate Professor of Art Education in the Ernest G. Welch School of Art and Design at Georgia State University. He noted that the new curator of art exhibits for the University System Office is the Associate Secretary to the Board of Regents, Jennifer E. Fairchild-Pierce.

ADJOURNMENT

There being no further business to come before the Board, the meeting was adjourned at approximately 11:50 a.m. on March 9, 2005.

s/ _____
Gail S. Weber
Secretary, Board of Regents
University System of Georgia

s/ _____
Joel O. Wooten, Jr.
Chair, Board of Regents
University System of Georgia