EXPANDING MEDICAL EDUCATION IN GEORGIA --

ROADMAP FOR MEDICAL COLLEGE OF GEORGIA SCHOOL OF MEDICINE AND STATEWIDE PARTNERS

FINAL EXECUTIVE REPORT

To: The Board of Regents University System of Georgia

JANUARY 11, 2008
Expanding Medical Education in Georgia –

Roadmap for Medical College of Georgia School of Medicine and Statewide Partners

Georgia has fallen so far behind in training doctors that it may never again have an adequate supply of doctors. Without immediate statewide investment in medical education at the MD level and simultaneous expansion of residency training programs, the future health and safety of Georgians is at risk.

The need for more doctors is so critical that Medical College of Georgia must expand immediately to produce physicians that will remain in GA – assuring both public health and economic opportunity for all citizens. Medical College of Georgia must expand its medical education, research, and clinical missions in Augusta simultaneously as it develops a new campus in Athens in partnership with the University of Georgia and continues its expansion in Albany and Savannah.

If implemented fully, the plan recommended by Tripp Umbach will more than double the economic impact of Medical College of Georgia School of Medicine, generating more than $1.6 billion additional dollars annually and supporting more than 10,000 additional jobs statewide. For every $1.00 invested by the State of Georgia in 2020 in medical education, a total of $2.54 will be returned in state tax revenue.

There is no other single investment that can positively impact quality of life and economic development more than medical education.
Georgia’s current drought of physicians will become a crisis by 2020 unless immediate coordinated action is taken to dramatically expand public medical education. Georgia’s population growth has left the state so far behind in training doctors to the extent that it may never again have an adequate supply of doctors. Without immediate statewide investment in medical education at the MD level and simultaneous expansion of residency training programs, the future health and safety of Georgians is at risk. With a shortage of more than 1,500 physicians in underserved areas expected by 2020, the annual cost of providing later stage medical care at emergency departments will be more than $5 billion annually.¹

Georgia’s population growth is projected to continue through 2030. This underscores the harsh reality that the state’s medical education system must be accelerated to meet the state’s projected physician workforce needs. Based on the state’s current number of medical students, residencies and physician recruitment and retention rates, by 2020 there will be even fewer physicians than today caring for 3 million more Georgia residents. Georgia could slip further to become the nation’s least desirable state for obtaining medical care.

Over the past two years, Georgia slipped in rank from 37th out of 50 states in the number of physicians per capita to 40th out of 50 states. Without investment in the state’s medical education system, Georgia will rank last in the United States in physicians per capita by 2020.

¹ Tripp Umbach estimates that a shortage of 1,500 primary care physicians in underserved areas would cost the State of Georgia $5.4 billion annually in uncompensated healthcare costs.
In September 2007, Medical College of Georgia retained Pittsburgh-based Tripp Umbach to complete the medical education expansion study on behalf of The Board of Regents. Tripp Umbach is the nation’s leading medical education planning organization, having conducted national studies for the Association of American Medical Colleges and individual medical school expansion studies in Arizona, Florida, California, Texas, Michigan, Minnesota, and Pennsylvania. Tripp Umbach is currently completing a similar study for the State of Connecticut.

The Tripp Umbach study was designed to achieve the following objectives:

1. To identify the best locations statewide for expanding medical education.

2. To identify the most cost effective strategies for the statewide expansion of Medical College of Georgia School of Medicine through partnerships with other organizations.

3. To recommend the best plan for expanding the Medical College of Georgia School of Medicine in order to maximize future physicians workforce supply and to increase economic development for the State of Georgia.

All Tripp Umbach recommendations are evidence-based and data-driven.
The Plan

Tripp Umbach recommends that Medical College of Georgia School of Medicine expand statewide to 1,200 students by 2020, from 745 students currently, an increase of approximately 60%, to meet critical statewide health and safety needs and to avoid an impending public health crisis caused by a shortage of thousands of physicians in underserved areas. Medical education and research expansion must be dramatic in scope. Furthermore, all aspects of the plan must occur simultaneously. The program will require significant expansion in Augusta, which will continue to serve as the foundation for a single state operated medical school. Medical College of Georgia School of Medicine will also develop and operate a four year regional campus in Athens in partnership with the University of Georgia as well as two clinical campuses anchored in Albany and Savannah. The statewide expansion program requires immediate and simultaneous investment in facilities, faculty, and programs, and positions the school to be nationally recognized as a center of medical excellence.

By 2020, the full implementation of the recommended medical education and research expansion plan will double the Medical College Georgia School of Medicine’s annual economic impact to $3.2 billion, add 10,000 new jobs statewide, and provide $2.54 in state tax revenue for every dollar invested by the state of Georgia. By 2020, Georgia will have one of the nation’s largest and most competitive state supported medical education systems, and will reap the many economic and social benefits associated with a stronger academic medical infrastructure.
Medical Education Expansion Plan 2020

Four Key Plan Elements:

- **Athens**
  - 4 yr Program
  - 240 Students

- **Augusta**
  - 4 yr Program
  - 900 Students

- **Albany**
  - 3rd & 4th yr Program
  - 30 Students

- **Savannah**
  - 3rd & 4th yr Program
  - 30 Students

[Map of Georgia with circles indicating the expansions in Columbus, Augusta, Savannah, and Albany.]
1. Expand Medical Education and Research Significantly in Augusta

Tripp Umbach recommends that Medical College of Georgia School of Medicine expand its current class from 190 first year students to 240 first year students by 2017. This expansion will make the MCG class in Augusta among the largest classes of medical school students in the nation. Under this plan, Medical College of Georgia School of Medicine’s Augusta campus will have more medical students per capita than anywhere else in the nation – adding value to investments already made by the State of Georgia on the Augusta campus. The expansion of the program in Augusta requires immediate capital investment in a new medical/dental education facility. Efficiencies to be achieved through such a combined facility will save taxpayers more than $20 million.

..... And develop a new medical education and research campus in Athens in partnership with the University of Georgia

Tripp Umbach recommends that Medical College of Georgia develop a new regional campus in Athens in partnership with the University of Georgia. The Medical College of Georgia will initiate and hold the accreditation of the medical education program at the Athens campus and will work in partnership with the University of Georgia to leverage mutual strengths in biomedical research and individual university strengths in public health. Medical College of Georgia, the state’s health sciences university, will partner with the University of Georgia, the state’s land grant university, to allow medical education, public health, and community health improvement programs to be delivered to all Georgians through the University’s cooperative extension network.
Tripp Umbach recommends a minimum investment by the State of Georgia of $10 million in 2008 to develop an initial facility in Athens for medical education and to recruit a regional dean and key faculty. State funding in 2008 will be required for the accreditation of the Athens campus as early as 2009 and no later than 2010.\textsuperscript{2} It is recommended that the University of Georgia purchase and renovate an initial facility on or adjacent to the UGA campus for the purpose of educating 40 MCG medical students beginning in 2010. It is further recommended that the medical education component of the Athens campus be relocated to the Navy Supply School property in 2012, to accommodate a class of 60 medical students by 2017.

….. And continue its development of regional campuses for 3rd and 4th year students in Albany and Savannah in Partnership with regional healthcare systems.

Expansion of MCG’s medical education activities outside of Augusta and the Central Savannah River Area should continue. Already nearly one in every four of MCG’s medical student clinical rotations is conducted outside of Augusta. Tripp Umbach recommends that a total of 60 third and fourth year students be educated at residential campuses in Albany and Savannah over the next seven years.

\textsuperscript{2} While MCG and UGA have publicly announced plans to open an Athens campus as early as 2009; Tripp Umbach has based all numbers in this report on a more realistic opening date of 2010.
2. Medical College of Georgia and the University of Georgia must create a dynamic medical research partnership to drive economic development statewide.

The emerging partnership between Medical College of Georgia and the University of Georgia provides one of the nation’s best opportunities to grow medical and biotechnology research. Research driven medicine has already been part of the culture at MCG in Augusta for decades and can be elevated to another level with an additional four-year medical education and research campus in Athens. Medical College of Georgia and the University of Georgia, which currently receive approximately the same amount of National Institutes of Health (NIH) research funding, should collaborate to attract millions of additional dollars annually to the Georgia economy. Collaborative investments by the two institutions on drug discoveries will also attract commercial investment and will eventually lead to healthcare cost savings.

3. Medical College of Georgia and the University of Georgia must develop a dynamic statewide public health partnership to meet the health and safety needs of all Georgians.

The collective strengths of Medical College of Georgia and the University of Georgia in public health improvement and disease management must be part of an expanded statewide partnership to achieve healthcare cost savings for the State of Georgia. To achieve improvements in areas such as access to appropriate earlier stage healthcare and lowering of obesity in children, Medical College of Georgia and the University of Georgia must immediately expand its
partnership to include community organizations, hospitals, physician practices, economic development organizations, and schools in all Georgia counties.

4. The State of Georgia must expand Graduate Medical Education in step with expansion of medical education at the MD level.

Georgia has a critical shortage of residency positions. The State of Georgia has only 2,000 residency positions, about half as many as its “fair share” nationally. Only about one-third of graduates of Medical College of Georgia remain in the state to complete their initial residency training.

Tripp Umbach recommends that the state support efforts for the simultaneous expansion of Graduate Medical Education (GME) to ensure that physicians educated in Georgia will remain in the state after completing residencies. A minimum of 104 new residency positions which are desirable to graduates and meet the state’s needs are required by 2020. This will translate into additional physicians added annually to the Georgia workforce and will provide for the full range of primary care and specialized medical disciplines.
Economic Benefits

There is no other single investment that can positively impact quality of life and economic development more than medical education.

If implemented fully, the plan recommended by Tripp Umbach will more than double the economic impact of Medical College of Georgia School of Medicine, generating more than $1.6 billion additional dollars annually and supporting more than 10,000 additional jobs statewide. Under the plan outlined in this report, for every $1.00 invested by the State of Georgia in 2020 in medical education, a total of $2.54 will be returned in state tax revenue.
The Georgia Physician Drought

The future health and safety of Georgians is at risk. Georgia’s current drought of physicians will become a crisis by 2020 unless immediate coordinated action is taken by the Board of Regents of the University System of Georgia to dramatically expand public medical education. Georgia has fallen so far behind in training doctors that it may never achieve an adequate supply of doctors without immediate statewide investment in medical education at the MD level and simultaneous expansion of residency training programs.

While the U.S. population grew by 30% over the last quarter-century, according to the U.S. Census Bureau, the number of physicians produced by U.S. medical schools has remained flat at approximately 16,000 physicians per year since 1980, according to the Association of American Medical Colleges (AAMC). In an October 2006 report titled "Physician Supply and Demand: Projections to 2020," the U.S. Health Resources and Services Administration projected a shortfall of 55,100 physicians in 2020, primarily in non-primary-care specialties. Richard “Buz” Cooper, Professor at the Wharton School at the University of Pennsylvania and a leading expert on medical manpower, suggests that the U.S. will need approximately 200,000 more doctors by 2020.

Based on current national projections, the State of Georgia will have a shortage of at least 2,500 physicians by 2020, and the shortage may grow to more than 5,000 physicians by 2030. Even more alarming is the fact that these projections do not account fully for increased statewide population, increases in utilization by the health conscious baby-boomer generation, or shorter work weeks and increased flexibility in work schedules demanded by both male and female younger physicians. Shortages will be especially intense in specialties that require around the clock coverage. Tripp Umbach estimates that a projected shortage of 1,500 primary care physicians in underserved areas would cost the State of Georgia $5.4 billion annually in delayed care healthcare costs.
Georgia’s recent population growth, which is projected to continue through 2030, underscores the harsh reality that the state’s current medical education system is already straining to meet the state’s physician workforce needs. Based on the state’s current number of medical students and residencies and physician recruitment and retention rates, by 2020 there will be even fewer physicians than today caring for 3 million more Georgia residents, making Georgia the nation’s least desirable state for obtaining medical care.

Georgia needs thousands of additional physicians right now, and physician training takes seven years minimum following the undergraduate education – two years of classroom instruction, two in clinical rotations, and at least three as a resident. It is important to remember that expanding medical education today won’t result in new physicians until 2018. Georgia has the opportunity today to expand medical education. The number of Georgians who wish to pursue a career in medicine is at an all time low and there are fewer than two qualified applicants for every first year MD class seat. The most recent data suggests that the state of Georgia may have relied too long on the in-migration of physicians from other states and counties. The number of new physicians added to Georgia’s workforce from outside of the state has declined 55% over the last 10 years. The Georgia Board for Physician Workforce expects that this trend will continue.

In January 2005, the Georgia Board for Physician Workforce reported that Georgia’s medical education system has not kept pace with the demand for physicians and that the state would need to add 180 medical students per class to reach the national average. Over the past two years, while exploring the options to expand medical education and address the growing physician shortage, Georgia slipped in ranking from 37th out of 50 states in the number of physicians per capita to 40th out of 50 states. Without changes in the state’s medical education system, Georgia will rank last in the United States in physicians per capita by 2020.
Overview of the Medical Education Expansion Study

In early 2007, within a backdrop of historic growth in the demand for quality medical care and a dwindling supply of physicians, the State of Georgia appropriated funds to study expanding public medical education – with the goal of developing a statewide plan for educating and retaining more physicians. The University System of Georgia Board of Regents commissioned Medical College of Georgia to manage the intensive four-month study.

In September 2007, Medical College of Georgia retained Pittsburgh-based Tripp Umbach to complete the medical education expansion study on behalf of the Board of Regents. Tripp Umbach is the nation’s leading medical education planning organization, having conducted national studies for the Association of American Medical Colleges and individual medical school expansion studies in Arizona, Florida, California, Texas, Michigan, Minnesota, and Pennsylvania.

**The Tripp Umbach Study was designed to achieve the following objectives:**

- To identify the best locations statewide for expanding medical education.
- To identify the most cost effective strategies for the statewide expansion of the Medical College of Georgia School of Medicine through partnerships with other organizations.
- To recommend the best plan for expanding the Medical College of Georgia School of Medicine in order to maximize future physician workforce supply and increase economic development for the State of Georgia.
Key Findings and Recommendations

The need for more doctors is so critical that Medical College of Georgia must expand immediately to produce physicians that will remain in Georgia – ensuring both public health and economic opportunity. Medical College of Georgia must expand its medical education, research, and clinical missions in Augusta simultaneously as it develops a new campus in Athens in partnership with the University of Georgia and continues its expansion in Albany and Savannah.

Additional annual investments must be made by the State of Georgia to strengthen the Medical College of Georgia School of Medicine, to ensure that the expanded statewide medical education program is positioned nationally as a center for medical excellence.

Tripp Umbach Recommends:

1. Expanding medical education and research facilities at all campuses to educate physicians and scientists who will remain in Georgia. Appropriation of an additional $10 million annually to fund faculty in key areas, making Georgia a destination for quality healthcare in key areas. Without the development of a special $10 million annual fund to move state supported medical education at the MCG School of Medicine from mid to top tier, the expansion will not generate the optimal levels of economic impact via job creation and tax revenue return to the state which are presented in this report.

2. Expanding medical education at the MD level and Graduate Medical Education (GME) level simultaneously to increase the likelihood that physicians educated in Georgia will remain in the state after completing residencies. In order to meet basic medical education requirements, a minimum of 104 new residency positions must be established and funded by 2020. To ensure that a sufficient number of doctors remain in Georgia to practice medicine, there will need to be more than 200 additional residency positions added by 2020.
Expansion of medical education without concurrent expansion of Graduate Medical Education will not create additional doctors in Georgia. A coordinated plan where medical school graduates fill newly created residency positions will result in twice as many practicing physicians remaining in Georgia than a plan that only expands GME. While approximately two-thirds of physicians remain in the state where they complete both their undergraduate and graduate medical education, 30% of all physicians remain in the state where they only complete graduate training.  

3. Prohibiting the creation of separately accredited state sponsored medical schools in Georgia through the development of a document similar to the historic document between the University of Arizona and Arizona State University. Such a document will be an important safeguard against creating additional competing state supported medical schools in the future. Investment in a single state supported medical school that has broad statewide partnerships with hospitals and universities is the most cost-effective way for the State of Georgia to expand the Medical College of Georgia School of Medicine.

4. Establishing a medical education partnership between the Medical College of Georgia and the University of Georgia to take advantage of the collective research strengths of both institutions. Tripp Umbach believes that such a partnership will maximize the economic impact to the state by attracting tens of millions of fresh federal research dollars. Both organizations receive roughly the same amount of funding annually from the National Institutes of Health (NIH). Tripp Umbach believes that an active partnership between the two universities will lead to a 15% increase in NIH funding, above what can be expected from each organization alone.

5. Expanding relationships with community hospitals and physician practices statewide is necessary for Medical College of Georgia School of Medicine to provide quality training at the undergraduate and GME level.

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3 Tripp Umbach analysis of AAMC data 2006
The Plan

Tripp Umbach recommends the following plan to fulfill the broadly stated objectives of expanding medical education and economic development statewide:

Expand Medical Education Significantly in Augusta

Expanding medical education in Georgia requires that Medical College of Georgia strengthen its current program in order to provide a strong foundation to support a statewide regional campus network. In order to maintain its accreditation as the “parent” campus of a statewide system, the main campus in Augusta must obtain additional funding from the State of Georgia for both facilities and program expansion.

Tripp Umbach recommends that Medical College of Georgia School of Medicine expand its class from 190 first year students currently to 240 first year students by 2017. This expansion will make MCG’s class among the largest medical school classes in the nation. Under this plan, Medical College of Georgia School of Medicine’s Augusta campus will have more medical students per capita than anywhere else in the nation. The expansion of the program in Augusta requires immediate capital investment in a new medical education facility. Accreditation for the expansion to 240 students per class for first and second year students cannot be granted by the Liaison Committee on Medical Education (LCME) without investment in a new medical education facility.

Tripp Umbach recommends that the State of Georgia immediately approve funding of a joint medical and dental education facility on the MCG campus in Augusta. Such a joint educational facility will save the state approximately $20 million over the cost of two facilities.
Facility expansion in Augusta is only part of the plan to expand medical education. In order to educate 50 additional medical students per year, Medical College of Georgia must develop strong relationships with an expanded network of hospitals and physician offices throughout the Augusta region. Augusta requires the formal development of an “academic medical district” to be anchored by the School of Medicine – bringing together faculty and community physicians for the purpose of medical education expansion. A district-wide approach, inclusive of all willing partners, will insure that Augusta’s medical industry continues to grow and that Augusta has the opportunity to become a destination for healthcare – bringing millions of fresh dollars annually to the region.

The plan for expanding medical education in Augusta will provide positive economic benefits to the State of Georgia and the greater Augusta region. If fully implemented, by 2020 the regional economic impact of Medical College of Georgia School of Medicine will increase by $350 million to $1.95 billion annually. Furthermore, medical education expansion in Augusta will support 3,000 new jobs and generate $172.2 million in annual total government revenue by 2020. Tripp Umbach also recommends the development of a downtown “medical opportunity district” in Augusta where more than $180 million in biomedical investment could be generated annually by 2020.

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4 This figure includes the economic impact associated with teaching hospitals in the Augusta region.
Medical College of Georgia and the University of Georgia to develop a new Medical Education and Research Campus in Athens.

Tripp Umbach recommends that Medical College of Georgia develop a new campus in Athens in partnership with the University of Georgia. The need for both medical manpower and economic development requires that MCG continue to formalize its partnership with the University of Georgia to develop initial facilities on the Athens campus. Tripp Umbach’s research concludes that the immediate development of a MCG sponsored campus in Athens in partnership with the University of Georgia is a key component to expanding the School of Medicine to 1,200 students statewide by 2020 – the minimum number of students required to avoid a future medical workforce crisis.

While the accreditation of the medical education program at the Athens campus must be initiated by and held through the Medical College of Georgia, Tripp Umbach recommends that a long-term binding agreement by the two partner universities be established to prohibit the future development of competing state operated medical schools and the associated unnecessary costs of such a competing program to future Georgia taxpayers.

Tripp Umbach recommends a minimum investment by the State of Georgia of $10 million in 2008 to pay for both the renovation of an initial facility in Athens for medical education, the recruitment of a regional Dean and key faculty, and other startup costs. State funding in 2008 will be required for the accreditation of the Athens campus as early as 2009 and no latter than 2010. It is recommended that the University of Georgia immediately purchase and renovate an initial facility on or adjacent to the UGA campus to make available to the Medical College of Georgia for the purpose of educating 40 medical students.

The long term strategy recommended by Tripp Umbach is for the medical education program at the Athens campus to be located on property currently used by the US Navy as a supply school. In 2006, the US Navy, as part of a national Base Realignment and Closure (BRAC) process, announced that the Navy Supply School in Athens would close and that the Navy would vacate all
buildings on the 58-acre site by 2011. In the fall of 2007, the Athens Local Redevelopment Authority (LRA) recommended medical education as the highest priority and best use for the Navy property. The LRA stipulated that the Navy School property must maintain an educational use and that intensive research or clinical functions will not be permitted.

Concentrating all medical research activities on the UGA campus will be in the best interest of the Athens program. Tripp Umbach recommends that the initial facility in Athens, which will be used to educate medical students in 2010 through 2012, be converted to a research facility after the medical education program moves to the 58-acre Navy school property. Tripp Umbach recommends that the initial 35,000 square foot medical education facility, of which approximately 19,000 square feet will be used for medical education, be the centerpiece of Medical College of Georgia’s future biomedical program in partnership with University of Georgia.

When the U.S. Navy vacates the 58-acre property used currently for the Navy Supply School, Tripp Umbach recommends that the University of Georgia on behalf of the Board of Regents develop the Navy School property for the purpose of health sciences. The Navy School property is an ideal site for a health science educational campus that includes medical education, nursing, allied health professions, and public health. Tripp Umbach recommends that state funding is provided to fund MCG’s expansion in partnership with the University of Georgia in both 2008 and 2009 to allow the transfer of the entire property to the Board at no cost to taxpayers. Tripp Umbach recommends that the current Navy School property be developed to accommodate a total class of 60 medical students, allowing a total of 240 medical students to be trained at the Athens campus by 2020. It is recommended that a 147,500 square foot medical education facility be constructed at the Navy School and a 60,000 square foot research facility be added to the initial biomedical research facility on or adjacent to the University of Georgia campus.
Georgia cannot afford to miss the opportunity for the Navy property and facilities for future health sciences education. Funding deadlines established in the BRAC plan must be met. Expanding MCG’s medical education program in Athens will be cost effective to the state due to the partnership and the opportunity to develop a medical education program at the former Navy Supply School property beginning in 2012. In fact, Tripp Umbach concludes that due to synergies between MCG and the University of Georgia and available facilities, the cost to educate medical students at the Athens campus will be the lowest in the nation, approximately half the average per student cost for all U.S. medical schools.  

Developing the needed facilities for medical education in Athens, both short term and long term, is only the first step in a challenging endeavor to educate physicians in the Athens region. Local hospitals in Athens and Gainesville currently do not have residency training programs and physician practices in the region have limited experience with teaching medical students. While plans are underway to develop residency training sites at hospitals in Athens and Gainesville, such new GME programs will not be fully developed until after 2012, forcing medical students in 2010 and 2011 to receive their clinical skills in a classroom environment and through community and contracted physicians at hospitals in Athens and Gainesville.

The plan for MCG to develop a regional four-year campus in Athens in partnership with University of Georgia will provide positive economic benefits to the State of Georgia and the Athens region. If fully implemented, by 2020 the regional economic impact of the Athens campus will equal more than $567 million annually by 2020. Furthermore, medical education, research, and clinical expansion in Athens will support 3,000 new jobs directly and indirectly and generate $17 million in local government revenue by 2020. Tripp Umbach also estimates that medical research growth in the Athens region will result in more than $180 million in commercial investment by 2020.

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5 The average medical school operating budget per student in the US equaled $240,000 in 2006. In 2020, the MCG campus in Athens in Partnership with University of Georgia is estimated to have an operating budget of $100,000 - $150,000 per student.
Medical College of Georgia must continue its development of residential clinical campuses in Albany and Savannah in partnership with healthcare systems.

Expansion of MCG’s medical education activities outside of Augusta and the Central Savannah River Area should expand. Already nearly one in every four of MCG’s medical student clinical rotations is conducted outside of Augusta. Tripp Umbach recommends that a total of 60 third and fourth year students be educated at residential campuses in Albany and Savannah over the next seven years.

In fall 2005, Medical College of Georgia began a Southwest Georgia Clinical Campus at Phoebe Putney Memorial Hospital in Albany. Using the Albany campus as a model, Tripp Umbach recommends that MCG continue to develop a partnership with St. Josephs/Candler Health System in Savannah with a long-term goal of opening a second residential campus for the MCG School of Medicine in 2008.

Tripp Umbach further recommends that additional clinical relationships be developed with hospitals and physician practices in areas such as Rome, Columbus, Gainesville, Brunswick, and Valdosta, in order to provide quality training for 1,200 medical students by 2020. It is conceivable that additional residential campuses for 3rd and 4th year medical students could be developed in other sites after 2020. In order to accomplish this clinical education expansion, MCG should explore approaches to compete for and secure the services of practicing physicians, local faculty and program administrators.
Medical College of Georgia and the University of Georgia must create a dynamic medical research partnership to drive economic development statewide.

The emerging partnership between Medical College of Georgia and the University of Georgia provides one of the nation’s best opportunities to grow medical and biotechnology research. Research driven medicine has already been part of the culture at MCG in Augusta for decades and can be elevated to another level with an additional four-year medical campus in Athens. Together, Medical College of Georgia and the University of Georgia, which currently receive approximately the same amount of National Institutes of Health (NIH) research funding, should collaborate to attract millions of additional dollars annually to the Georgia economy. Collaborative investments by the two institutions on drug discoveries will attract commercial investment and will eventually lead to healthcare cost savings.

Future NIH funding requires a demonstration of active partnership in which research teams translate basic science discoveries into disease treatment and commercial development. Medical College of Georgia School of Medicine has already demonstrated this kind of research strength with $33 million annually in NIH funding, a Clinical Translational Science Planning Grant, and partnership in the Southeastern Clinical and Translational Research Institute. With combined NIH funding of $65 million, the partnership has a strong base on which to build a biomedical infrastructure that will generate new jobs for thousands of Georgians.

For example, the combination of molecular chemistry talent already present at UGA with translational research talent at MCG could propel the partners toward the development of a new Drug Discovery Institute. Investment in research infrastructure on both campuses combined with the strategic selection of new Athens campus medical school faculty will attract research funding far greater than expected through the continuation of separate UGA and MCG efforts.
Medical College of Georgia and the University of Georgia must develop a dynamic public health partnership to meet the health and safety needs of all Georgians.

The State of Georgia ranks near the bottom in the United States in several key public health indicators. According to the most recent data collected by the Georgia Department of Human Resources Division of Public Health, the State of Georgia is below the national average in many key areas of health status, including the percentage of women who receive inadequate prenatal care, low birth weight deliveries, adult and childhood obesity, and mortality rates for diabetes and cardiovascular diseases. The expansion of medical education is important to place more physicians in underserved areas where citizens lack access to preventive care. Georgia ranks 44th out of 50 states in the number of family doctors per capita. Independent analysis conducted by Tripp Umbach indicates that states that have more primary care physicians than the national average have significantly higher health status indicators. According to Tripp Umbach, each physician that provides primary care in an underserved area saves the State of Georgia $3.6 million annually for care that would have been provided in an emergency room.

The collective strengths of Medical College of Georgia and the University of Georgia in public health improvement and disease management must be part of an expanded statewide partnership to achieve healthcare cost savings for the State of Georgia. To achieve improvements in areas such as access to appropriate earlier stage healthcare and reducing obesity in children, Medical College of Georgia and the University of Georgia must immediately expand their partnership to include community organizations, hospitals, physician practices, economic development organizations, and schools in all Georgia counties. Tripp Umbach recommends that Medical College of Georgia and the University of Georgia as well as other partnering institutions work to develop, manage, and establish a tracking mechanism for a statewide community health improvement program in partnership with the state health department and other public and private agencies – ensuring that the medical education expansion plan reaches the living rooms and kitchen tables of every Georgia resident.
The State of Georgia must expand Graduate Medical Education in step with expansion of medical education at the MD level.

Graduate Medical Education (GME) is initiated when students graduate from medical school and enter residency training. Unlike medical school, in which all students take a similar set of courses and clinical rotations, residencies are designed to train physicians in a particular area of specialization. Georgia has a critical shortage of residency positions. The State of Georgia has only 2,000 residency positions, about half as many as its “fair share” nationally. Only about one-third of graduates of Medical College of Georgia remain in the state to complete their initial residency training.

Tripp Umbach recommends that the state support efforts for the simultaneous expansion of GME to assure that physicians educated in Georgia will remain in the state after completing residencies. A minimum of 104 new residency positions which are desirable to graduates and meet the state’s needs are required by 2020. This will translate into additional physicians added annually to the Georgia workforce and provide for the full range of primary care and specialized medical disciplines.

As mentioned earlier in the report, there is a strong correlation between where a physician receives his or her training and where he or she decides to locate a practice. 6 Tripp Umbach recommends that a statewide residency training plan be developed and that Medical College of Georgia School of Medicine and its statewide partners work closely with regional residency and fellowship programs and local hospitals to facilitate the creation of a model to allow students to move smoothly from graduation at the School of Medicine to residency and fellowship positions in Georgia.

A strategic planning process is currently underway in the Athens region to determine how best to develop new residency programs at local hospitals in Athens and Gainesville and how to integrate the new positions with the proposed Medical College of Georgia at Athens in partnership with the University of Georgia.

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6PT National Conference of State Legislatures Physician Workforce Institute for Primary Care and Workforce Analysis January 2003 report “Practice Location of Physician Graduates”.

Tripp Umbach
research / strategy / impact
Residency Expansion Goals to Support Medical Education – 104 New Positions by 2020

- Athens
  - '07 – 0
  - '20 – 60
- Augusta
  - '07 – 429
  - '20 – 440
- Albany
  - '07 – 19
  - '20 – 30
- Savannah
  - '07 – 118
  - '20 – 140
Space Needs and Capital Costs

Tripp Umbach, working interactively with representatives from SmithGroup and Burt Hill, estimated the following space needs and capital costs associated with the medical education expansion program. Multiple private and public funding sources will be needed.

<table>
<thead>
<tr>
<th>Funding Year</th>
<th>Campus</th>
<th>Facilities /Space Needs (sq. ft)</th>
<th>Capital Cost Estimate</th>
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<tr>
<td>2008</td>
<td>Athens</td>
<td>Initial Medical Education Renovation on UGA Campus/ 19,000 sq. ft.</td>
<td>$7 million</td>
</tr>
<tr>
<td>2009</td>
<td>Albany</td>
<td>Medical Education Facility / 6,000 sq. ft.</td>
<td>$2.4 million</td>
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<td>2009</td>
<td>Savannah</td>
<td>Medical Education Facility / 6,000 sq. ft.</td>
<td>$2.4 million</td>
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<tr>
<td>2010</td>
<td>Augusta</td>
<td>Medical Education Centerpiece Facility / 247,000 sq. ft.</td>
<td>$99.0 million</td>
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<tr>
<td>2010</td>
<td>Athens</td>
<td>Health Sciences Campus Development / 147,500 (66,000 sq. ft. for MCG/UGA Medical School facility @ $18.5 m and 81,500 for other campus support facilities @$22.5 m)</td>
<td>$41.0 million</td>
</tr>
<tr>
<td>2015</td>
<td>Athens</td>
<td>Research Facility adjacent to initial Athens facility / 60,000 sq. ft.</td>
<td>$29.5 million</td>
</tr>
<tr>
<td>2015</td>
<td>Augusta</td>
<td>Research Facility at MCG campus / 60,000 sq. ft.</td>
<td>$29.5 million</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>All Campuses</strong></td>
<td><strong>545,500 sq. ft.</strong></td>
<td><strong>$210.8 million</strong></td>
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</table>
Financial Impacts

Tripp Umbach recommends that a $10 million annual fund be established to strengthen the core teaching mission of Medical College of Georgia School of Medicine throughout the medical education expansion process. Total recommended support for medical education at the Medical College of Georgia School of Medicine, annual tax benefits, and return on investment to the State of Georgia are outlined in the table below.

Return on Investment to the State of Georgia by Investing in Medical Education Expansion at Medical College of Georgia School of Medicine

<table>
<thead>
<tr>
<th>Budget Year</th>
<th>Base Support for Medical Education</th>
<th>Investment in Excellence Funding</th>
<th>Tax Benefit to the State of Georgia</th>
<th>Return on Investment to the State of Georgia</th>
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<tbody>
<tr>
<td>2010</td>
<td>$74.2 million</td>
<td>$10 million</td>
<td>$171.3 million</td>
<td>$2.03</td>
</tr>
<tr>
<td>2015</td>
<td>$99.0 million</td>
<td>$10 million</td>
<td>$242 million</td>
<td>$2.22</td>
</tr>
<tr>
<td>2020</td>
<td>$106 million</td>
<td>$10 million</td>
<td>$295.7 million</td>
<td>$2.54</td>
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</table>
Economic Impact of Medical Education Expansion

The economic impact associated with expanding Medical College of Georgia School of Medicine in partnership with a wide variety of organizations statewide is far reaching, both in terms of generation of fresh dollars in the state’s economy and annual cost savings resulting from the appropriate provision of early stage healthcare. Tripp Umbach identified the following areas where fresh dollars are generated in the state’s economy:

1. **Impacts Associated with MCG Campus Expansion**
   Medical College of Georgia already generates nearly $1 billion in the Georgia economy annually.\(^7\) Expanding students, faculty, and research capacity at sites in Augusta, Athens, Albany and Savannah will add approximately $800 million to the Georgia economy by 2020.

2. **Impacts Associated with Teaching Hospital Expansion**
   Teaching hospitals will also expand due to expanded programs, services, and research associated with their relationship with Medical College of Georgia School of Medicine. Currently, teaching hospital affiliates have an annual economic impact of $469 million.\(^8\) The expansion of teaching hospital relationships in Augusta, Athens, Albany and Savannah will add more than $350 million annually to the state economy.

3. **Impacts Associated with Adding New Physicians to the State’s Workforce**
   Each physician that practices medicine in Georgia has a positive economic impact of $1.3 million annually, according to economic impact calculations completed by the Georgia Board for Workforce Development. Currently, Medical College of Georgia produces approximately 70 new physicians annually, resulting in a positive economic impact of $91 million. The medical education expansion plan is expected to produce a minimum of 180 new physicians annually by 2020, which will equal $234 million in positive economic impact in the state economy.

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\(^7\) Association of American Medical Colleges Economic Impact of AAMC Member Institutions, 2005, Study completed by Tripp Umbach on behalf of the Association of American Medical Colleges

\(^8\) Association of American Medical Colleges
4. Commercial Application of Research

In addition to the economic impact associated with attracting fresh research dollars to Georgia from public and private sources, the commercial application of medical research has been demonstrated to drive business growth and expansion. Tripp Umbach estimates that the current annual value of commercial activity related to research at Medical College of Georgia School of Medicine is $25 million. With expanded research capacity and a focused plan to expand commercial application of research, Tripp Umbach estimates that the annual commercial impact associated with Medical College of Georgia will grow to $360 million by 2020. Approximately half of the economic impact of commercialized research will be attributable to the Athens campus, to be developed in partnership with the University of Georgia.
Total Statewide Economic Impact Summary:

Tripp Umbach identified two areas where medical education expansion would lead to future healthcare cost savings:

1. Placing Primary Care Physicians in Underserved Areas
2. Research Discoveries that Lower Healthcare Spending
Employment Impact of Medical Education Expansion

Medical College of Georgia is already an important employer and generator of employment in the Augusta region and statewide supporting more than 10,000 jobs. If fully implemented, the plan developed by Tripp Umbach will support more than 21,000 Georgians by 2020.

Total Statewide Employment (Direct & Indirect) (*Shown in Thousands)

- 2007: 10,367
- 2010: 12,367
- 2015: 17,440
- 2020: 21,313

*Shown in Thousands*
Government Revenue Impact of Medical Education Expansion

Medical College of Georgia is already an important generator of government tax revenue at both the state and local levels. If fully implemented, the plan developed by Tripp Umbach will generate nearly $300 million in state revenue by 2020.

Total State & Tax Revenue Generated (*shown in millions)

- 2007: $143.8
- 2010: $171.3
- 2015: $242.0
- 2020: $295.7
Conclusion

Expanding medical education and its associated research and clinical enterprises in an integrated fashion is the best investment that the State of Georgia can make. There is no “single bullet” for success. But, if implemented fully and according to the projected timeline, the plan recommended by Tripp Umbach will more than double the economic impact of Medical College of Georgia, generating more than $1.6 billion additional dollars annually and supporting more than 10,000 additional jobs statewide. Under the plan outlined in this report, for every $1.00 invested by the State of Georgia in 2020 in medical education, a total of $2.54 will be returned in state tax revenue.
Appendix A: Tripp Umbach Study Methodology

1. What Do We Need?
   - More Doctors

2. What is Holding Us Back?
   - Limitations / Barriers
     - Current
     - Future

3. What Could We Have?
   - Vision / Opportunities
     - Current
     - Future
     - Other Models

4. What Will It Take?
   - Key Actions
     - Sites
     - Program
     - Facility
     - Funding

5. Cost Analysis

6. Economic Impact?
Tripp Umbach completed the following scope of services in Augusta:

- **Review and Analyze Data**: The Tripp Umbach team reviewed all data provided by the client. Data included profiles of research, patient volumes, residency positions, relationships with hospitals, current and projected students, trends in pedagogy, etc. Tripp Umbach also reviewed existing master facility expansion plans for the Augusta campus.

- **Assess Underdeveloped Land / Facilities**: The Tripp Umbach team assessed the feasibility of utilizing existing underdeveloped educational and clinical facilities / land on the Augusta Campus, and at local hospitals, including the VA and University Hospital. Specifically, Tripp Umbach developed a series of building assessments for this study. These assessments began with the compilation of a complete inventory of existing underutilized facilities and available properties. Tripp Umbach worked with MCG to compile and validate this inventory from existing data. As a part of this initial data gathering phase, Tripp Umbach worked with MCG to create an initial set of quantitative and qualitative evaluation criteria. This review of existing facilities and proposed facility expansion plans provided initial analysis in order to determine the true “carrying capacity” and “appropriateness” of current and proposed facilities based on alignment with current and projected strategic goals and objectives for physicians, principal investigators, and student enrollment profiles as well as operational/economic parameters.

- **Adjacent Property**: The Tripp Umbach team toured and assessed the feasibility of obtaining and utilizing adjacent privately or government owned property, if necessary. Specifically, the Tripp Umbach team held interviews with adjacent property owners and local elected officials to determine the likelihood of purchasing adjacent properties.

- **Faculty / Staff**: Tripp Umbach assessed the number of faculty / staff required for the education, research, student services, and clinical needs for expansion, i.e. patients for teaching clinical skills. Tripp Umbach’s work in this area was based on national benchmarking data collected for other medical school planning projects and from the Association of American Medical Colleges. A group of “peer” state-related medical schools who have developed branch programs was selected by the client with input from Tripp Umbach at the initial project planning meeting. Peer institutions included in this analysis include the University of Florida, the University of Arizona, University of West Virginia, Texas Tech University, the Ohio State University, the University of Louisville, the University of Alabama Birmingham, and Medical University of South Carolina.

- **Functional Relationships / Economies of Scale**: The Tripp Umbach team assessed the functional relationships / economies of scale that exist at MCG’s current campus regarding access to existing facilities, faculty, patients, administrative staff, students, and clinical training sites for students and residents in the Augusta area. Tripp Umbach conducted interviews and held meeting with representatives from the Veteran’s Administration Medical Center, Medical College of Georgia Hospital, University Hospital, and other clinical sites.
• **Public Input:** The Tripp Umbach team conducted more than 25 interviews and a series of focus groups with faculty, community leaders, and students, to determine “ideal” functional relationships within the existing and expanded campus. The findings of these interviews and focus groups were integrated along with the program information developed during a previous phase of the study, and addressed the impact that each potential location or proposed combination of locations will have on the ideal expansion plan.

• **Collaborations:** The Tripp Umbach team assessed the opportunities for community collaborations and partnerships through a series of community input sessions to be held in Augusta. Input was received from leaders representing Augusta Tomorrow, the Chamber of Commerce, the Mayor’s Office, the City/County Council, the state’s legislative delegation, and the Augusta Chronicle.

The Tripp Umbach team assessed Sites in Athens including the Navy Supply Corps School (NSCS):

• **Assess Underdeveloped Land / Facilities:** The Tripp Umbach team assessed sites in the Athens area, including on and adjacent to the University of Georgia campus and on the NSCS property.

• **Assess Adjacent Property:** Tripp Umbach assessed the feasibility of obtaining and utilizing adjacent privately, university, and government owned property. Specifically, the Tripp Umbach team held interviews and participated in site tours to determine the likelihood of using properties in Athens for medical education.

• **Faculty / Staff:** Tripp Umbach assessed the number of faculty / staff required for the education, research, student services, and clinical needs for expansion in Athens, i.e. patients for teaching clinical skills. Tripp Umbach's work in this area was based on national benchmarking data collected for other new and expanded regional medical school planning projects and from the Association of American Medical Colleges. A group of “peer” new medical schools was selected by Tripp Umbach at the project planning meeting. The “peer” medical school group used by Tripp Umbach in evaluating the size, costs, and space needs of the Athens regional campus included the Phoenix program of the University of Arizona, University of California – Merced, Florida International University, and Texas Tech – El Paso, and the proposed independent allopathic four-year medical school in Scranton, Pennsylvania.

• **Functional Relationships / Economies of Scale:** The Tripp Umbach team assessed the functional relationships / economies of scale that exist at the NSCS campus. Tripp Umbach also evaluated relationships with existing facilities on the University of Georgia campus. Tripp Umbach also toured, evaluated and met with leadership from hospitals, and medical staff leaders at St. Mary’s Regional Hospital and Athens Regional Hospital in Athens and at Northeast Georgia Medical Center in Gainesville as well as at other potential clinical training sites in the Athens area.
• **Community Input:** The Tripp Umbach team conducted interviews and focus groups in Athens with a wide variety of community leaders, elected officials, economic development, and university leaders. The findings of these interviews and focus groups were integrated with the program information developed during a previous phase of the study, and to drive decision making on the impact each potential location or proposed combination of locations will have on medical education expansion in Athens.

• **Collaborations:** The Tripp Umbach team assessed the opportunities for community collaborations and partnerships through a series of three community input sessions held in Athens.

After completing evaluations and assessments in both Augusta and Athens, the Tripp Umbach team performed the following services:

**Evaluation of Sites outside of Augusta and Athens:**

The Tripp Umbach team also evaluated sites throughout the state using the methodology outlined below. In completing analysis of other sites, Tripp Umbach considered the following:

- Location / Size / Potential Growth in GME programs
- Projected clinical program growth by county and metropolitan area
- Interviews with hospital and college and university officials statewide to gauge interest in the development of a new medical school (in areas that have the Clinical and GME infrastructure).

**Evaluation of Advantages / Disadvantages Associated with Potential Sites:** With potential sites examined, the Tripp Umbach team (working interactively with the client) developed operational and educational advantages and disadvantages of each location, including temporary venues prior to the establishment of permanent locations.

**Working Sessions with Medical College of Georgia and University of Georgia:** A series of three interactive working sessions with MCG and UGA were facilitated by the Tripp Umbach team where advantages and disadvantages associated with potential sites were discussed and priorities and recommendations were determined. Criteria developed by the Tripp Umbach team prior to the work sessions was based on the University System of Georgia Board of Regents for exploration of appropriate locations beyond the Augusta campus, specifically growing student population to 300 per class.

**Recommended Capital Improvement Projects:** The Tripp Umbach team (with input from the client) recommended necessary capital improvement projects needed to make expansion a reality at each location, including temporary venues prior to NSCS availability.

As an outcome of the interactive work sessions, the Tripp Umbach team ranked potential site expansion locations, including multiple scenarios for each site, based on advantages / disadvantages, capital improvement projects envisioned, and functional relationships.

**Evaluation of Graduate Medical Education (GME) Residency Sites:** The Tripp Umbach team also identified current residency program sites at hospitals / clinics around the state and, given medical education expansion goals, offered suggestions to boost the number of GME slots available to meet both medical education needs but also physician workforce needs.
Recommendation of Partners: Tripp Umbach identified all partners involved in the program expansion, their roles at implementation and beyond; and the likelihood of a realistic and productive affiliation / partnership with MCG. A series of approximately 50 interviews was completed throughout the 16 week project.

Costs: The Tripp Umbach team examined all costs associated with expanding at all suggested locations including acquisition of land (if applicable), construction (for new structures and / or up-fits to existing structures), necessary personnel to run said facilities, equipment needed for users to operate any new / renovated building and building operating costs.

Schedule: The Tripp Umbach team developed a schedule showing the development of priority projects.

Funding: The Tripp Umbach team developed budgets showing the use of funds in the first year and projected use of funds in succeeding years.

Course of Action: The Tripp Umbach team developed a plan for MCG School of Medicine Administration to follow to achieve expansion in the next 12 years. The Tripp Umbach team also recommended policies to guide decisions about prioritization of expansion projects.

Economic Impact Assessment: Tripp Umbach developed a comprehensive economic impact statement showing the future economic, employment, and government revenue impacts associated with the recommended medical school expansion.
## Appendix B: Location Criteria

### Evaluation Criteria

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Rating Scale</th>
<th>Weight Factor</th>
<th>Albany</th>
<th>Athens / Gainesville</th>
<th>Augusta</th>
<th>Rome</th>
<th>Savannah</th>
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<td>2</td>
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<td>0</td>
<td>3</td>
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<td>Existing GME publicly funded slots</td>
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<td></td>
<td></td>
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<td>Availability of basic education facilities</td>
<td>0-3</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>2</td>
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<td>Comprehensive medical education</td>
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<td><strong>Ratios</strong></td>
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<td>Potential student to patient ratio</td>
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<td></td>
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<tr>
<td>Potential student to physician ratio</td>
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<td>3</td>
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<td>Potential residency slots</td>
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<td>2</td>
<td>3</td>
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<td>Number of affiliates / service area</td>
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<td><strong>Research Capacity</strong></td>
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<td>Strong physician supply</td>
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<td><strong>Facilities</strong></td>
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<td>Available existing physical space</td>
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<td>Ability to develop new physical space</td>
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<td><strong>Total</strong></td>
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</table>
Appendix C:

Key Findings from Focus Groups

Overall Comments – UGA Medical Student Focus Group (October 30th)

Demographics of Students --
- Pre-Med Students in 4th year Undergraduate at UGA
- Specialties Interests – Primary Care, Dermatology, Cardiology, OB/GYN, Undecided, Internal Medicine, Pediatrics, Surgery, Emergency Medicine
- Staying in GA upon completing residency – majority of students feel that they will stay in GA, because of family and close relationships that have been built

Overall Comments – MCG Medical Student Focus Group (October 29th)

Demographics of Students --
- Variety of Students – (2) 1st year students, (2) 2nd year students, (5) 3rd year students, and (1) 4th year student
- Current Clerkships/Clinical Rotation Locations – MCG; Augusta, GA; Edgefield, SC
- Specialties of students upon graduation – Pediatrics, Internal Medicine, ER, Dermatology, Pediatric Oncology, Surgery, Undecided, Infectious Disease, Internal Medicine, OB/GYN, Internal Medicine (Cardiology), Pediatrics, and Internal Medicine
- Staying in GA upon completing residency -- Half of the Students feel that they will stay in the GA area after school because they have family here and/or they grew up in the area
Overall Comments – UGA Medical Student Focus Group (October 30th)

Overall Healthcare Needs in GA --

- Treatment in Rural areas
- Need more Pediatric
- Primary Care because of shortage of doctors
- State of GA needs to offer more scholarships to GA students
- Offer money incentives for Primary Care and Family Medicine to get more students interested
- Role of Physicians – Rural town physicians are considered an expert within the community on all healthcare aspects, they are role models, activists, and help in politician issues

Overall Comments – MCG Medical Student Focus Group (October 29th)

Overall Healthcare Needs in GA --

- Majority of students felt that the “Overall Healthcare Needs” of Georgia is Preventive Medicine and a need for Primary Care Doctors in Rural areas
- Aware that there is a Statewide lack of physicians
- Feel that a majority of Georgia residents are un-educated on healthcare issues and may have a fear of doctors
- Strategies state should use to encourage more students to pursue a career in Primary Care or Family Medicine – Incentives and Reimbursement towards loans, Consistent Mentoring and Counseling while attending school, Offer more for “Post-Grad Students”, Build up student perspective of Primary Care/Family Medicine doctors
- Mentioned “Country Doc” program; Students feel that this has its advantages and disadvantages
Overall Comments – UGA Medical Student Focus Group (October 30th)

Understanding of Student Experience at MCG --
- Hope to have an accessible mentor (offer face – to – face counseling)
- Online responding opportunities
- Peer Mentoring
- Alumni of MCG available for mentoring
- Website browse of FQA (housing tips to curriculum)
- In 3rd and 4th year, hope to travel to gain a broad experience of GA as a state
- Gain responsibilities
- Need a better understanding of curriculum
- A “Blog” to speak with current MCG students would be helpful
- A basic “Fact Book” of MCG and Augusta area would be helpful

Overall Comments – MCG Medical Student Focus Group (October 29th)

Student Experience --
- Feel that it would be helpful/beneficial to offer an earlier clinical experience
- As of now, at MCG, Hospital experience is limited
- Feel that physicians should back up the lectures done by Ph. D professors to make them more focused and geared toward the students (a better use of time)
- Duke is a good example of a school that combines the 1st and 2nd years and offers 3 months of research
- Research helps the students to become better acquainted with specialties in which they may be interested
- Students expressed that there needs to be a mentor/advisor that guides them on a consistent basis through every step of their medical school experience – could maybe find alumni that would be interested in working with the students to council them
- Lack of patient interaction in the first years, so when these students get in their later years they are lost on some issues
- Regional Campus – majority of students felt that this is a wonderful idea, more hands on experience would be offered, Most patients go to University instead of MCG, so we don’t have access to them, opportunity to learn more with a private practice experience at a regional campus
**Overall Comments – UGA Medical Student Focus Group (October 30th)**

**Facilities --**

- Great to have a good workout facility
- A “Student Learning Center” with quite areas, computers, and rooms available for groups study
- Regional campuses, but only for the 3rd and 4th year, want to stay on MCG campus for 1st and 2nd year to gain experience and have peer counseling available
- Residential complex at MCG or Regional Campus would be great (Medical Students only)
- Need to offer “Newer, Family friendly” residential complexes
- Living in dorms make’s it very difficult
- Prefer to live with other Medical Students
- Residential/Regional apartment style medical areas

**Overall Comments – MCG Medical Student Focus Group (October 29th)**

**Student Experience --**

- Ideal program for medical education in the 3rd and 4th year – Intern year need to have standards by this point, MCG seems to be very basic at this point, Residency here makes it competitive, Offsite location needs to be at a hospital with few residents, Offer better teaching residents, When offsite I have learned a lot, Use the online criteria and actually have students perform, Non-chain of command at MCG, Curriculum discussion needs to be included, make a connection, show practical application, more clinical

**Facilities --**

- Albany offers great workout facilities and free meals at the hospital
- More hands – on experience off site
- Clinical at Albany
- Need the basics at MCG
- Housing provided – needs to be “real life living”, not a dorm room
- Thomasville in Albany offers a Mansion to live in with all other Medical Students
- Residential Complex specifically for medical students so you can mentor each other
**Overall Comments – UGA Medical Student Focus Group (October 30th)**

**Facilities – Distance Learning**
- Good to offer multiple ways of learning
- Could use for lectures or group study
- Access advisor online
- Majority of the students feel that this is not a way they would like to depend on learning everything
- It is harder to receive feedback
- Hard to focus
- Content lacking
- Wouldn’t want to be considered the 1st year guinea pigs that tried this

**Overall Comments – MCG Medical Student Focus Group (October 29th)**

**Facilities – Distance Learning**
- Supplemental, but wouldn’t do this for class
- Learn this way for enjoyment, but not beneficial for class
- Helpful tool for studying
- When technology doesn’t work then it can be difficult
- If there is not enough faculty offered at regional campuses then Distance Learning is a good tool
- Useful for Lectures (unless they are dealing with dissecting)
Appendix D: Annual Funding Requirements, Economic Impact and Tax Revenue Return on Investment to the State of Georgia (2008-2020)

<table>
<thead>
<tr>
<th>Year</th>
<th>Capital Needs in Millions (All campuses)</th>
<th>Total State Operating Support Required for MCG (all campuses) 9</th>
<th>Tax Benefit to the State of Georgia</th>
<th>Return on Investment to the State of Georgia</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>$7.0</td>
<td>$75.0</td>
<td>$148.2</td>
<td>$1.98</td>
</tr>
<tr>
<td>2009</td>
<td>$4.8</td>
<td>$76.0</td>
<td>$151.2</td>
<td>$1.99</td>
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<tr>
<td>2010</td>
<td>$140.0</td>
<td>$84.2</td>
<td>$171.3</td>
<td>$2.03</td>
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<tr>
<td>2011</td>
<td>--</td>
<td>$87.7</td>
<td>$183.3</td>
<td>$2.09</td>
</tr>
<tr>
<td>2012</td>
<td>--</td>
<td>$95.5</td>
<td>$201.5</td>
<td>$2.11</td>
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<tr>
<td>2013</td>
<td>--</td>
<td>$103.2</td>
<td>$220.8</td>
<td>$2.14</td>
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<tr>
<td>2014</td>
<td>--</td>
<td>$106.2</td>
<td>$231.5</td>
<td>$2.18</td>
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<tr>
<td>2015</td>
<td>$59.0</td>
<td>$109.0</td>
<td>$242.0</td>
<td>$2.22</td>
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<td>2016</td>
<td>--</td>
<td>$109.0</td>
<td>$246.3</td>
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<tr>
<td>2017</td>
<td>--</td>
<td>$111.0</td>
<td>$259.7</td>
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<td>2018</td>
<td>--</td>
<td>$112.9</td>
<td>$270.9</td>
<td>$2.40</td>
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<tr>
<td>2019</td>
<td>--</td>
<td>$114.9</td>
<td>$281.5</td>
<td>$2.45</td>
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<tr>
<td>2020</td>
<td>--</td>
<td>$116.0</td>
<td>$295.7</td>
<td>$2.54</td>
</tr>
<tr>
<td>Total for Plan</td>
<td>$210.8</td>
<td>$1,300.60</td>
<td>$2,903.90</td>
<td></td>
</tr>
</tbody>
</table>

Note: While state support for medical education will grow by 60% over the period 2007 though 2020 – from $65 million currently to $116 million in 2020, tax revenue to the state associated with the medical education expansion plan will increase by nearly 100% by 2020.

9 Includes $10 million annual fund for supporting medical education excellence
Appendix E:
Tripp Umbach Qualifications

Since 1990 Tripp Umbach has completed more than 1,000 consulting assignments throughout the United States and Internationally. Tripp Umbach is a national leader in conducting market feasibility and economic impact analysis for leading academic medical campuses and for new medical schools. Tripp Umbach has provided similar consulting services to eight new or expanded medical schools over the past five years. Tripp Umbach completed detailed market feasibility and economic impact assessments for the University of Arizona’s Phoenix Biomedical Campus; a project to be completed in partnership with Arizona State University, Banner Healthcare and TGEN. Tripp Umbach has also conducted market feasibility and economic impact studies for proposed medical schools in St. Paul, MN (University of St. Thomas), Miami, Florida (Florida International University), Grand Rapids, Michigan (Michigan State University), and Merced, California (University of California – Merced). Tripp Umbach also conducted a feasibility study to develop an independent allopathic medical school to be located in Scranton, Pennsylvania and is currently studying expanding medical education in Lancaster, Pennsylvania. Tripp Umbach is also currently conducting a feasibility study for expansion of the UCONN health sciences center for the State of Connecticut.

Since 1995, Tripp Umbach has completed three national studies measuring the economic impact of all 125 medical schools and more than 400 teaching hospitals for the Association of American Medical Colleges, making Tripp Umbach the most qualified firm to assess the feasibility and economic impact of new or expanded medical school or hospital campus. Tripp Umbach has consulted with 50 of the top 100 hospital and health systems listed in the 2007 US News & World Report’s List of Best Hospitals. Tripp Umbach has also completed feasibilities studies and strategic plans focused on the expansion of Graduate Medical Education.