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University of South Carolina BOARD OF TRUSTEES <u>Health Affairs Committee</u> March 5, 2008

The Health Affairs Committee of the University of South Carolina Board of Trustees met on Wednesday, March 5, 2008, at 1:30 p.m. in the 1600 Hampton Street Board Room.

Members present were: Mr. Toney J. Lister, Chairman; Mr. Arthur S. Bahnmuller; Mr. John W. Fields; Dr. C. Edward Floyd; Mr. William W. Jones, Jr.; Mr. M. Wayne Staton; Mr. John C. von Lehe, Jr.; Mr. Herbert C. Adams, Board Chairman; and Mr. Miles Loadholt, Board Vice Chairman. Mr. William L. Bethea, Jr. was absent. Other Trustees present were: Mr. William C. Hubbard; Mr. Eugene P. Warr, Jr.

Others present were: President Andrew A. Sorensen; Secretary Thomas L. Stepp; Vice President for Research and Health Sciences Harris Pastides; Vice President for Student Affairs and Vice Provost for Academic Support Dennis A. Pruitt; Vice Provost for Faculty Development Christine Curtis; Vice Provost for Academic Affairs William T. Moore; Vice President for University Advancement Brad Choate; Dean of the School of Medicine Donald J. DiPette; Executive Dean of the South Carolina College of Pharmacy Joseph T. DiPiro; University of South Carolina Campus Dean for the South Carolina College of Pharmacy Randall C. Rowen; Dean of the College of Nursing Peggy O. Hewlett; General Counsel Walter (Terry) H. Parham; Associate Vice President for University Development, Division of University Advancement, Michelle Dodenhoff; Assistant Vice President for Advancement Administration, Division of University Advancement, J. Cantey Heath, Jr.; Associate Dean of Administration and Finance, School of Medicine, Brian J. Jowers; Associate Dean of Clinical Research and Special Projects, School of Medicine, Stanley D. Fowler; Associate Dean of Clinical Affairs, School of Medicine, Marion O. Burton; Chief Operating Officer, University Specialty Clinic, and Instructor in the Department of Internal Medicine, Alfred A. Dunn; Director of Legal Affairs, School of Medicine, Linda T. Moore; Executive Director of the USC Alumni Association Marsha A. Cole; Professor in the School of Medicine Robert G. Best; Special Assistant to the President and Athletics Director John D. Gregory; Broadcast Journalist, Office of Media Relations, Frenche Brewer; Chairman, Grenzebach Glier & Associates, Inc., Martin Grenzebach; Director of the Office of University Communications, Division of University Advancement, Russ McKinney, Jr.;

University Technology Services Production Manager Justin Johnson; Board staff members Terri Saxon, Vera Stone, Karen Tweedy; and members of the media.

Chairman Lister called the meeting to order, welcomed those present, and asked everyone to introduce themselves. Mr. McKinney introduced members of the media who were in attendance.

Chairman Lister stated that the agenda had been posted and the press had been notified as required by the Freedom of Information Act; the agenda had been circulated to the Committee members; and a quorum was present to conduct business.

Chairman Lister directed the attention of the Committee to the agenda and called on Dr. Pastides and Dr. DiPette.

## I. Health Manpower Needs in South Carolina and the Role of the School of

<u>Medicine</u>: Dr. Pastides recognized Dean Joseph DiPiro and Dean Randy Rowen and announced that the South Carolina College of Pharmacy (SCCP) was in the Top 20 in the nation with respect to National Institutes of Health (NIH) funding. Their next goal was to move into the Top 15.

Dr. Pastides thanked Chairman Adams who participated in a joint meeting of SCCP faculty from USC and MUSC. He stated that Chairman Adams represented the aspirations of this board in the meeting and responded to some difficult questions very thoughtfully.

With respect to healthcare, Dr. Pastides reported that healthcare would be the number one item in the presidential elections relative to our national population. In addition, a cigarette tax was being debated by the South Carolina General Assembly. Therefore, this was not the time for the University of South Carolina School of Medicine (USC SOM) to "sit back and let the action happen."

Dr. Pastides called on Dr. DiPette who stated that not only was there a physician's shortage but there was a total health profession shortage including pharmacy, nursing and the allied health fields. Today, he would center his focus on the physicians' component.

Dr. DiPette stated that the USC SOM was one of the youngest in the nation. It was created in 1973 in conjunction with the Teague-Cranston Act as a communitybased medical school with a mission to help address the medical needs of South Carolina. The mission included the following:

- train physicians for underserved areas of South Carolina;
- conduct research on medical problems of greatest concern in South
  Carolina;
- provide health care to patients in South Carolina.

Dr. DiPette stated that the USC SOM had over 1,538 medical degree graduates and the statistics were as follows:

- 1,295 USC SOM graduates were in practice (636 in-state and 659 out-ofstate);
- 213 USC SOM graduates were in training plus 30 involved with military, on-leave, or deceased;
- 416 USC SOM graduates were practicing in needed specialties (family medicine, pediatrics, internal medicine, OB/GYN, emergency medicine and psychiatry) in South Carolina;
- 295 USC SOM graduates were practicing in non-metropolitan areas of South Carolina;
- 55.3 percent of all graduates have or were being trained in primary care (family medicine, pediatrics, internal medicine).

Dr. DiPette stated that in the 1980s and 1990s, an era of increasing managed care, public policy experts predicted an excess of physicians, specialists and subspecialists by year 2000. Therefore, steps were recommended, and taken, to reduce the supply of physicians. He stated that it was difficult to predict physicians' manpower. One of the reasons why one was likely to make a mistake in predictions was because it takes 15 to 20 years to produce a physician, so the circumstances being evaluated today would not be reflective of the needs. In the long-term, the predictions of the 1980s were "dead wrong" and did not reflect the experience of South Carolina or other states.

According to the 2001 Physician Workforce Report of the SC Deans' Committee on Medical Education, most counties in South Carolina were medically underserved and had shortages in health professions, and at least one-third had a shortage of primary care physicians.

Currently, South Carolina had fewer medical students and residents per capita than the average for states in the southeastern region and the entire United States.

Dr. DiPette reported that the South Carolina workforce shortage of physicians continues. He gave the following 2007 Physician Workforce Data showing South Carolina ranking in the USA:

- active physicians (total) per 100,000 population:
  USA-249.7 SC-210.6 (37th rank)
- active primary care physicians per 100,000 population:
  USA-88.1 SC-75.0 (41st rank)
- medical students per 100,000 population:
  USA-29.2 SC-22.0 (29th rank)
- medical residents per 100,000 population:
  USA-35.6.1 SC-23.5 (35th rank)

Currently, approximately 20.6 percent of active South Carolina physicians were under the age of 40, and 20.5 percent were over age 60. Nearly sixty percent of the physicians' workforce were ages 40-60 and would be retiring in the next 15 to 20 years. He stated that efforts had to begin today to deal with this crisis.

Dr. DiPette stated that the length of time estimated to educate and train a medical student to enter the physician's workforce was between 12 and 16 years. For example it would take five to six years to create a medical facility plus four years of undergraduate studies and three to six years of graduate training.

On February 26, 2008, there was an article in USA Today that echoed the problem was rooted in the 1980s and 1990s, when the United States medical schools put a cap on enrollments, believing that managed health care, among other factors, would create a glut of doctors. Dr. DiPette reiterated that they were "wrong." This error had now impacted the United States and there was a national shortage of surgeons and family practice doctors across the country. Specifically, they had centered on primary care, rural areas and specialty areas including surgery.

Dr. DiPette stated that the major body that regulated the supply of physicians was the Association of American Medical Colleges (AAMC). This body accredited medical students and determined the number of medical students that an institution could enroll. Until the present time, the AAMC had the doors closed to medical school expansion or class size expansion in response to the predictions that there would be too many physicians. AAMC had now reversed that policy, and would now open the door to medical school class expansion or medical school formations. In addition, AAMC was now recommending a 30 percent increase in enrollment of students entering medical schools in the United States.

Dr. DiPette stated that the preponderance of current evidence suggested that the United States was headed toward an aggregate shortage of physicians. Twentyfive percent of all physicians in resident training were international medical graduates.

Dr. DiPette cited the following consequences of the physician shortages:

- made access to healthcare more problematic for all citizens, especially the disadvantaged;
- increased the delays individuals encountered in scheduling appointments;
- increased distances patients must travel for various types of health care services;
- increased healthcare costs.

Dr. DiPette proposed three options to address this crisis and in response to the AAMC recommendation of a 30 percent increase in medical students.

<u>Option One</u>: Do nothing. Dr. DiPette stated that the consequences for doing nothing would be that the United States would be totally dependent on international medical graduates. Currently, the United States imported 25-percent of our physician's workforce.

With current United States restrictions on immigration, entry of international medical graduates was increasingly difficult. Also, there was a strong preference of patients to be cared for by American healthcare providers.

Dr. DiPette stated that the most difficult and heartbreaking factor of all for him was that there were so many qualified students who were unable to enter medical training in schools in the United States because of limited capacity.

Option Two: Create new medical schools to train physicians.

Dr. DiPette stated that many communities were choosing to build new medical schools. Currently, there were 20 to 22 new medical schools, either on the drawing board, under construction, or in the initial planning stages. This option was very expensive. Based on data from the University of Texas, the estimated cost to build a brand new facility was roughly two billion dollars.

Dr. DiPette gave a breakdown of the estimated costs as follows:

Cost to construct a new medical school: (classrooms and departmental space):

700,000 sq. ft. X \$500/ sq. ft. = \$ 350,000,000 Cost for faculty recruitment, equipment, and staff: Basic (6) & Clinical (6) Departments x \$100,000,000 = \$ 1,200,000,000 Cost to construct a university hospital (incl. clinical departments): 450 beds X \$1,000,000/ bed = \$ 450,000,000 \$ 2,000,000

Option Three: Expand the class size of current medical schools.

Dr. DiPette stated that this option was more amenable to the University's circumstances and had the greatest merit. First, the Administration should consider class size expansion of medical schools already in our community. This option was the most cost effective and the turnaround time would be approximately seven to nine years shorter for medical students entering the physicians' workforce. The reason for the shorter time was because there was no planning stage, faculty and staff recruitment or construction that it would take for a brand new medical school. In addition, the quality of education, reputation and performance of the USC SOM was already known and accredited. Moreover, the USC SOM already had a faculty of excellence, a research and clinical enterprise.

Dr. DiPette stated that he had been affiliated with two institutions that had the foresight to look forward on this issue, specifically Michigan State University

and Texas A&M. Both institutions had young medical schools approximately 30 - 35 years old. Both schools would incrementally expand class size from 80 to 200 students per class and would use multiple community sites which were to their advantage.

Dr. DiPette reported that the University System of Georgia Board of Regents had accepted a report for consideration for the expansion of medical education in Georgia. The report called for the Medical College of Georgia (MCG) School of Medicine to expand statewide from 745 to 1,200 students, an 80 percent increase by year 2020. Simultaneously, an expansion at four sites would include Augusta, Albany, and Savannah and a new 4-year school in Athens.

In North Carolina, there was a proposal to establish regional medical campuses in Asheville and Charlotte.

Dr. DiPette gave an overview of the following North Carolina expansion proposal:

- expand medical school enrollment from current 160 first year students to 230 first year students by 2011;
- phase in expanded class sizes starting in 2009;
- all students would complete Years 1-2 in Chapel Hill, then the added 70 would complete clinical Years 3-4 in Asheville (20) or Charlotte (50);
- Dean of UNC School of Medical would be the Chief Academic Officer as required by accreditation bodies.

Dr. DiPette stated that the USC SOM was poised to grow to meet the needs of South Carolina because the school was young and flexible and had economies-of-scale. In addition, the USC SOM was a component of an outstanding public institution of higher education with a rich history and tradition of engaging the community. Also, USC SOM already had diverse partners which included the state, federal, and private industries in the community; unlike the monolithic medical schools.

Dr. DiPette gave an overview of the USC SOM/Greenville Hospital System partnership. He stated that plans were to increase medical students in Greenville to 20 students per year in the third and fourth year for a total of 40 students.

Dr. DiPette emphasized the importance of using our communities for medical class expansion. The Columbia campus had the capacity to expand their first and second year medical class size to 120 students per year; currently, the class was only 85. This modest increase would still not meet the demands.

In conclusion, Dr. DiPette reported there were some advantages of the medical school class expansion. First, it addressed urgent state and national needs. Second, it aligned with the USC SOM need to grow for enhanced

competiveness. Finally, it favorably marketed and branded institutional health care systems and was a catalyst for economic development of involved communities.

Mr. Bahnmuller inquired about the number of physicians 60 years old or older who were still practicing medicine. Dr. DiPette responded that twenty percent of the entire physician workforce was over 60.

Mr. Hubbard commented that if the USC SOM had the capacity for 120 medical students in Year 1 and Year 2, then why was there a projected decrease to 60 medical students in Year 3 and Year 4 in the year 2010. Dr. DiPette responded that the first two years were the pre-clinical years which were predominately lectures and classrooms. The third and fourth years, students would move to the hospital setting. Currently, the hospital setting could accommodate a capacity of 60 students in Columbia and 20 in Greenville.

Dr. DiPette responded to various other questions from the committee regarding expansion of the medical facilities at the University.

Dr. Pastides explained that the facilities today were suitable for up to 85 medical students. However, the medical school anticipated expansions and renovations to accommodate 120 students comfortably.

With respect to federal research, Dr. Pastides stated that North Carolina and Virginia garnered between 60 and 70 percent of their annual totals from their medical school. USC garnered approximately 20 percent from its medical school and University of Georgia garnered zero percent from not having a medical school. Therefore, Georgia anticipated making a better flagship University by having a medical school in Athens.

Mr. Hubbard asked how many faculty additions would be needed to increase the class size to 120 students. Dr. DiPette responded that he did not have the calculations but estimated it would take five to ten basic science faculty and that our clinical partners in Greenville had the capacity for 60.

Dr. Pastides stated that the USC SOM would develop a more detailed plan which would be presented to the Board in the future. He concurred that Option Three appeared to be the most econonomical model now.

Dr. Sorensen stated that the University would aggressively solicit the involvement of Clemson University. Dr. Pastides was already involved in a grant proposal to the federal government linking the MCG, MUSC and USC SOM. Our three medical schools were working together on translational research.

Chairman Lister stated that this report was received for information.

II. <u>Other Matters</u>: Chairman Lister called on President Sorensen who presented data on undergraduate enrollment of minority students at USC Columbia and the regional campuses.

The African-American students at USC-Columbia had decreased from 2,670 to 2,345 (12 percent), Native-Americans increased from 48 to 70 (46 percent), Asian-Americans increased from 475 to 540, (15 percent), and Hispanic-Americans increased from 271 to 386 (42 percent). Based on current figures, Hispanic-Americans were the fastest growing group in the state, including whites.

From 2003 to 2007, statistics revealed that minority enrollment had increased by 17 percent, from 2,924 to 3,412 at USC system campuses. Native-Americans had increased from 50 to 68, a 36 percent increase, Asian-American 207 to 224, an 8 percent increase and Hispanic-Americans increased by 14 percent, from 251 to 287.

Based on interviews, President Sorensen stated more African-American students were choosing to attend USC campuses closer to their respective residence.

Overall, total enrollment for all USC campuses from 2002 to 2007 showed that African-American enrollment had increased from 5,594 to 5,757 (3 percent), Native-Americans from 93 to 138 (41 percent), Asian-Americans from 682 to 764 (12 percent) and Hispanic-Americans from 522 to 673 (29 percent).

President Sorensen stated that a few important points were that although there were 325 fewer African-Americans at Columbia, there were nearly 500 more African-Americans at the seven regional campuses resulting in a system-wide increase of 3 percent.

In conclusion, President Sorensen stated that never before in the history of USC had so many minority students been enrolled. The fact that USC was witnessing such substantial growth of minority students while the admission standards at each of our baccalaureate institutions were dramatically higher than they were five years ago, was a tribute to the faculty and staff who were leading the way in this important area.

President Sorensen stated that he was very pleased with this increased diversification of the entire University of South Carolina.

Chairman Lister expressed his gratitude to President Sorensen for his efforts in this regard.

Chairman Lister stated that this report was received for information.

There were no other matters to come before the Committee. Chairman Lister declared the meeting adjourned at 2:00 p.m.

Respectfully submitted,

Thomas L. Stepp Secretary