Minutes of the Research, Outreach and Economic Development Committee

The University of Tennessee Board of Trustees

October 23, 2008 Knoxville, Tennessee

The Research, Outreach and Economic Development Committee of the Board of Trustees of the University of Tennessee met on October 23, 2008, in the Michael R. and Tiffiny A. West Wing of the new James A. Haslam II Business Building on the campus of the University of Tennessee at Knoxville.

I. Call to Order

Mr. Don Stansberry, Chair, told those assembled for the meeting that he looked forward to working with the Research, Outreach and Economic Development Committee in advancing the work assigned to them. Mr. Stansberry called the meeting to order at 8:40 a.m.

II. Roll Call

Dr. David Millhorn called the roll and the following voting members were present:

Mr. Don Stansberry, Chair

Mr. Crawford Gallimore

Ms. Monice Moore Hagler

Mr. Doug Horne

Ms. Brittany McGruder

Dr. John Schommer

Ms. Betty Ann Tanner

The following non-voting members were present:

Mr. Tyler Forrest

Dr. John Petersen

Dr. Verbie Prevost

Dr. Richard Rhoda

Ms. Sharron Rollins

Mr. Glenn Turner

Commissioner Ken Givens, Dean Dick Gourley, Mr. Jim Murphy, and Commissioner Tim Webb were absent from the meeting.

Dr. Millhorn declared a quorum present for the meeting.

III. Approval of Minutes of the Last Meeting

Mr. Stansberry asked if there were corrections or questions regarding minutes of the June 20, 2008, meeting in Knoxville. There being none, Mr. Gallimore moved the minutes be approved and Mr. Horne seconded the motion. Mr. Stansberry announced the motion carried.

IV. UT Knoxville New NSF Grant Recognition – Information

Dr. Millhorn recognized three National Science Foundation (NSF) grants awarded to the University over the last several months. They are highly competitive awards and will distinguish the University of Tennessee from many other universities. Two of the three grants are NSF IGERT (Integrated Graduate Education and Research Training) awards. The Principal Investigators of each grant gave a brief presentation about the initiatives.

A. Scalable Computing and Leading Edge Innovative Technologies (SCALE-IT)

Dr. Cynthia Peterson, Professor and Head of Biochemistry, Cellular and Molecular Biology at UTK, gave a power-point presentation on the SCALE-IT grant, made in partnership with Oak Ridge National Laboratory. Across the U.S. nine IGERT grants were awarded and UT won two of these. They are \$3M grants with a five-year, renewable term. Dr. Petersen attributed on-going high-quality research on the faculty and investigator levels, strong collaborative ties and resources with Oak Ridge National Laboratory, and critical infrastructure and administrative support and resources in proposal development and commitments for success in receiving the award. The focus of the SCALE-IT award is computational biology, with the goal of transforming our graduate education to provide hands-on experiences to generate computationally-enabled interdisciplinary bioscientists equipped to tackle scaling problems in biology. Tera-grid portals for biology will be created, along with a new biocomputing curriculum, providing students with increased problem-solving diversity, advanced high-performance computing skills, and grid-computing research and scalable biocomputing tools to be successful in a highly competitive market in academia, industry, national laboratories, institutes and for public service.

Mr. Forrest asked the amount of time it will take to implement the program. Dr. Peterson said a lot of front-end work is required, with about two years of work in the planning, team-building and brain-storming phase, before the application to scale work can be made. Ms. Blackburn asked about renewing the grant, and Dr. Peterson noted that doing a good job in documenting goals and benchmark accomplishments will be key factors in this consideration. An assessment team will take a hard look at the activities and their effectiveness in attaining SCALE-IT goals. The bottom-line is how effective we will be to train the students and how

competitive they are for the next stage in their career. A renewed grant will involve new visions, as they will be five years down the road from the initial undertaking.

Mr. Stansberry congratulated Dr. Peterson in securing the SCALE-IT grant and for the distinction and opportunities it brings to the University.

B. Sustainable Technology through Advanced Interdisciplinary Research (STAIR)

Dr. David Keffer, UTK Associate Professor of Chemical Engineering, made a powerpoint presentation on the STAIR IGERT grant. Sixteen Ph.D. students, all U.S. citizens, will receive training with the \$3M NSF five-year grant and \$1M from UTK in a highly-interdisciplinary program. The new curriculum being created by the grant, however, will be available to all UT graduate students in the Colleges of Arts & Sciences and Engineering. Partnering organizations are Oak Ridge National Laboratory, 3M, GM, and the University of South Florida. The basis of the sustainable technology grant is to develop new tools and technology to address the impending global energy/climate crisis. The proposal provides Ph.D. training of U.S. citizens with expertise in either biomolecular engineering or materials science and engineering relevant to sustainable production of energy, breath in both the biomolecular and materials disciplines, and pervasive exposure to research performed within the context of sustainability. Research will be conducted within the context of sustainability of design alternatives without generating materials, such as carbon monoxide, that accumulate to negatively affect the environment. A new materials discovery effort is needed to meet these criteria. STAIR will train scientists and engineers to operate under two guiding principles: (1) analysis for sustainability is essential to the future of process design, and (2) advanced interdisciplinary research is necessary to achieve major innovation. A broader impact of the grant is that it will provide a training arena that fosters development of technological, scientific, and engineering expertise in exploring new, sustainable energy technologies.

Mr. Gallimore asked about the timeframe in going to market. Dr. Keffer replied that the work involved is fundamental research. The grant goal is to lay down fundamental principles, for whoever develops the next generation of materials, to have long-term impact.

Mr. Stansberry congratulated Dr. Keffer on securing the grant and the accompanying opportunities and distinction for this most relevant topic in looking at today's energy situation. He is proud the University of Tennessee is leading in this area.

C. National Institute for Mathematical and Biological Synthesis (NIMBioS)

Dr. Millhorn introduced Dr. Louis Gross, UTK Professor of Mathematics and Ecology and Evolutionary Biology, who gave a power-point presentation on NIMBioS. Dr.

Gross noted that at a Faculty Senate meeting President Petersen had said one of the things faculty needed to do better was to go after national, major centers. NIMBioS is a result of that challenge and a several-decades' long commitment at UTK to build and maintain one of the world's leading education and research programs in mathematical biology. It is under the directorship of Dr. Gross, with associate directors Dr. Cynthia Peterson, Dr. Suzanne Lenhart, Dr. Sergey Gavrilets, and Dr. Graham Hickling. NIMBioS is a unique collaboration of agencies based at UTK and funded by NSF, the U.S. Department of Homeland Security and the U.S. Department of Agriculture. It is the first time that NSF has collaborated with these agencies to create a national center. Unlike the IGERT grants where the resources are to build infrastructures at UTK for the benefit of primarily UTK students, the objective of NIMBioS is to build an interdisciplinary national resource center for research and education at the interface between mathematics and biology, funded with \$16M over five years. In four years there will be an assessment of the center, with noncompetitive renewal possible for another five years of similar funding. Temporarily NIMBioS is located on White Avenue; however, in about two years the center will move to the Claxton Complex.

The NIMBioS vision is to make UTK a go-to place for researchers from all over the world working on fundamental and applied problems in biology that require mathematical and computational approaches. NIMBioS is a community-driven center, meaning its activities are chosen by an external advisory board made up of distinguished faculty members and researchers from all over the country. One of the first outreach projects will be producing a tutorial to foster a broader understanding of potential applications of modern math and computational science in biology for the National Institute for Computational Science (NICS) at ORNL, a UTK facility housed at ORNL under the direction of Dr. Thomas Zacharia. Besides NICS, NIMBioS will partner with the UTK SCALE-IT and STAIR IGERT programs, the Great Smoky Mountains National Park, minority-serving institutions (including NIH MARC Phase II awardees), IBM and ESRI, and the Center for Wildlife Health (located in the Institute of Agriculture).

Dr. Gross elaborated on the proposal and competitive process by which NIMBioS was awarded; further, Dr. Gross expanded upon the factors he believes led to the success of the proposal: outstanding faculty with extensive prior experience and successful collaboration, strong support of UTK administration and their commitment of resources, UTIA administration agreement to benefits of the proposal, and Dr. Petersen's assistance. Dr. Gross said the award is an example of building success from within rather than purchasing it from outside.

In conclusion, Dr. Gross gave recommendations to the Board of Trustees members which he feels will enhance opportunities for similar grant success in the future: to work with UWA to convince the Governor to allow reallocation of resources, such as the Governor's Chairs program, to better meet needs of students and to bring in

faculty to build from within; encourage UWA to reduce the structural restraints that limit efficient interdisciplinary interactions across units; to encourage appropriate decentralization of operations to provide accountability to those using the operation, such as Purchasing; and, to convince the legislature for resources to better support our students (including scholarships and the flexibility of differential tuition--low tuition does not mean high access) and to support a major research institution.

Mr. Cates asked about issues which needed to be addressed to build better connections between units. Dr. Gross said lines between faculty who report to UT Institute of Agriculture (UTIA) and UTK can get complicated due to the reporting structure. Normal administrative structure, said Dr. Gross, is not conducive to allow sharing of resources and faculty in general. A commitment was needed, for example, from UTIA to fund faculty for the NIMBioS proposal who were not part of UTK. Dr. Joe DiPietro, Vice President UTIA, noted that integration of interdisciplinary issues can be cumbersome, but it can be done and NIMBioS is a great example of that process. Mr. Cates inquired about help from the Office of the Vice President for Academic Affairs to remove impediments. Dr. Millhorn said issues cross various reporting lines and he agreed with the concept of integration and cooperation, especially in putting together interdisciplinary institutes. It is not unique to UT in having these problems, he noted; it is the structure of academia. A priority should be given in breaking down barriers so that the kinds of activities discussed could occur.

Ms. Blackburn asked Dr. Gross about tuition costs and scholarship access. Dr. Gross described an analysis process he prepared which shows students are currently paying less tuition costs at UTK than they were ten years ago. The HOPE (Tennessee Lottery) scholarship program, first available in fiscal year 2005, is available to all entering UTK students. It now provides students \$4,000 per year if a sufficient GPA is maintained. A significant segment of the final operating budget of UTK is used for scholarships, especially as access for students who would not otherwise be able to attend college. There are also endowment funds for these purposes. More resources, however, must be built to meet the needs of students who cannot afford to attend college even with scholarship assistance.

Mr. Wharton asked if a higher-level critical analysis had been done on the Governor's Chair program and if a consensus had evolved to determine if the program was effective in accomplishing what it initially was designed to do. Dr. Petersen noted there were continuing modifications to the program. Dr. Millhorn said the Governor's Chair program was being looked at very carefully to see if the best model is being utilized. The initial program targeted senior-level people who were members of the National Academy and it was very difficult to attract this caliber of individuals. Their home institutions want to keep them and a lot of enticement is required to persuade them to leave. Discussions are ongoing,

however, with interested parties. It appears the program will be remodeled, still keeping the intent of bringing in outstanding scholars but aiming at career-level individuals who are on an upward projectory. The idea is to bring in quality people who can put together teams and put together grants like we've seen here today.

Mr. Wharton asked Dr. Gross to expand on the topic of procurements and the system's impact on this process. Dr. Gross cited a lack of accountability down to his faculty level in the sense that procurement and purchasing is managed through the system and does not report through the campus. The ability to purchase something at a lower price is not necessarily allowed. Dr. Petersen said problems like this arise because a general contract is generated with a broad base with a number of specific items in the contract. Some items in the base amount are obtained elsewhere at a lower individual price and others are obtained at a higher price. The bottom-line, however, is that the lower bid contract is utilized.

Mr. Stansberry congratulated Dr. Gross on a most impressive award. It demonstrates a lot of cooperation and it will bring further distinction to the University. Mr. Stansberry asked for a copy of the suggestions Dr. Gross made to the Board of Trustees so that several committees could address these issues. A copy of the tuition study was also requested.

Dr. Millhorn noted a year had passed since the formation of the National Institute of Computational Science (NICS) in Oak Ridge, headed by Dr. Thomas Zacharia (ORNL Associate Deputy for Computing and Computational Sciences and UT Vice President for Science and Technology). The Institute is the home of the NSF supercomputer. The three NSF presentations given today are directly related to the success of the super-computer award and the capabilities and resources it brings to the University and ORNL. The computer actually belongs to the University and is located at ORNL. It will lead to even more success in the future. Dr. Millhorn said it was important to know of the tremendous research being conducted, especially in light of budget cuts. The work of students, both undergraduate and graduate, is ongoing to put these kinds of grant applications together that win major awards and bring great distinction to the University. Dr. Zacharia said the three NSF presenters were at ORNL earlier this week participating in a major NSF review of the NICS project. The review results were very positive, as evidenced by the scale of integration made by UT shown in the grants discussed today. There is greater outreach for both students and faculty within the University and also nationally. By the end of the calendar year, the University will have the most powerful academic computer in the world. Dr. Millhorn noted that cycles are reserved on the supercomputer to support state education programs, economic development programs and scientific programs. Dr. Zacharia deserves most of the credit, Dr. Millhorn said, for bringing this resource here and enabling good things, such as the new NSF grants, to happen.

V. Update on Biofuels Initiative, Dr. Kelly Tiller, External Operations, UTIA Office of Bioenergy Programs – Information

Mr. Stansberry introduced Dr. Kelly Tiller, who gave a power-point presentation and update on the UT Biofuels Initiative. Dr. Tiller spoke of the very integrated approach to the Biofuels Initiative. This approach includes farm production of new energy crops, development of production systems and supply chains that are increasingly more effective and efficient, and laboratory work with technologies to convert feedstock to ethanol, chemicals and other consumer products. The industrial scale is a critical part of this initiative. Through Genera Energy, the company the University has set up, a joint partnership has been formed with DuPont-Danisco Cellulosic Ethanol LLC (DDCE), a recognized world leader in the industry, for the construction and operation of a cellulosic ethanol process development unit and pilot biorefinery plant at the Niles Ferry Industrial Park in Vonore, Tennessee, in the heart of the farming community. DDCE has a wealth of experience, resources and technologies to bring to the project. Groundbreaking for the pilot plant was October 14, 2008. About 300 people attended the event, including Gov. Bredesen, Sen. Corker, Congressmen Wamp and Duncan, President Petersen, high-ranking DDCE officials, local and UT and ORNL officials, Genera Energy board members, community leaders, and a large majority of the farmers producing crops for the plant. DuPont has cited this plant as one of their key projects-if not their top priority--as a pathway for the future. Construction will begin within the next few weeks. It is expected the plant will be operated for a long time as an R&D facility.

Dr. Tiller discussed the processes involved in production of cellulosic ethanol and the tremendous opportunities to produce valuable intellectual properties throughout the production and research stages. A new energy crop will be generated, spearheaded out of the Institute for Agriculture. Now, 723 acres are dedicated to switchgrass production. This acreage will be expanded next year to add another 2000 acres, and another 3000 acres will be added in the spring of 2010. Research access and opportunities ranging from management practices, harvesting and storage techniques (with partners such as John Deere), and environmental studies are part of this project. Much progress has been made in a short amount of time. It was just a year ago that funding was received from the state. There is an aggressive construction schedule for the plant. With our partner DuPont-Danisco, it is on target now for the facility to be producing Grassoline by the end of 2009. They have an abundant history of cob research. The Vonore facility will be using both cob and switchgrass, piloting on cob first and switchgrass very soon thereafter. The timeline is for the first commercial scale production facility to be operational between 2012 and 2013 with a production of 20-25 million gallons per year.

Dr. Tiller outlined the operating structure of Genera Energy, a private for-profit company created in consultation with the state's Attorney General's office to partner

with a private company in order to protect proprietary process technology, as well as business sensitive information such as investments. Such aspects are difficult to work through a university structure. A number of the pieces of the overall project remain in the University, yet the partnership, construction and ownership of facilities filters down to Genera Energy, which is totally owned by the UT Research Foundation. Genera Energy is quickly moving to assemble the pieces required to make a successful operation. There is a distinguished board of directors, who have been most active and helpful in guiding progress, and a collaboration committee has been created which works with DuPont-Danisco in the actual governance of the project. Tennessee is certainly in a leadership position in this emerging industry.

Mr. Horne asked who the contractor is on the facility and what is the percentage in returns for the university, our breakdown on investments with DuPont. We are contracting with DuPont-Danisco, Dr. Tiller said, for the construction and operation of the facility. While we are working closely with them, they are the parties who are selecting the biorefinery plant contractors. Bid packages are in preparation and an architectural design package should be out very soon. The general contractor (GC) bid package should be out in about two weeks. Local firms are currently being prequalified. The GC has not been awarded yet and it is not the same process the state typically uses. Because funds are funneled into Genera Energy, we have a different process that allows us to take advantage of the significant resources of DuPont in contributing to the construction and operation as well. As to the financial agreement, DuPont and Danisco are extremely sensitive about the business, economic and proprietary technology and processes involved in the partnership. A balance must be struck in providing that information and protecting their interests to make the partnership work. Genera Energy, together with DDCE, will develop a for-public consumption summary of this agreement which will provide more detailed information about revenue sharing and future intellectual property and revenue opportunities. Once this information can be distributed, Dr. Tiller believes all parties will be pleased to see that we have a very good opportunity to share in downstream benefits that our investment is leveraged to bring about. The summary should be available within a short timeframe.

Mr. Stansberry inquired about responsibility for overruns on the project, which he understands are with DuPont? That is correct, Dr. Tiller replied. We are in for up to \$40.7M capital, which is a small amount of the total capital and operating budget.

Mr. Schledwitz asked Dr. Tiller to explain the project structure and the role the UT Research Foundation has in the project. Mutually agreeable and acceptable reporting and accounting procedures were formulated jointly by Genera, UTRF, UT, the State Building Commission and the Fiscal Review Committee, Dr. Tiller said. Decosimo Certified Public Accounts, a leading regional accounting firm in Tennessee, has been engaged to develop a very detailed set of flows and internal accounting controls and procedures for both the operating side and the capital side.

Does UTRF approve transactions or have any role, or is it a pass-through arrangement, Mr. Schledwitz asked. UTRF is primarily a pass-through, Dr. Tiller replied. UTRF provides certain business services and legal services for the project concerning intellectual properties. Funds approved by the State Building Commission flow from the Department of Finance & Administration to the UTRF and its wholly-owned for-profit subsidiary Genera Energy.

Mr. Stansberry asked who appointed the Genera Energy board of directors. Dr. Tiller said the UTRF appoints the board members as Genera Energy is wholly owned by the UTRF. Mr. Schledwitz said the UT Board of Trustees must ultimately have some responsibility for accountability and relationships, yet the UT Board does not have information about the agreement; what is our role? Dr. Tiller discussed the balance between the University and the partnership with private companies. The role that UT administrators have played, especially Dr. Millhorn, provides good feedback for the University. He is serving as chairman of the board of Genera Energy LLC. Dr. DiPietro is also on the Genera Board. Several of the Genera Board members are former members of the UT Board of Trustees. Of the four people working for Genera, three are University employees who have some of their time assigned to Genera, and one is a UT-Battelle employee on a loaned employee agreement with ORNL. Mr. Schledwitz asked if they are UTRF employees? Yes and no, Dr. Tiller said. In her case, she has a partial appointment with UTRF, but her main assignment is with the UTIA. UTIA cannot assign people to Genera but UTRF can. No employee paid with UTRF funds is also being paid from Biofuels Initiative funds.

Mr. Talbot asked if his understanding was correct that the pilot biorefinery was not intended to be a commercial plant. That is correct, Dr. Tiller said. DuPont-Danisco has tremendous incentive, and has committed, to building a commercial-scale facility in the state of Tennessee. Genera has an option to participate in that operation if it is decided it would be a good opportunity to do so. The DDCE agreement commits them to either build a pilot plant in the state of Tennessee or that technology package is available to Genera. We are not anticipating partnership in the commercial-scale facility, but there will be a stream of revenue that can be taken advantage of in the operation of a commercial facility.

Mr. Cates inquired about the corn cob aspects of the project. After pre-treatment, corn cobs are similar to switchgrass in their composition. DuPont-Danisco has done cobfocused work for over 10 years. Much of the research and data known about cob can be transferred quickly to switchgrass. Mr. Hall asked about the life of the project. Dr. Tiller said the life is expected to be a long one. There is a 10-year commitment from DuPont-Danisco to operate the plant, with three five-year extensions.

Mr. Stansberry thanked Dr. Tiller for her presentation and noted he had attended the ground-breaking ceremony in Vonore and it was a most exciting event. Perhaps the most excited people there, he said, were the farmers and that is significant for all of us.

VI. UT Kingsport Center Initiative, Dennis Phillips, Mayor, City of Kingsport, and John Campbell, City Manager, City of Kingsport - Information

Mr. Stansberry asked Dr. Millhorn to elaborate on the Kingsport Center initiative. Dr. Millhorn said the initiative began about eighteen months ago when discussions took place in Kingsport with officials and community leaders concerning higher education in the Kingsport area and the need to provide a mechanism for offering education to the baccalaureate degree in collaboration with UT and other universities. This is an example of an outreach opportunity for the University to a region of the state which has very little University presence. The initiative has matured to the point that the City of Kingsport is making substantial investment of about \$13M to build a structure to house this activity. Dr. Millhorn introduced Kingsport Mayor Dennis Phillips and City Manager John Campbell to give an update on the project.

Mayor Phillips used a power-point presentation to highlight aspects of the Kingsport Center for Higher Education. Kingsport is about 99 miles east of Knoxville, part of the Tri-Cities area, and it is the largest city in the state without a college offering a four-year degree. A concern was given by Mr. Brian Ferguson, CEO of Eastman Chemicals Company, and others that an educated workforce was unavailable in the quotas sufficient to run their businesses. A challenge was made to put education as a first priority. The City of Kingsport has committed \$20M for higher education and there is now a program whereby every student in the City of Kingsport, in Sullivan County, Tennessee, can attend two years of college at zero costs to the individual, the first program of its kind in Tennessee they believe. The City is committed to creating an academic village located in the heart of downtown Kingsport. The first phase in this creation is a regional center for health professions, housed in the Allied Health building just finished this past August. There are 400 students in this program. This is pertinent since there are 4,800 medical businesses and employers in the area.

Mayor Phillips showed a rendering of the Kingsport Higher Educational Center. The facility will have 54,450 square feet, with a 220-seat auditorium and two 60-seat digital lecture halls. Classes are expected to be held in the Center by August 2009.

Mayor Phillips spoke of the great enthusiasm, assistance, and outstanding leadership of Drs. Katie High, David Millhorn and John Petersen in this endeavor and for higher education in general. It's all about the students. UT has been a critical factor in the success of Kingsport's undertaking. The first question asked by businesses and industries has been "What about UT?" He thanked the Trustees for the important part UT has played in the Kingsport Higher Education Consortium. Charter members include

Northeast State Technical Community College, Carson-Newman College, King College, Lincoln Memorial University, and the University of Tennessee.

Mayor Phillips presented a chart with "local climate" statistics of the Kingsport-Johnson City region, showing 863,515 people live within a 50-mile radius of the area; 2,813 patents have been issued since 1976, the third highest county in Tennessee; Eastman has invested \$1.3B in five years; sales tax collections are up 9.7 percent; housing appreciation is 14th highest in the country; and teacher salaries are competitive. Another chart gave information concerning employment and skilled worker demand statistics according to the 2000 census. Daytime population has jumped from 44,905 to 68,764 (an increase of 23,859) people; Eastman plans to hire a minimum of 2,000 new employees over the next five years (partly to replace retiring employees who will be leaving the workforce; younger employees must be attracted to the area); and only 27 percent of businesses report satisfactory labor supply.

One noticeable item in educational attainment statistics is that there are 6,000 people (18.5 percent of the area population) with some college but no degree. That is the target group for the Center. With UT through its on-line programs, and with other programs provided by Consortium colleges and universities, Kingsport wants to be the "Wal-Mart of Education"—they want to make education available 24/7. Mayor Phillips noted that the City of Kingsport has 23.6 percent of their population with a bachelor's degree or higher. The average for this same group for the state of Tennessee is 21.7 percent. Kingsport's five-year goal is to raise this number to 30 percent.

Mayor Phillips concluded by saying the key point he wants to make is that the City of Kingsport has made education a top commitment and it will do everything it can to make the University of Tennessee successful in sharing in this commitment. He again commended UT leadership in asking "How can we help make this work?" and in maintaining a positive presence in this undertaking.

Mr. Forrest asked if funds for this project were obtained from the general property taxes and revenues paid in for the City of Kingsport for all of education, or is this seed money. Mayor Phillips said the City built the buildings with tax receipts. The City is also obtaining grants and seeking funds from a multitude of sources.

Mr. Campbell said it is critical for UT to have a strong presence in this undertaking. This year alone Eastman hired 80 chemical engineers. Most of their employees and hires are engineers and researchers. In addition to UT, many of their employees come from Virginia Tech and Clemson. Statistics show that four of the top 10 funded high school systems in the state are in the Tri-Cities area.

Mr. Stansberry thanked Mayor Phillips and Mr. Campbell for their informative presentation.

Mr. Stansberry noted that for most of his time on the UT Board John Thornton chaired this committee and Mr. Stansberry thought it was always one of the most enjoyable committees of the Board. This morning's meeting certainly confirms that opinion and it illustrates the opportunity to see what UT is doing within the state.

The meeting was adjourned at 10:30 a.m.

Respectfully submitted,

David E. Millhorn, Ph.D. Executive Vice President