



**LSU Health Sciences Center at Shreveport  
GRAD Act Annual Report 2011**

## **Performance Objective 1: STUDENT SUCCESS**

**Element: 1a. Implement policies established by the institution's management board to achieve cohort graduation rate and graduation productivity goals that are consistent with institutional peers.**

*Narrative report: required*

*The narrative report should include at a minimum:*

- *Policies adopted by the management board*
- *Subsequent policies adopted by the institution*
- *Timeline for implementing the policies*

### Narrative

#### **Recommendation to Standardize Bachelor Degree Credits and to Establish a Student Tracking Model**

The LSU Board of Supervisors authorizes and instructs the System President to require each Chancellor of a campus offering a bachelor's degree to work with faculty committees, academic administrators, and, as necessary, external accreditation and certification bodies to:

- 1) Develop and implement a review process for each bachelor's degree program with the goal of standardizing the number of credits at 120 hours without compromising accreditation and certification requirements. The review should be specific to the number of credits and courses required for lower division, prerequisites for entering a major and the total number of credits required for the degree. The review should also include the identification of institution and department policies that might contribute to excess hours for graduation.
- 2) Implement a student tracking model and degree audit program that will effectively monitor student progression and time to degree.

Since the majority of degree programs at LSUHSC-S are post-baccalaureate and/or professional, the approach to achieve graduation rate targets varies from that recommended for traditional 4-year undergraduate universities and schools. The institution has, however, determined policies that are applicable for such degree programs.

In addition, beginning in 2010, the LSU System began the LSU System Performance Metrics process, which includes the development of performance indicators for each Health Science Centers designed to provide campus leadership and the Board of Supervisors with a mechanism for evaluating annual institutional performance. Metrics data are designed to allow institutions to discuss descriptive metrics and performance measures within the context of their mission, including amongst others, measures related to retention, graduation, licensure, and pass rates, degrees, and credentialing. These metrics are collected and reported on an annual basis and represent a significant

analysis and measuring tool for the Louisiana State University System and its institutions.

### **School of Allied Health Professions**

The School of Allied Health Professions (SAHP) identifies and assesses general education competencies for its baccalaureate programs consistent with those required by Louisiana Board of Regents Academic Affairs Policy 2.16 (Statewide General Education Requirements). The SAHP General Education Committee (which is composed of individuals with expertise and credentials in general education) reviews and recommends standards for general education requirements and serves as a resource group for program directors in determining the level of intervention required for students who demonstrate areas of weakness in their general education.

The SAHP uses the Collegiate Assessment of Academic Proficiency (CAAP) examination as a method to measure general education competencies of students. Upon admission, each student enrolled in the three undergraduate programs is administered the CAAP examination. Following the administration of the CAAP examination and analysis of scores by the General Education Committee, students falling below the national norm are identified, and a plan for remediation is developed by the respective program to address the area of deficiency.

In academic year 2007-8, the General Education Committee developed the following guidelines for monitoring and remediating "at-risk" students:

1. In the first semester of enrollment, the Assistant Dean for Academic Affairs or his/her designee will orient students enrolled in Cardiopulmonary Science, Clinical Laboratory Science, and Physician Assistant to their respective programs and the administration of the Collegiate Assessment of Academic Proficiency (CAAP) Examination.
2. During the first several weeks of the fall semester the CAAP Examination will be administered to all students enrolled in the three undergraduate programs.
3. If the student passes the CAAP Examination, achieving at or above the 10th percentile nationwide (criteria established by the SAHP's General Education Committee), he or she will continue to matriculate through the respective program's curriculum.
4. If the student fails the exam, falling below the 10% percentile nationwide (distribution of scores is skewed, so percentile ranks are used to establish cut score; in a normal distribution, the 2nd percentile is -2.0 SD below the mean while the 10th percentile is -1.3 SD below the mean), he/she will collaborate with his/her program director under the guidance of the General Education Committee to compile a portfolio documenting competencies in the general education domains. In addition, the program director and student will develop a study plan based on a CAAP Study Guide. The student is allowed to continue taking courses in his/her program.
5. During March of the spring semester of the student's junior year, the student will re-take the CAAP Examination (attempt number two). If the student passes the examination, his/her portfolio will be placed on file and the student will continue with his or her program's curriculum. If the student fails the CAAP Examination on the second attempt, the student will be required to meet with the university's

education specialist (Dr. Peggy Murphy) to develop a study plan. Additionally, the student will withdraw from the SAHP and enroll at a SACS accredited college or university for remedial course work. The remedial course(s) in which the student enrolls will be determined and approved by the SAHP's General Education Committee. The committee will use evaluation data from the student's portfolio, recommendations from the education specialist, and committee members' expertise to determine these courses.

6. One year later in May, the student will be allowed to re-enter his or her program and at that time be re-tested with the CAAP Examination (third attempt). In the event the student passes the exam, he or she will be permitted to re-enter the program starting as a new student (i.e., first semester, junior year). In the event the student fails the CAAP Examination for the third time, he or she will be informed by the Assistant Dean for Academic Affairs in writing that he or she is dismissed from the school. He or she may re-apply to his or her program with competitive admissions.

The committee periodically reviews follow-up evaluation procedures and remediation plans to ensure compliance and analyzes test data on an annual basis to improve the efficiency and effectiveness of the evaluation procedures.

## **School of Medicine**

### *USMLE Step 1 Preparation*

Like all U.S. medical schools, LSUHSC-S School of Medicine takes very seriously the ethical mandate to produce safe, competent physicians for the citizens of Louisiana and the remainder of the nation. In an effort to assure excellence in the performance of its graduates, the School of Medicine instituted policies in 2006 outlining expected student achievement during matriculation. Several such requirements deal with successful completion of Step 1 of the United States Medical Licensing Examination (USMLE). The School of Medicine policy states that students must pass Step 1 to graduate and are given three opportunities to pass this examination. Failure to pass Step 1 after three attempts results in dismissal. Of note, almost none of the students who successfully pass Step 1 and move into the third and fourth years of medical school withdraw or are dismissed. Thus, as in most U.S. medical schools, successful completion of USMLE Step 1 at LSUHSC-S is intimately linked with successful completion of medical school.

To provide the most optimal setting for student success in fulfilling this requirement, the School of Medicine instituted a plan in 2007 to identify students "at risk" for failing USMLE Step 1. This proactive and ongoing plan is consistent with the "student tracking model" recommended by the LSU Board of Supervisors.

The above noted plan to improve USMLE Step 1 outcomes was created after an extensive review of the academic performance data from past LSUHSC-S medical students who failed this examination on the first attempt. After review of USMLE Step 1 results of students matriculating in the new curriculum from 2002-2006, a committee was formed to determine an action plan to improve Step 1 outcomes. In order to obtain a complete statistical overview of the academic performance characteristics of this group of students, the committee reviewed pre-admission data, all medical school course

grades, as well as performance on standardized examinations (Medical College Admission Test (MCAT) and National Board of Medical Examiners (NBME)- type exams) from medical school were analyzed. Using these data, a formula was developed to identify students "at risk" for USMLE Step 1 failure. The formula was applied to student data from the previous four classes and demonstrated an excellent predictive value for identifying students who had poor Step 1 performance. Since the USMLE Step 1 examination must be passed prior to entry into the third year of medical school, the formula is applied to the academic performance data of all second year students. Identified high-risk students are enrolled in an intensive study course designed to better prepare them for the Step 1 exam, while low-risk students are allowed to use a study method of their choosing. Each subsequent class is evaluated yearly to determine the number of students needing the intensive study course.

Implementation of this plan in 2007 resulted in a six percent improvement from 2006 in the first-time pass rate for USMLE Step 1. In 2008, performance improved an additional six percent as compared to 2007 and exceeded the national first-time pass rate by five percent. Performance benchmarked against the national average will continue to be tracked as annual results are compiled.

#### *Student Performance during Coursework*

During Year One Orientation, students are advised to seek help if an academic or personal need arise. Didactic sessions on study skills and time management are also provided during this time. Students who seek assistance meet with an education specialist at the university to discuss specific issues, learn about other study methods, and develop personalized study plans. After the initial meeting with the education specialist, students follow-up via e-mail to report their progress on a weekly basis.

Tutoring services are available for any pre-clinical student who requests this assistance and are free of charge. These are provided by senior medical students in good academic standing and arranged through the Office of the Assistant Dean for Student Affairs.

In the pre-clinical curriculum, course directors take a proactive approach with students exhibiting suboptimal academic performance. Students identified to be "at risk" for failure of a course are required to have a conference with the course director. Those exhibiting academic difficulties that appear to result from poor study habits are counseled by the course director. A number of course directors will make special efforts to provide identified "at risk" students with additional assessment in the form of periodic mock quizzes to determine whether or not they are improving and keeping pace with the material taught. Students identified as having anxiety or personal problems are sent to the Assistant Dean for Student Affairs for help and, if necessary, directed to more formal counseling.

#### **School of Graduate Studies**

Standards for acceptance into the School of Graduate Studies include satisfactory scores on the Graduate Record Exam (GRE), a minimum of 2.5 grade point average (GPA) for undergraduate work, satisfactory interviews and excellent letters of recommendation. Students enrolled in the School of Graduate Studies are required to



maintain at least an overall GPA of 3.0. Students who do not achieve a 3.0 GPA are placed on academic probation. Students who have not improved their GPA to at least a 3.0 within 1 year after being placed on academic probation are dismissed from the program. Some departments have developed academic support systems in which senior graduate students are allowed to tutor first year graduate students who are "at risk" for academic probation. In addition, the Department of Pharmacology, Toxicology and Neuroscience has developed a review/refresher series of on-line tutorials and faculty generated quizzes in biochemistry targeted to students in the summer before their first year of Graduate School. Students who complete this series are more successful in passing their first year biochemistry courses than are students who do not complete the series. Of 12 students who participated in the most recent review/refresher series, 11 students successfully completed the biochemistry courses; of the 6 students who elected to not participate in the series, 4 students received a grade of C or below in the biochemistry courses. Passing the biochemistry courses is essential in advancing from the first year to the second year of the program, thus, the review/refresher series will be required for incoming students to the program.

Efforts to improve the quality of applicants to the Graduate School include ongoing programs at the high school and undergraduate level. Several programs are active on the LSUHSC-S campus:

1.) The Department of Pharmacology, Toxicology and Neuroscience received funding in 2007 from the American Society for Pharmacology and Therapeutics for Summer Undergraduate Research Fellowships (SURF). In this program, senior undergraduates from around the country spend a summer performing basic research in a laboratory in the department. The great majority of these students continue their education in graduate school, medical school, or MD/PhD programs.

2.) The National Institutes of Health funds the BioStart Academy program, which is a partnership between Southwood High School in Shreveport and LSUHSC-S, begun in 2006. Students participating in this program obtain research experience in a lab at LSUHSC-S as part of their high school program. The majority of these students attend college, but because the program has only graduated one class so far, data about additional education for these graduates is not yet available.

3.) The Science and Medicine Academic Research Training (SMART) program, initiated in 1997, is a partnership between LSUHSC-S and the Biomedical Research Foundation of Northwest Louisiana. The top 10-12 high school students in Caddo, Bossier, and DeSoto Parishes who are interested in science careers are chosen for this program. Students perform basic science research projects in the laboratories of LSUHSC-S faculty for a summer, and their entire senior year in high school. These students typically attend college and continue their education in medical school or graduate school.

**Measures**

**Measures: Targeted**

- 1<sup>st</sup> to 2<sup>nd</sup> year retention rate
- Same institution graduation rate

1 <sup>st</sup> to 2 <sup>nd</sup> year retention rate by school		
	2008-09	2009-10
School of Medicine	99% (116/117)	97% (114/117)
School of Graduate Studies	74% (14/19)	93% (13/14)
School of Allied Health Professions	88% (129/146)	Not available <sup>1</sup>

<sup>1</sup>The retention rate for School of Allied Health Professions is based on summer enrollment since the majority of its programs begin in that term; therefore, the 2009-10 rate cannot be determined until summer 2011.

Same institution graduation rate		
	Baseline	Year 1
School of Medicine	92% (93/101) <sup>1</sup>	90% (91/101) <sup>2</sup>
School of Graduate Studies*	n/a	n/a
School of Allied Health Professions	86% (102/119) <sup>3</sup>	85% (132/156) <sup>4</sup>

<sup>1</sup> Entering cohort of 2002-03

<sup>2</sup> Entering cohort of 2003-04

<sup>3</sup> Entering cohort of 2005-06

<sup>4</sup> Entering cohort of 2006-07

\*Due to small class sizes and various acceptable lengths of study, graduation rates for the School of Graduate Studies cannot be calculated.

## Performance Objective 1: STUDENT SUCCESS

**Element: 1b. Increase the percentage of program completers at all levels each year.**

*Narrative report: optional*

### Narrative

#### **School of Medicine**

The number of program completers for the School of Medicine has increased gradually as the overall class size has expanded; however, substantial further increase in class size will be limited by financial and physical resource constraints as well as accreditation requirements. The graduation rate approximates 90% for most years.

#### **School of Allied Health Professions**

In keeping with national standards, the Physical Therapy program in the School of Allied Health Professions transitioned from masters to doctorate (DPT) in 2006-07. As part of this transition, the program offered a part-time, post-professional track to previous graduates, allowing them to obtain the higher-level DPT degree. As a result, both the number of enrollees and program completers transiently increased. Similarly, the Physician Assistant program transitioned from bachelor's to master's in 2010-11, and began offering a similar part-time track to previous graduates who desire to earn the higher degree. These program upgrades caused an inflated number of degrees to be awarded in academic years 2009 - 2010 and 2010 - 2011 and are expected to do so to a lesser extent for several more years. As these transitions in the Physical Therapy and the Physician Assistant programs are accomplished, the number of part-time, post-professional students in these programs will decrease, and both enrollment and completer figures will stabilize at a lower level.

#### **School of Graduate Studies**

In the School of Graduate Studies, the number of graduates fluctuates annually because the number of students accepted changes from year to year in the five PhD programs. In addition, the length of time to degree completion varies among students and ranges from four to eight years with a school average of 5.6 years for the PhD degree. The national average to obtain a doctorate degree in biological and health sciences is 5.5 years (National Academies of Science, 2010 report).

Because of limited physical and financial resources that are compounded in the current climate of budget reductions for higher education in Louisiana, increases in the number of completers are not projected for the School of Graduate Studies, which relies on competitive stipends to attract and recruit students, until funding recovers.



Students are rarely accepted directly into a master's program since the majority of applicants initially enroll in a doctorate program. Some PhD students later decide to pursue a master's degree instead. Students in the master's program are required to complete the degree requirements within 4 years of being accepted into the program. Average time for LSUHSC-S students to complete the MS degree is 2.7 years after being accepted into the MS program.

Measures

*Measures: Targeted*

- *Percentage change in completers from baseline year per award level*

School of Medicine Percentage change in completers by award level from baseline		
	2008-09	2009-10
Professional	baseline (110)	+2% (112)

School of Graduate Studies Percentage change in completers by award level from baseline		
	2008-09	2009-10
Master's	baseline (1)	0% (1)
Doctorates	baseline (8)	+88% (15)

School of Allied Health Professions Percentage change in completers by award level from baseline		
	2008-09	2009-10
Bachelor's	baseline (62)	-23% (48)
Master's	baseline (27)	-30% (19)
Professional	baseline (62)	-32% (42)

**Performance Objective 1: STUDENT SUCCESS**

**Element 1c: Develop partnerships with high schools to prepare students for postsecondary education.**

Not applicable to LSUHSC-S.

## Performance Objective 1: STUDENT SUCCESS

**Element: 1d. Increase passage rates on licensure and certification exams and workforce foundational skills.**

*Narrative report: optional*

### Narrative

#### **School of Medicine**

The School of Medicine draws its applicants from Louisiana residents. Despite a smaller applicant pool, often with entry exam scores lower than the national median (school median MCAT: 28 vs. national median MCAT: 32), the institution's licensure pass rates are consistently competitive with national pass rates.

Students are required to take and pass Step 1 of the United States Medical Licensing Examination (USMLE) prior to graduation from the School of Medicine. The proactive measures taken by the School of Medicine in an effort to increase passage rates of USMLE Step 1 include a plan for identifying and assisting "at-risk" students by directing them to enroll in an intensive study course designed to better prepare them for the Step 1 examination. Details of this plan are outlined in Element 1a.

Students must also take the two components of USMLE Step 2 prior to graduation. Although the School of Medicine does not require that a student pass USMLE Step 2 prior to graduation, it fully recognizes the importance that successful completion of this examination has in the future success of its students. Curricular revision aimed at increasing the quality and breadth of clinical experience provided to students has been made with the intent of further improving the quality of graduating physicians. The third and fourth year curricula have been reviewed and modified to provide students with increased patient contact and faculty interaction. In addition, the incorporation of clinical curricula from the institution's Clinical Skills Center (CSC) has provided an important way in which all medical students receive training in aspects of clinical medicine appropriate for their year and a means by which their performance of clinical skills can be evaluated. These efforts not only serve to improve the overall patient care performance of these future physicians but provide for them an enlarged foundation of clinical knowledge that directly impacts success with USMLE Step 2.

The high first-time pass rates for the two components of USMLE Step 2 shown in the table at the end of this section reflect the successful implementation of the School of Medicine's clinical curriculum enhancements. The School of Medicine intends to maintain these high first-time pass rates for USMLE Step 2.

## School of Allied Health Professions

The School of Allied Health Professions has instituted various methods across all programs to increase passage rates on licensure and certification exams and improve workforce foundational skills. These include early identification of students needing remediation, individual student counseling, study groups, practice examinations, clinical practice skill development, and interactive teaching by faculty on clinical rotations.

Examples of student success include the following:

The Program in Physical Therapy offers a National Board Exam Preparation Course the month prior to graduation each year. Since the program began offering this course three years ago, the first time pass rate has increased from 85% to 90%. In addition, all students take a mock-licensure exam in the semester prior to graduation in order to identify areas requiring additional review.

The Physician Assistant (PA) program has taken several actions to improve pass rates on the PA certification exam. One such modification was the conversion from written course exams to electronic format exams, which exposes the students to the test format in which they will later take their actual certification exam. The Physician Assistant program also subscribes to a national peer-reviewed database of certification exam practice questions for students to use as a study aid.

### Measures

*Measures: Targeted*

- *Passage rates of licensure exams*

School of Medicine Passage rates of licensure exams				
	2009 AY Graduates		2010 AY Graduates	
	School Pass Rate	National Pass Rate	School Pass Rate	National Pass Rate
USMLE Step 1	92% (99/108)	94%	98% (107/109)	93%
USMLE Step 2 CK	98% (112/114)	96%	98% (107/109)	97%
USMLE Step 2 CS	99% (109/110)	97%	99% (109/110)	97%

School of Allied Health Professions Passage rates of licensure exams*		
	2009 AY Graduates	
	School Pass Rate	National Pass Rate
Medical Technology	94% (17/18)	82%
Cardiopulmonary Science	90% (9/10)	72%
Physician Assistant	79% (23/29)	92%
Communication Disorders	100% (9/9)	86%
Occupational Therapy	100% (12/12)	78%
Physical Therapy	90% (27/30)	89%

\*Passage rates are determined within 12-months of graduation; therefore, AY2009-10 data will not be available until AY2011-12



**Performance Objective 2: ARTICULATION AND TRANSFER**

**Element: 2a. Phase in increased admission standards and other necessary policies by the end of the 2012 Fiscal Year in order to increase student retention and graduation rates.**

Not applicable to LSUHSC-S.

**Element: 2b. Provide feedback to community colleges and technical college campuses on the performance of associate degree recipients enrolled at the institution.**

Not applicable to LSUHSC-S.

**Element: 2c. Develop referral agreements with community colleges and technical college campuses to redirect students who fail to qualify for admission into the institution.**

Not applicable to LSUHSC-S.

**Element: 2d. Demonstrate collaboration in implementing articulation and transfer requirements provided in R.S. 17:3161 through 3169.**

Not applicable to LSUHSC-S.

**Performance Objective 3: WORKFORCE AND ECONOMIC DEVELOPMENT**

**Element: 3a. Eliminate academic program offerings that have low student completion rates as identified by the Board of Regents or are not aligned with current strategic workforce needs of the state, region, or both as identified by the Louisiana Workforce Commission.**

*Narrative report: required*

*The narrative report should include at a minimum:*

- *A description of the institution's current review processes to identify academic programs that have low number of completers or are not aligned with current or strategic workforce needs.*
- *A description of the institution's collaboration with the Louisiana Workforce Commission to identify academic programs that aligned with current or strategic workforce needs.*
- *A description of the institution's current review processes to identify academic programs that are aligned with current or strategic workforce needs as defined by the Regents utilizing LWC and Louisiana Economic Development published forecasts.*
- *A description of how the institution has worked to modify or initiate new programs that meet current or strategic future workforce needs of the state and/or region.*

**Narrative**

The emphasis placed on excellent education and skills development at LSUHSC-S contributes in an important way to the overall health as well as the economic vitality of the state. LSUHSC-S focuses resources and efforts on its learners to prepare them for careers in numerous fields of health care and health sciences. Education and training in these critical areas will help ensure a solid economy long into the future.

Health care is a very important industry for the economic stability and well being of Louisiana. As the baby-boom generation reaches retirement age, Louisiana's older population will continue to grow. As a result, the need for health care services will increase dramatically as the population ages. To assure that Louisiana has an adequate supply of skilled health care professionals to fill both present and future positions, LSUHSC-S recruits and trains learners for needed health care and health science occupations. All programs at LSUHSC-S are aligned with the Fostering Innovation through Research in Science and Technology in Louisiana (FIRST Louisiana) core industry of health care.

**School of Allied Health Professions**

The Dean of the School of Allied Health Professions at LSUHSC-S serves as the LSU System representative on the Louisiana Health Works Commission. The Health Works Commission functions directly with the Louisiana Workforce Commission to study and make recommendations on supply and demand issues related to the health professions. Using the knowledge gained from these commissions, LSUHSC-S strives to meet the

projected demands by fostering programs best suited to the state's needs. The latest data presented by the commissions with regard to workforce growth in Louisiana indicate that three LSUHSC-S degree programs (Physician Assistant, Physical Therapy and Respiratory Therapy) are predicted to be high growth fields (29%, 29% and 25% respectively) through 2018. Furthermore, all six of the academic programs in the LSUHSC-S School of Allied Health Professions (Physical Therapy, Occupational Therapy, Speech-language Pathology, Physician Assistant, Respiratory Therapy and Clinical Laboratory Science) are predicted to have annual growth rates in the state ranging from 30% in physician assistant and speech language pathology to 100% in physical therapy.

As evidence indicating that additional graduates will be needed to fill high demand positions has become more compelling over the past several years, the School of Allied Health Professions has partnered with the Louisiana Health Works Commission and the Louisiana Board of Regents to increase enrollment in key programs that were functioning at capacity. This was accomplished through a capitation arrangement with the Board of Regents in which the School was provided with additional funding on a per student basis for each new student admitted over the baseline number to these key programs. This agreement allowed the school to increase the entering class size of the Physical Therapy program and the Physician Assistant Program by six students each, and the Clinical Laboratory Science Program by twelve students. Recent state budgetary constraints have severely curtailed the capitation program but the school remained committed to the students enrolled and has utilized funding from tuition increases to maintain the higher numbers.

The Cardiopulmonary Science Program provides professional preparation in the allied health specialties of respiratory care and cardiovascular technology. It prepares students to provide care to neonatal, pediatric and adult patients with cardiopulmonary disease, administer diagnostic tests as well as therapeutic agents and techniques, and oversee the operation and maintenance of the instrumentation involved in these procedures. With an educational foundation in anatomy, physiology, chemistry, pharmacology and clinical medicine, the graduate is prepared to exercise judgment and accept responsibility in performance of diagnostic and therapeutic procedures in the care of the cardiopulmonary patient. Graduates of the program become eligible for professional credentialing exams, along with eligibility for licensure to practice respiratory therapy. In addition, the baccalaureate cardiopulmonary science graduate is a potential candidate for supervisory, educational and administrative positions within the profession. Graduates of the baccalaureate program are also potential candidates for graduate education courses in master's and doctorate programs. The program is accredited by the Committee on Accreditation for Respiratory Care (CoARC).

LSUHSC-Shreveport and LSUHSC-New Orleans are the only two institutions in the state that graduate baccalaureate prepared cardiopulmonary practitioners. Baccalaureate trained graduates are in demand in this field for supervisory and upper level managerial positions within Louisiana hospitals.

The LSUHSC-S School of Allied Health Professions advanced programs in Occupational Therapy and Physician Assistant (master's degree) and Physical Therapy (doctorate degree) also serve to meet the healthcare demands of Louisiana. In addition to primary healthcare roles, graduates with an advance degree fulfill the need for

supervisory and upper level managerial positions. In addition, a number of Occupational Therapy, Physician Assistants, and Physical Therapy graduates have taken advantage of opportunities in education.

Many professional allied health programs have transitioned to entry levels beyond the baccalaureate degree in recent years (for instance, the Physician Assistant Program recently transitioned from bachelor's to master's degree beginning in academic year 2010-11). Consequently, student demand for the Master of Health Sciences (MHS) degree decreased, and the program was terminated in 2010.

### **School of Graduate Studies**

The Dean of the Graduate School and the Graduate Advisory Council in the School of Graduate Studies review each program for the number of completers. If the number of graduates in a program is not acceptable according to Board of Regents standards, the Council recommends solutions to address the deficit to the Dean. The Dean makes the final decision on these issues.

The LSU Board of Supervisors and the University of Louisiana Board of Supervisors approved a proposal for a PhD program in Bioinformatics and Computational Biology as a cooperative effort among LSUHSC-S, LSU-S and Louisiana Tech in 2009. It currently awaits final approval by the Board of Regents.

The advent of high-throughput data generation techniques in biology and medicine has dramatically expanded the need for researchers trained in bioinformatics. The proposed PhD in Bioinformatics and Computational Biology Program is dedicated to providing current and comprehensive training to students in the knowledge and skills necessary for the invention of algorithms and the creation of novel complex computational systems that facilitate the understanding of biological processes and application of these tools and methods for scientific and economic progress and public health of Louisiana and the nation. The proposed program emphasizes the application of data mining, machine learning, statistics, and high-performance computing to computationally difficult, yet tractable problems in molecular biology and clinical sciences.

The rapid growth recently witnessed by biotechnology and informatics sectors has created a market for graduates who have acquired cutting-edge skills and technologies in both biological sciences and computing. Indeed, the U.S. Bureau of Labor Statistics includes bioinformatics biological scientist (doctoral degree) on the list of "fastest growing occupations" between 2008-2018 in its Occupational Outlook Handbook (2009-2010 edition), with an anticipated 19% growth and the addition of 16,100 new jobs nationwide. An 11% growth in this area is projected for Louisiana.

The State of Louisiana has already made investments in areas that would support a PhD program in Bioinformatics and Computational Biology. These include a biotechnology sales tax exclusion; a technology commercialization tax credit; a higher education information technology initiative; a higher education bioscience initiative; the Louisiana Cancer Research Center; the Gene Therapy Research Consortium; the Consortium for Education, Research, and Technology (CERT); and wet-lab incubators. Other infrastructure and hardware acquisitions that would facilitate a collaborative

bioinformatics program include the Access Grid Node at LSUHSC-S, and three Access Grid Nodes at LSUS, together with high speed internet connectivity through LONI along the I-20 and I-49 corridors.

As part of the Board of Regents low-completer review in 2011, the institution proposed to consolidate five master's programs in its five basic science departments into a single master's program to be known as the Biomedical Sciences Master's Program. Students would enroll in the currently offered core courses in their first year and complete laboratory rotations in three different laboratories of faculty in the five basic science departments. At the end of their first year, the students would choose a research advisor/mentor in one of the basic science departments. The students would then complete the additional course/program requirements for the master's in that department and receive the Master's in Biomedical Sciences. These students would not be eligible for a stipend or a tuition waiver.

A track in Human Clinical Anatomy (that began in August 2010) provides another option for the students in the Master's in Biomedical Sciences Program who choose a mentor in the Department of Cellular Biology and Anatomy. They will assist in teaching anatomy to medical students in their second year, thus, be trained to become anatomy instructors when they have completed the requirements of the master's degree. A national shortage of anatomy instructors is evident for medical schools, allied health and nursing schools, and graduate schools, so this program track will provide well-trained instructors that will fill a growing need in the State as well as elsewhere in the country.

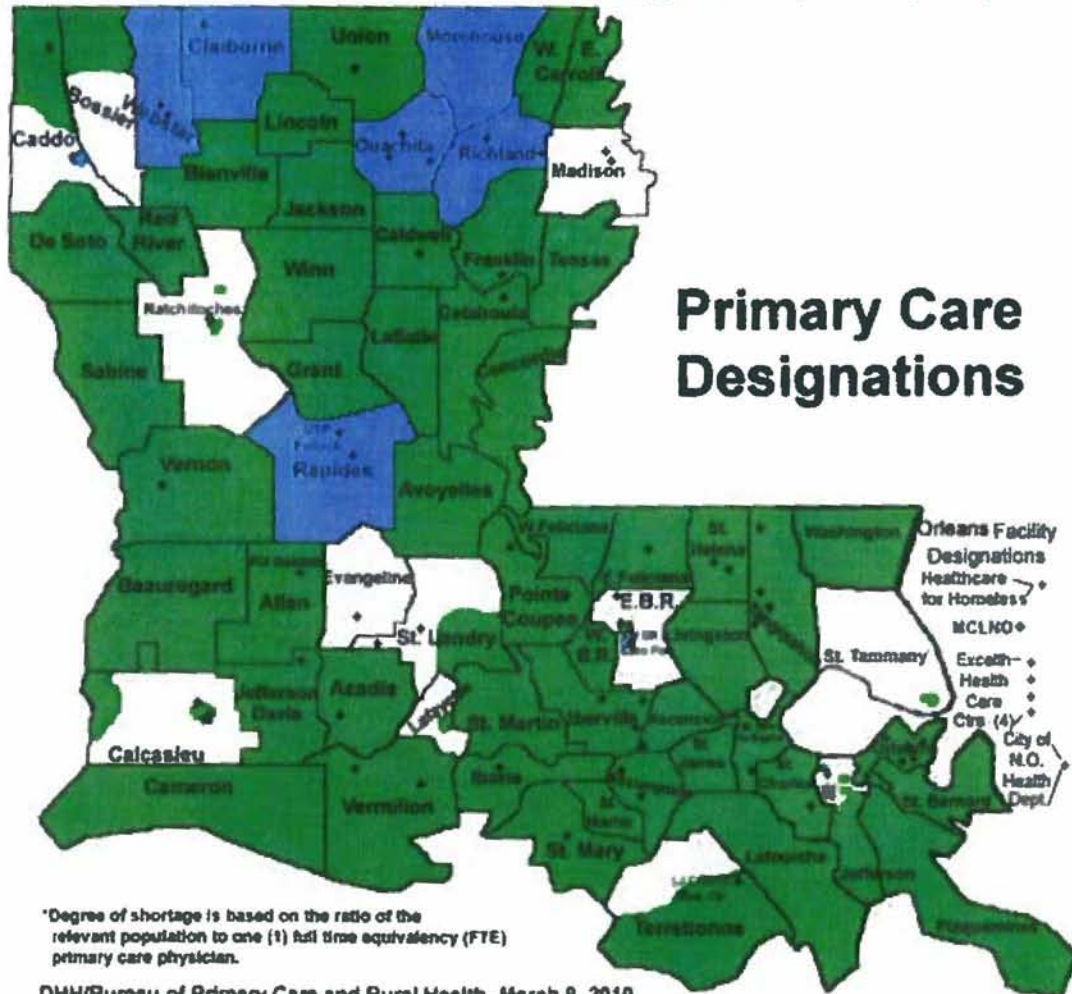
### **School of Medicine and Other Postgraduate Training Programs at LSUHSC-S**

Since Louisiana has large areas in which the population has limited access to health care, one of the most pressing requirements is an adequate supply of primary care physicians. LSUHSC-S has initiated several educational and training programs aimed at meeting those needs.

The first of the two following charts demonstrates the many medically underserved parishes of the state of Louisiana. The second, from recently published data from the American Association of Medical Colleges (AAMC), demonstrates the success that LSUHSC-S has in retaining its graduates in-state and in placing them in rural and underserved areas as benchmarked against all US medical schools.



## Health Professional Shortage Area (HPSA) Map



### HPSA DESIGNATIONS LEGEND:

- Geographic Designation
- Population Group Designation
- Facility Designation

To Look Up HPSAs by address go to: <http://datawarehouse.hrsa.gov>

**TABLE 2** Graduate a Workforce that Will Address the Priority Health Needs of the Nation  
 Louisiana State University School of Medicine in Shreveport  
 Benchmarked against All Medical Schools



Percentile	Areas of Practice for Graduates from 1996 through 2008				Areas of Estimated Practice for Graduates from 2007 through 2009		
	Total Graduates	Percent in Primary Care Medicine	Percent Practicing In-state	Percent Practicing in Rural Areas	Total Graduates Entering Post-Graduate Training	Percent in Family Medicine	Percent in Primary Care
90	968	42.2%	54.2%	7.4%	564	13.9%	32.8%
80	834	38.4%	46.8%	4.3%	485	11.7%	30.0%
70	757	36.1%	42.8%	1.4%	447	10.2%	27.8%
60	719	33.5%	40.7%	9.4%	421	9.5%	25.7%
50	638	32.8%	36.9%	7.6%	384	7.5%	24.1%
40	531	31.3%	31.0%	8.2%	324	6.5%	22.1%
30	491	29.6%	27.5%	5.0%	282	5.6%	19.9%
20	441	28.5%	19.0%	3.5%	251	4.8%	18.1%
10	311	23.7%	13.3%	2.8%	178	2.7%	15.3%
Mean	541	32.7%	34.8%	6.0%	377	8.2%	24.3%
Valid N	124	124	124	124	126	126	126

Note: The percentile distributions include reported zero values but exclude missing values.  
 Source: AAMC Student Records System; American Medical Association Physician Masterfile; GME Track System

### LSUHSC-S Primary Care Internal Medicine Residency Program

In addition to the categorical Internal Medicine training program at LSUHSC-S, the institution began a program to specifically train internists in the practice of Primary Care Internal Medicine (the only such program in the southern U.S.).

Recognizing that a great percentage of traditional Internal Medicine residents choose to enter specialty fellowship training after graduation, the LSUHSC-S Department of Internal Medicine determined that the need for community internists was not being met and began the Primary Care Internal Medicine Program in 2008 with six residents. All of these initial trainees will graduate in June 2011 and are entering primary care internal medicine positions.

Beginning July 1, 2011, this program will have a total of 24 positions (9 in year 1, 9 in year 2, 5 in year 3, and 1 vacant for the moment). The community has recognized the value of this program and provided support to fund many of these training positions: 12 are funded by the Veterans Affairs Medical Center in Shreveport, 1 by Christus Schumpert Hospital, 5 by Willis-Knighton Health System, 4 by the LSU Hospital in Shreveport and 2 by the Practice Plan of the Department of Internal Medicine. At present, none of the positions in this unique program are supported by state funds, although the institution benefits from its relationship with the Rural Hospital Coalition. The Primary Care Internal Medicine Program could be extremely beneficial for Louisiana, and LSUHSC-S continues to look for support to expand its numbers.

### *LSUHSC-S Family Medicine Residency Program*

The primary mission of the LSUHSC-S Family Medicine Residency Program is to train residents capable of practicing in rural settings. In addition to providing an excellent foundation in the practice of primary care medicine, the program has emphasized training in a variety of procedural skills for over 20 years to help accomplish this goal. To function in rural areas, physicians must be prepared to perform a number of treatments and diagnostic studies that, in urban areas, might be done by a specialist.

The Department of Family Medicine has maintained a rural training track for over 10 years and currently has 6 residents in that program. All residents of the program based at LSUHSC-S are required to complete one month of training in a rural setting in their second year. The Family Medicine residency programs affiliated with LSUHSC-S in Monroe and Alexandria, being located in smaller metropolitan areas, emphasize training for rural practice.

The Emergency Medicine/Family Medicine Program is intended to prepare graduates to effectively staff emergency departments as well as practice family medicine in rural communities.

### *LSUHSC-S Area Health Education Centers (AHEC)*

AHEC is a national organization with a primary mission to enhance access to quality health care, particularly primary and preventive care, by improving the supply and distribution of healthcare professionals through community/academic educational partnerships.

In keeping with the overall AHEC mission and its application to Louisiana, the AHEC Program Office at LSUHSC-S and its two centers focus on introducing students to the practice of medicine in the rural and underserved areas of the state. The program plays an active role in the training of LSUHSC-S medical students and also offers programs for high school and college level students.

The high school student program has been in place for several years and is aimed at introducing medicine as a career to these students.

For college students, the AHEC Rural Scholars program has been established. Ten college students are selected for this program each year and are mentored throughout the medical school application/admission process.

AHEC plays a role in the LSUHSC-S medical school curriculum at a number of levels. In the first year, all students have 16 hours of primary care experience with an AHEC preceptor during a component of the Foundations of Clinical Medicine course entitled "Immersion". In the summer between the first and second years, students can avail themselves of the Primary Care Preceptorship Program (PCRPP), a 2-4 weeks rural primary care experience. In the fourth year, a number of 1-month electives are available to senior students in community and rural AHEC sites. Most recently, in the Family Medicine clerkship of the newly revised third year curriculum, students will have 96 contact hours with a community and/or rural AHEC physician preceptor.



Finally, a partnership between the AHEC Centers and DHH known as MedJob Louisiana focuses on recruitment of primary care providers into medically underserved areas of Louisiana. ([www.Medjoblouisiana.com](http://www.Medjoblouisiana.com))

### Measures

#### *Measures: Descriptive*

- *Number of programs eliminated: as a result of institutional or Board of Regents review (Baseline: 2009-10)*
- *Number of programs modified or added: to meet current or strategic workforce needs, as identified by the institution in collaboration with LWC (Baseline: 2009-10)*
- *Percent of programs aligned with workforce and economic development needs: as identified by Regents utilizing LWC or LED published forecasts*
  - *Number of program offerings, regardless of award level, in a given academic year (Baseline: 2009-10)*
  - *Number of programs aligned with workforce and economic development needs, as identified by institution utilizing LWC or LED published forecasts*

Summary of program review		
	2009-10	2010-11
Number of programs eliminated	1	5 <sup>1</sup>
Number of programs modified or added	0	2 <sup>2</sup>

<sup>1</sup>As part of the Board of Regents low-completer review in 2011, the institution proposed to consolidate five master's programs in its five basic science departments into a single master's program to be known as the Biomedical Sciences Master's Program.

<sup>2</sup>Physician Assistant Program began transition from bachelor's to masters in 2010-11; consolidated Biomedical Sciences Master's Program proposed to BOR in 2011.

Programs aligned with workforce and economic development needs	
	2009-10
Number of program offerings	18
Number of programs aligned with workforce and economic development needs	18
Percent of programs aligned with workforce and economic development needs	100%

### **Performance Objective 3: WORKFORCE AND ECONOMIC DEVELOPMENT**

**Element: 3b. Increase use of technology for distance learning to expand educational offerings.**

*Narrative report: required*

*The narrative report should include at a minimum:*

- *A description of current initiatives to improve technology for distance learning. Such initiatives may include but are not limited to infrastructure and software enhancements; facilitation of processes for admission, registration, and other business processes; professional development for faculty, and enhancement of on-line student assessment processes.*
- *A description of current initiatives to create and expand educational offerings by distance education.*
- *A description of any efficiencies realized through distance education.*

#### Narrative

##### **School of Medicine**

As is prevalent in most medical schools, students in the School of Medicine must interact in person with faculty, students, patients, etc. in most curricular activities (e.g. clinical clerkships, small group discussions, lectures, problem-based learning, standardized patient experiences, etc.); therefore, distance learning is not a viable delivery option for the M.D. Program.

##### **School of Graduate Studies**

The Introduction to Bioinformatics course provided by the School of Graduate Studies is offered to students in four institutions in Louisiana (LSUHSC-S, LSU-S, Louisiana Tech, and Southern University in Baton Rouge). This unique course is not offered in any of the schools individually. Thus, by offering this course by Access Grid, students around the state have the opportunity to take this course using an efficient method to deliver the course content.

The Introduction to Bioinformatics course (BCH 290, 3 credit hours) is taught in the School of Graduate Studies, Department of Biochemistry and Molecular Biology. Fifty percent of the lectures in the course are given at LSUHSC-S and 50% are given at LSU-S. The Access Grid System connects these two campuses as well as Louisiana Tech and Southern University in Baton Rouge, so that students on all four campuses can enroll in this course. Students register on their respective campuses for course credit in their institutional programs. The course is taught in the spring of alternate years. In 2008, 8 students were enrolled in the course (on the LSUHSC-S and LSU-S campuses), 1 student from LSUHSC-S. In 2010, 23 students were enrolled in the course (from all 4 campuses), 6 students from LSUHSC-S. No courses in the School of Graduate Studies are offered 100% through distance education.



The NIH-funded INBRE program supports Access Grid, allowing graduate students, postdoctoral fellows and faculty at LSUHSC-S to participate in a Bioinformatics Affinity Group Journal Club with students and others at Louisiana Tech, ULM, LSU-BR, LSU-S, LSUHSC-NO and SUBR. These interactive Journal Clubs are important in student learning as well as development of oral communication skills. Students from multiple departments participate in this course.

Students in the School of Graduate Studies must perform scientific research as part of their degree requirements, and this aspect of training cannot be provided through distance learning.

### **School of Allied Health Professions**

The Cardiopulmonary Science Program has a consortium agreement with Bossier Parish Community College to teach on that campus as well as use technology for distance learning to teach students residing in the Monroe and Alexandria region. The students in Monroe and Alexandria have a weekly lab performed at their site with a clinical instructor and all clinical rotations are completed in their respective areas. There are 8 students receiving their education via long distance learning. Upon completion these students will receive an Associate Degree in Respiratory Therapy

Efficiencies include both fiscal and physical assets for the State of Louisiana. The ability of the Cardiopulmonary Science Program faculty in the School of Allied Health Professions to teach the Associate Degree in Respiratory Therapy for BPCC eliminates the need for duplicate faculty on that campus as well as the physical needs of duplicate faculty on that campus. Additionally, the distance-learning students realize efficiencies by remaining in their communities while acquiring their classroom and clinical instruction. The communities these students reside in benefit from having additional Respiratory Therapists to provide medical care.

### Measures

#### *Measures: Tracked*

- *Number of course sections with 50% and with 100% instruction through distance education: reported separately for 50% to 99% and 100% (Baseline: 2008-09)*
- *Number of students enrolled in courses with 50% and with 100% instruction through distance education: duplicated students, reported separately for 50% to 99% and 100% (Baseline: 2008-09)*
- *Number of programs offered through 100% distance education, by award level (Baseline 2008-09)*

School of Graduate Studies Distance Learning		
	2008-09	2009-10
Number of course sections with 50% to 99% instruction through distance education	0	0
Number of course sections with 100% instruction through distance education	1	1
Number of students enrolled in courses with 50% to 99% instruction through distance education	0	0
Number of students enrolled in courses with 100% instruction through distance education	3	23
Number of programs offered through 100% distance education, by award level	0	0

School of Medicine Distance Learning		
	2008-09	2009-10
Number of course sections with 50% to 99% instruction through distance education	0	0
Number of course sections with 100% instruction through distance education	0	0
Number of students enrolled in courses with 50% to 99% instruction through distance education	0	0
Number of students enrolled in courses with 100% instruction through distance education	0	0
Number of programs offered through 100% distance education, by award level	0	0

School of Allied Health Professions Distance Learning		
	2008-09	2009-10
Number of course sections with 50% to 99% instruction through distance education	0*	0*
Number of course sections with 100% instruction through distance education	0	0
Number of students enrolled in courses with 50% to 99% instruction through distance education	0*	0*
Number of students enrolled in courses with 100% instruction through distance education	8	0
Number of programs offered through 100% distance education, by award level	0	0

\* Faculty from the Cardiopulmonary Science Program of the School of Allied Health Professions (SAHP) teach the didactic portion of the Respiratory Therapy program at Bossier Parish Community College (BPCC). Students residing in Monroe and Alexandria enrolled in this BPCC program receive this didactic portion of the Respiratory Therapy course via long-distance learning. In short, this is a course provided by BPCC utilizing LSUHSC-S SAHP faculty to provide long-distance learning to students in Monroe and Alexandria.

### **Performance Objective 3: WORKFORCE AND ECONOMIC DEVELOPMENT**

**Element: 3c. Increase research productivity especially in key economic development industries and technology transfer at institutions to levels consistent with the Institution's peers.**

*Narrative report: required*

*The narrative report (which may exceed 2-page maximum) should include at a minimum:*

- *A description of current and prospective research productivity and technology transfers as it relates to Louisiana's key economic development industries.*
- *A description of how the institution has collaborated with Louisiana Economic Development, Louisiana Association of Business and Industry, industrial partners, chambers of commerce, and other economic development organizations to align Research and Development activities with Louisiana's key economic development industries.*
- *A description of any business innovations and new companies (startups) and companies formed during previous years and continuing (surviving startups) resulting from institutional research and/or partnerships related to Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) awards.*
- *A description of how the institution's research productivity and technology efforts compare to peer institutions.*

#### **Narrative**

All the research and development activities at LSUHSC-S are related to Louisiana's key economic industry of Health Care. One major area of research, the Center of Molecular and Tumor Virology, is funded through an NIH COBRE grant. This research includes both basic and clinical science investigations of molecular mechanisms involved in virally-induced pathogenesis. Another major research area is an NIH funded program project grant on the Role of the Microcirculation in Intestinal Inflammation. Investigators working on this project are studying inflammatory bowel diseases, such as colitis and Crohn's Disease in order to develop better treatments for these debilitating conditions. As a result of some of this research, a patent was issued and a company was formed (TheraVasc) to conduct clinical trials on the developed technology for treating peripheral artery disease. Also, in the area of cardiovascular disease, another company was formed (Requisite) to develop improved drugs for coating stents used in the treatment of vascular stenosis. Researchers at the Feist-Weiller Cancer Center perform investigations into molecular mechanisms of cancer initiation and metastases as well as conduct clinical trials on new cancer treatments. In the neurosciences area, another company was formed (Embera Neurotherapeutics) based on a new treatment for cocaine abuse. The upcoming clinical research is funded by the NIH. Other areas of basic and clinical research in the neurosciences include Parkinson's Disease, Alzheimer's Disease, other neurodegenerative diseases, Multiple Sclerosis, drug abuse and olfactory processing. Other investigators are studying diabetes, stroke, asthma, rheumatoid arthritis, kidney disease, pulmonary disease, hepatitis, sickle cell disease, preeclampsia and cystic fibrosis.

The Community Foundation of NW Louisiana is managing the funds from an endowment obtained from donations dedicated to support the Research Core Facility (RCF). The RCF consists of state-of-the-art instruments that are utilized by clinical and basic scientists for biomedical research. This research supports Louisiana's key economic development industry of Health Care.

The Data Appendix from the Association of University Technology Managers (AUTM) U.S. Licensing Activity Survey FY2009 is provided immediately after this section and provides comparison data to other U.S. universities, hospitals, and research institutions. LSUHSC-S data is consolidated with the LSU System.

### Measures

#### *Measures: Tracked*

*Faculty holding (serving as principal and/or co-principal investigators) active research and development grants*

- *Total number of research/instructional faculty (FTE) at the institution. Include all FTE faculty, tenure and non-tenure track including physicians whose job responsibilities include expectations for scholarly activity (Baseline: 2009-10)*
- *Percent of research/instructional faculty (FTE) at the institution holding active research and development grants/contracts (Baseline: 2009-10)*
- *Percent of research/instructional faculty (FTE) holding active research and development grants/contracts in Louisiana's key economic development industries (Baseline: 2009-10)*
- *Dollar amount of research and development expenditures: reported annually, based on a five-year rolling average, by source (federal, industry, institution, other). Include all expenditures from S&E and non S&E grants/contracts as reported annually to the NSF. (Baseline: four-year average of FY2005-06 through FY2008-09)*
- *Dollar amount of research and development expenditures in Louisiana's key economic development industries. These data will be supplemented with the narrative report demonstrating how research activities align with Louisiana's key economic development industries. (Baseline: four-year average of FY2005-06 through FY2008-09)*
- *Number of intellectual property measures (patents, disclosures, licenses, options, new start-ups, surviving start-ups, etc.) which are the result of the institution's research productivity and technology transfer efforts reported by: total count of the number of disclosures, licenses and options awarded; the number of patents awarded; the number of new companies (start-ups) formed; and the number of companies formed during previous years and continuing (surviving start-ups). (Baseline: 2008-09)*



Research Productivity and Technology Transfer Measures	
Total number of research/instructional faculty <sup>1</sup> (FTE) at the institution (Baseline: 2009-10)	256
Percent of research/instructional faculty (FTE) at the institution holding active research and development grants/contracts (Baseline: 2009-10)	33% (85/256)
Percent of Basic Science research/instructional faculty (FTE) at the institution holding active research and development grants/contracts (Baseline: 2009-10)	59% (52/88)
Percent of research/instructional faculty (FTE) holding active research and development grants/contracts in Louisiana's key economic development industries (Baseline: 2009-10)	33% (85/256)
Dollar amount of research and development expenditures: reported annually, based on a five-year rolling average, by source (federal, industry, institution, other). Include all expenditures from S&E and non S&E grants/contracts as reported annually to the NSF. (Baseline: four-year average of FY2005-06 through FY2008-09)	\$30,335,250
Dollar amount of research and development expenditures in Louisiana's key economic development industries (Baseline: four-year average of FY2005-06 through FY2008-09)	\$30,335,250
Patent applications filed (Baseline: 2008-09)	12
Patents issued (Baseline: 2008-09)	1
Disclosures (Baseline: 2008-09)	12
Licenses/options executed (Baseline: 2008-09)	2
New start-ups (Baseline: 2008-09)	0
Surviving start-ups (Baseline: 2008-09)	0

Name of Institution	Program Start	2009 Licensing FTE	2009 Research Expenditures	2007-2009 Cumulative Total Research Expenditures	2009 Licenses and Options Executed	Cumulative Active Licenses	2009 Startups	2009 Invention Disclosures	2007-2009 Cumulative Invention Disclosures	2009 U.S. Patents Issued	2009 New Patent Applications	2007-2009 Cumulative Adjusted Gross Income	2009 License Income
Albert Einstein College of Med/Yeshiva University	1985	4.00	142,966,051	438,451,071	10	NA	2	51	120	7	8	6,976,997	2,966,838
Arizona State University	1985	9.00	254,006,785	710,057,262	49	109	5	164	463	20	126	5,983,652	1,878,749
Auburn University	1988	3.70	143,654,000	431,267,000	15	66	NA	87	281	14	80	1,922,198	693,452
Ball State University	1991	1.00	26,082,888	64,555,337	2	20	NA	31	54	NA	2	473,906	146,537
Baylor College of Medicine	1983	8.00	305,687,000	918,408,000	56	564	NA	76	250	18	14	28,720,000	8,809,000
Baylor University	2009	0.20	NA	NA	NA	NA	1	4	NA	NA	3	NA	NA
Boise State University	2009	1.00	11,954,131	NA	1	1	NA	7	NA	NA	NA	NA	5,000
Boston University/Boston Medical Ctr.	1976	12.00	371,652,029	1,053,989,782	23	158	4	78	280	12	45	5,194,413	1,776,497
Bowling Green State University	2001	1.00	8,396,000	28,228,000	3	3	1	12	28	1	10	18,500	10,500
Brigham Young University	1986	4.00	27,299,213	79,842,023	27	220	9	159	457	5	74	9,550,020	2,687,163
California Inst. of Technology	1978	5.00	521,436,800	NA	37	97	18	549	1,721	94	381	74,453,766	47,665,535
Carnegie Mellon University	1992	6.00	232,992,000	691,033,000	19	245	10	111	362	12	49	20,222,921	8,041,047
Case Western Reserve University	1986	7.50	332,661,000	1,120,975,400	31	218	5	148	424	11	104	40,789,662	16,281,957
Clemson University	1987	3.00	140,969,423	401,612,327	13	54	NA	77	197	5	64	8,528,806	2,837,226
Colorado State University	1970	3.50	311,720,381	910,333,324	22	78	1	104	273	5	65	5,631,770	2,776,439
Columbia University	1982	16.00	604,660,000	1,865,004,000	51	NA	13	302	921	57	202	305,904,252	154,257,579
Cornell Research Fdn., Inc.	1979	11.00	687,430,951	2,015,040,606	23	450	3	362	844	73	129	16,755,654	5,100,407
Dartmouth College	1985	2.00	145,953,505	499,535,281	9	132	1	66	163	10	26	9,060,784	1,833,707
Drexel University	1995	3.00	104,040,000	306,275,005	19	53	3	128	385	14	78	799,807	178,499
Duke University	1986	10.15	709,803,045	2,091,515,499	97	689	4	192	573	34	155	40,653,176	19,048,244
Duquesne University	1999	0.50	12,200,000	36,400,000	1	1	NA	5	12	1	4	NA	NA
East Carolina University	1995	2.00	24,177,000	56,339,000	4	15	NA	10	37	5	9	2,084,038	838,090
Eastern Virginia Medical School	1999	1.00	36,678,000	98,908,000	3	23	1	8	21	2	39	3,440,820	1,260,808
Emory University	1985	7.50	416,476,261	1,172,458,803	36	244	1	184	502	18	53	51,534,506	15,034,198
Florida International University	NA	0.50	74,626,700	229,900,930	1	3	NA	16	47	1	11	55,408	39,819
Florida State University	1996	3.00	199,073,850	604,609,940	10	63	2	45	145	10	36	4,263,294	1,192,448
George Mason University	1996	1.85	100,164,596	247,686,839	4	16	2	55	174	7	45	321,993	163,444
Georgetown University	1993	5.00	230,637,658	510,653,658	11	164	NA	50	145	14	50	18,690,485	9,222,996
Georgia Inst. of Technology	1990	7.00	581,278,634	1,607,393,275	65	398	9	341	1,000	54	239	6,638,191	2,411,613
Harvard University	1977	9.60	705,074,000	1,995,287,896	65	523	8	277	789	46	175	43,854,169	12,308,207
Indiana University (ARTI)	1991	7.00	422,084,735	1,234,799,820	30	224	6	131	491	2	72	14,961,202	5,952,499
Iowa State University	1935	6.25	253,323,000	747,409,000	82	426	1	95	296	24	32	34,995,089	8,832,802
Johns Hopkins University	1973	11.40	1,242,316,445	3,526,664,445	99	482	10	352	940	46	458	32,124,264	12,387,415
Johns Hopkins University Applied Physics Laboratory	1999	5.00	949,816,923	2,511,546,222	21	114	2	118	388	21	47	5,891,139	1,268,939



AUTM U.S. Licensing Survey: FY2009

Data Appendix

Summary of 2007 - 2009

U.S. Universities

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Name of Institution	Program Start	2009 Licensing FTE	2009 Research Expenditures	2007-2009 Cumulative Total Research Expenditures	2009 Licenses and Options Executed	Cumulative Active Licenses	2009 Startups	2009 Invention Disclosures	2007-2009 Cumulative Invention Disclosures	2009 U.S. Patents Issued	2009 New Patent Applications	2007-2009 Cumulative Adjusted Gross Income	2009 License Income
Kansas State University Research Fdn.	1962	2.60	105,116,954	293,795,098	6	55	NA	24	104	4	17	4,486,459	1,509,490
Kent State University	1989	1.50	31,803,999	69,860,228	6	32	1	26	58	3	19	1,092,696	339,444
Lehigh University	2004	NA	42,946,000	135,878,000	NA	NA	NA	18	62	NA	11	NA	NA
Louisiana State University System	1986	8.40	601,306,000	1,196,691,000	17	112	6	118	390	14	65	14,060,919	6,349,177
Louisiana Tech University	2000	1.00	21,458,000	55,030,000	4	14	1	26	85	6	11	271,086	176,800
Loyola University of Chicago	NA	0.00	36,519,096	NA	NA	1	NA	14	NA	NA	8	NA	5,772,000
Massachusetts Inst. of Technology (MIT)	1940	20.00	1,375,073,000	3,910,873,000	91	887	18	495	1,504	154	509	200,083,604	66,450,000
Medical College of Georgia Research Inst.	2001	2.50	65,473,271	182,559,440	3	26	NA	42	128	3	46	815,766	296,390
Medical College of Wisconsin Research Foundation	1984	3.00	123,368,970	387,868,970	4	50	2	52	136	3	3	552,321	166,786
Medical University of South Carolina	1994	3.50	154,958,151	473,250,968	9	NA	4	45	154	2	15	2,039,096	450,878
Miami University	NA	0.00	22,616,538	83,442,465	NA	4	1	6	25	2	2	3,354,492	1,412,242
Michigan State University	1992	6.00	373,184,000	1,090,803,000	44	359	NA	129	381	41	60	13,537,636	4,449,445
Michigan Technological University	1988	3.00	60,394,681	177,391,019	10	89	NA	35	125	4	15	1,392,260	462,035
Mississippi State University	1995	3.00	216,936,000	634,094,000	4	41	NA	51	187	5	10	1,224,717	382,347
Montana State University	1980	2.00	98,431,691	296,698,567	69	184	3	26	78	6	17	713,620	288,608
Mount Sinai School of Medicine of NYU	1991	7.50	321,299,455	887,130,407	8	95	NA	88	215	11	36	75,913,695	25,081,703
New Jersey Inst. of Technology	1990	3.00	92,891,000	271,382,000	117	193	NA	84	250	13	77	1,096,403	447,876
New Mexico State University	1990	1.00	122,541,630	366,408,668	1	18	1	4	46	3	6	368,608	107,307
New York University	1989	5.00	308,834,000	917,400,000	38	296	5	119	345	29	50	1,008,069,194	113,110,437
North Carolina State University	1984	6.00	380,600,000	1,078,399,000	91	633	4	130	456	41	118	NA	4,930,022
North Dakota State University	1995	1.75	113,214,000	334,955,000	96	447	NA	41	135	15	24	6,350,619	1,539,570
Northern Arizona University	2008	0.50	26,183,000	NA	NA	2	NA	17	NA	1	12	NA	NA
Northern Illinois University	1988	0.00	16,527,079	NA	NA	3	NA	6	NA	2	8	NA	19,500
Northwestern University	NA	6.00	400,012,697	1,129,711,172	31	223	3	199	572	28	168	962,123,348	161,591,544
Ohio State University	1990	6.26	716,461,278	2,139,230,478	27	152	7	163	470	20	61	5,027,018	1,711,719
Ohio University	1991	2.00	41,256,000	95,852,608	1	9	NA	39	106	2	69	17,159,980	6,875,069
Oklahoma State University	1995	3.00	163,066,112	430,321,222	14	56	3	44	129	7	23	3,756,548	1,469,443
Oregon Health & Science University	1989	5.50	NA	NA	57	298	3	132	374	14	36	7,369,927	1,492,748
Oregon State University	1980	4.50	209,061,000	586,685,000	27	138	4	58	186	10	25	6,903,412	2,407,725
Penn State University	1989	6.50	765,037,000	2,147,412,000	21	155	3	119	383	34	93	4,695,489	1,227,175
Portland State University	2005	2.00	53,039,924	130,716,470	9	12	1	16	35	3	9	135,064	135,064
Purdue Research Fdn.	1988	7.00	524,117,000	1,691,916,000	85	NA	10	247	723	68	137	11,971,330	4,201,112
Rensselaer Polytechnic Inst.	1993	5.20	63,808,234	192,964,473	10	61	1	67	219	14	33	2,057,661	722,881
Research Foundation of SUNY	1979	15.65	849,961,108	2,416,142,825	49	435	5	321	879	56	160	62,399,583	16,205,537



## AUTM U.S. Licensing Survey: FY2009

Data Appendix

Summary of 2007 - 2009

U.S. Universities

Name of Institution	Program Start	2009 Licensing FTE	2009 Research Expenditures	2007-2009 Cumulative Total Research Expenditures	2009 Licenses and Options Executed	Cumulative Active Licenses	2009 Startups	2009 Invention Disclosures	2007-2009 Cumulative Invention Disclosures	2009 U.S. Patents Issued	2009 New Patent Applications	2007-2009 Cumulative Adjusted Gross Income	2009 License Income
Rice University	1998	4.00	89,990,014	254,593,067	9	73	1	54	201	22	85	1,577,866	680,137
Rutgers, The State University of NJ	1989	7.00	236,502,404	871,518,404	87	392	5	77	256	28	60	23,861,987	8,128,409
San Diego State University	1997	1.00	133,794,378	NA	14	12	NA	24	NA	1	30	NA	419,873
South Dakota State University	2008	0.50	55,333,000	NA	NA	13	1	16	NA	NA	1	NA	754,048
Stanford University	1970	16.00	733,266,108	2,127,405,687	77	976	9	443	1,285	128	221	175,564,731	65,054,187
Stevens Inst. of Technology	2000	1.00	25,418,052	83,907,703	3	24	NA	40	99	5	20	392,722	NA
Temple University	1989	2.00	88,836,915	372,789,739	1	27	1	35	97	1	11	1,217,825	340,965
Texas A&M University System	1992	18.00	630,655,000	1,840,379,148	63	413	6	196	576	20	63	29,226,907	9,897,559
The UAB Research Fdn.	1987	7.00	431,732,000	1,128,469,000	29	268	5	97	289	9	31	12,171,279	2,668,761
Thomas Jefferson University	1984	4.00	94,784,221	293,921,958	18	53	NA	53	174	6	16	8,638,742	5,531,467
Tufts University	1978	4.00	172,866,529	459,918,616	9	77	NA	45	143	5	20	15,196,528	8,390,154
Tulane University	1985	2.00	130,908,211	440,127,723	2	43	NA	18	60	6	12	21,545,209	9,366,708
University of Akron	1995	2.60	61,502,209	161,889,434	4	39	4	58	175	8	18	7,905,743	454,625
University of Alabama	2006	1.00	36,508,000	148,690,113	3	11	2	41	125	4	16	193,168	5,005
University of Alabama in Huntsville	1999	1.00	73,210,398	203,530,398	3	10	5	21	58	1	7	3,152,387	1,012,005
University of Arizona	1988	6.50	565,292,000	1,644,241,875	49	214	7	125	330	11	99	2,554,263	687,110
University of Arkansas for Medical Sciences	1994	1.00	95,200,000	315,522,741	6	50	2	32	119	8	17	2,648,478	811,774
University of Arkansas, Fayetteville	1990	4.00	113,924,245	338,572,245	61	350	1	40	85	8	8	1,370,081	663,167
University of California System	1979	73.00	4,686,598,210	13,103,003,255	237	2,034	47	1,482	4,390	244	928	329,883,682	103,104,667
University of Central Florida	1985	3.00	123,306,298	342,906,298	5	39	3	83	282	41	NA	2,193,942	640,008
University of Chicago/UCTech	1986	12.00	336,155,979	955,731,236	16	212	NA	85	374	13	29	30,648,242	9,025,392
University of Cincinnati	1983	3.75	219,583,165	574,171,929	24	138	3	113	334	9	34	1,725,855	725,159
University of Colorado	1993	8.80	718,000,000	2,016,400,000	62	142	11	260	752	29	118	32,757,055	4,430,040
University of Connecticut	1987	4.00	151,369,331	456,111,981	14	93	7	86	238	15	34	2,322,663	749,365
University of Dayton Research Inst.	1984	3.00	94,048,794	NA	2	163	NA	18	NA	7	20	NA	92,412
University of Denver	2004	1.00	20,633,000	NA	NA	NA	NA	11	NA	NA	NA	NA	285,117
University of Florida	1983	16.50	496,063,499	1,453,661,508	115	569	10	304	930	73	180	153,774,574	53,880,474
University of Georgia	1979	5.50	349,730,000	1,032,641,000	124	687	6	139	362	20	71	68,955,990	30,531,425
University of Hawaii	1987	4.00	246,546,713	668,234,730	6	39	3	42	144	10	58	1,317,622	360,393
University of Houston	1996	3.00	99,262,000	254,981,789	6	32	3	31	98	9	17	4,304,597	1,952,557
University of Idaho	1986	3.00	88,243,599	222,777,368	7	30	1	32	86	7	23	916,170	331,062
University of Illinois, Chicago, Urbana	1981	23.00	905,365,000	2,552,455,000	49	283	8	333	1,015	57	132	28,973,834	13,364,056
University of Iowa Research Fdn.	1975	8.50	334,936,000	991,743,000	21	278	3	70	225	30	18	83,737,183	42,922,081
University of Kansas	1994	5.00	207,115,000	598,242,000	14	80	2	101	221	9	81	3,010,664	1,406,616
University of Kentucky Research Fdn.	1984	2.00	248,952,000	682,891,672	19	149	14	77	231	21	37	4,702,905	1,700,000



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University of Louisville	1996	7.00	167,178,000	494,735,000	12	51	5	86	245	6	56	667,360	437,410
University of Massachusetts	1994	12.50	489,060,000	1,321,777,000	50	285	1	166	502	35	85	146,793,859	70,553,428
University of Memphis	2008	1.00	52,000,000	NA	2	2	NA	15	NA	NA	11	NA	54,000
University of Miami	1989	5.00	318,000,000	636,992,916	20	73	4	87	229	3	117	2,996,557	1,442,697
University of Michigan	1982	9.00	1,016,565,913	2,715,287,095	78	321	8	350	985	72	153	52,300,124	18,311,368
University of Minnesota	1957	15.00	590,880,956	1,722,370,956	53	795	3	244	654	37	65	240,895,712	95,168,525
University of Mississippi	1992	2.00	54,709,000	163,652,000	6	20	3	6	33	6	4	1,665,993	81,173
University of Missouri, All campuses	1987	9.00	339,124,184	1,046,305,063	79	124	5	161	421	14	48	21,786,782	10,400,726
University of Nebraska	1992	8.75	374,822,789	1,045,254,277	32	109	6	147	424	13	139	7,175,196	2,273,608
University of Nevada at Reno	2000	2.00	73,914,403	218,094,103	2	NA	NA	22	NA	13	20	331,790	164,366
University of New Hampshire	1997	1.50	97,869,103	313,435,720	7	85	1	14	47	5	6	767,671	312,425
University of New Mexico/Sci. & Tech. Corp.	1995	4.50	201,768,708	576,826,443	37	60	8	113	310	15	84	2,077,405	805,381
University of North Carolina at Greensboro	2002	2.00	36,678,357	98,317,031	8	15	2	16	53	2	8	523,830	152,354
University of North Carolina, Chapel Hill	1985	6.00	666,871,589	1,875,839,533	72	301	1	137	372	19	61	7,457,346	3,063,947
University of North Carolina, Charlotte	1993	3.00	30,400,033	89,946,717	10	44	3	37	133	4	51	275,269	89,409
University of North Texas Health Science Ctr.	1999	1.00	34,313,668	92,123,985	1	23	NA	17	52	3	3	256,215	48,870
University of Notre Dame	1999	3.00	104,900,000	291,200,000	6	15	2	33	127	2	26	330,804	91,580
University of Oklahoma, All Campuses	1984	5.40	153,592,917	459,982,126	8	49	5	56	179	16	28	1,128,253	426,938
University of Oregon	1992	3.75	110,321,683	310,346,411	33	131	1	25	103	5	3	19,034,887	7,188,653
University of Pennsylvania	1986	12.00	760,836,000	2,086,236,873	62	438	4	372	958	41	517	25,434,805	11,658,000
University of Pittsburgh	1992	6.25	653,925,000	1,915,598,000	41	205	3	254	744	32	105	15,009,567	4,129,172
University of Rhode Island	1991	1.00	68,700,000	179,600,000	6	31	NA	8	36	4	27	1,562,093	690,479
University of Rochester	1980	10.00	377,246,000	1,096,322,120	15	106	2	148	444	27	63	171,626,684	46,025,270
University of South Alabama	1995	2.00	32,882,000	82,982,221	1	NA	NA	11	32	1	4	6,551,522	2,553,723
University of South Carolina	1993	2.00	210,460,471	NA	12	90	3	61	NA	4	89	NA	139,366
University of South Dakota	2006	0.05	34,690,000	78,905,000	1	1	2	5	15	NA	3	25,000	25,000
University of Southern California	1971	14.50	533,040,769	1,432,840,769	13	185	5	187	528	43	120	14,192,683	4,399,006
University of Tennessee	1983	3.00	284,211,680	769,161,544	16	136	2	84	247	16	146	5,988,983	1,609,779
University of Texas System	1985	49.10	2,272,779,788	NA	161	1,297	22	744	NA	107	330	NA	32,428,040
University of Toledo	1994	2.00	66,136,000	178,167,000	23	107	3	91	179	6	40	2,056,828	705,796
University of Utah	1968	10.25	354,653,777	902,215,756	79	246	19	200	594	35	108	53,873,234	12,422,572



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University of Vermont	1998	2.50	103,629,135	274,397,445	3	33	2	23	116	6	10	764,685	171,324
University of Virginia Patent Fdn.	1977	6.00	261,604,000	749,436,000	57	396	2	162	524	25	161	15,844,466	6,347,487
University of Washington/Wash. Res. Fdn.	1983	18.50	1,076,044,801	3,064,316,460	231	1,153	10	349	1,033	40	145	230,545,671	87,339,905
University of West Florida	2007	0.05	13,534,237	45,223,246	NA	4	NA	3	9	NA	1	NA	NA
University of Wisconsin at Madison	1925	26.00	1,132,000,000	NA	57	528	1	333	NA	119	129	NA	56,714,000
University System of Maryland	1987	6.05	817,083,316	NA	44	397	7	254	NA	42	145	NA	2,392,959
Utah State University	1987	4.50	147,509,000	433,831,000	11	72	5	93	222	11	27	1,630,173	637,753
Vanderbilt University	1990	6.50	457,357,428	1,312,782,232	46	350	1	150	428	17	64	28,629,285	11,329,700
Virginia Commonwealth University	1994	3.00	150,989,000	434,097,000	19	90	1	93	269	4	107	5,291,997	964,033
Virginia Tech Intellectual Properties Inc.	1985	5.00	211,519,580	593,017,561	35	NA	6	176	499	15	86	5,853,487	2,022,510
Wake Forest University	1985	4.00	162,084,439	496,379,816	8	NA	3	82	191	8	NA	256,868,907	95,636,362
Washington State University Research Fdn.	1939	3.30	152,380,954	428,496,257	16	128	2	53	166	9	81	2,621,533	906,027
Washington University of St. Louis	1986	7.00	567,383,000	NA	53	469	2	125	NA	50	106	NA	6,301,462
West Virginia University	1999	4.00	87,299,000	NA	11	31	3	33	NA	4	24	NA	136,971
Wright State University	2001	2.00	48,153,000	NA	1	15	NA	7	NA	2	6	NA	5,958

Name of Institution	Program Start	2009 Licensing FTE	2009 Research Expenditures	2007-2009 Cumulative Total Research Expenditures	2009 Licenses and Options Executed	Cumulative Active Licenses	2009 Startups	2009 Invention Disclosures	2007-2009 Cumulative Invention Disclosures	2009 U.S. Patents Issued	2009 New Patent Applications	2007-2009 Cumulative Adjusted Gross Income	2009 License Income
Beth Israel Deaconess Medical Ctr.	1997	4.00	195,528,000	578,989,000	26	156	2	77	219	9	23	4,009,790	6,210,934
Brigham & Women's Hospital Inc.	1986	13.00	485,006,000	1,337,913,000	50	271	3	137	407	22	68	12,910,577	28,384,078
Cedars-Sinai Medical Ctr.	1991	4.00	80,075,546	NA	0	31	0	32	NA	9	23	13,204,097	NA
Children's Hospital Boston	1991	8.00	204,746,145	573,391,077	28	209	1	128	338	23	44	14,343,204	36,467,442
Children's Hospital Oakland Research Inst.	2001	1.00	38,509,997	142,425,025	6	25	0	10	44	2	3	180,831	1,125,371
Children's Hospital of Philadelphia	1991	1.00	201,795,000	554,656,013	4	35	0	49	141	8	13	202,538	198,249,946
Children's Hospital, Cincinnati	1997	3.50	255,875,708	688,743,234	14	137	0	88	276	6	20	8,614,367	30,858,864
City of Hope National Medical Ctr. & Beckman Research Inst.	1986	2.00	259,000,000	675,292,000	12	35	1	11	58	9	11	195,637,783	722,336,246
Cleveland Clinic	1989	7.00	224,426,000	680,356,548	32	208	5	205	628	20	55	7,440,815	24,310,535
Dana-Farber Cancer Inst.	1981	6.00	230,328,608	632,137,704	39	350	6	85	264	15	28	4,556,064	16,360,070
Fox Chase Cancer Ctr.	1984	2.00	96,137,399	NA	22	53	0	45	NA	5	13	1,130,000	NA
Fred Hutchinson Cancer Res. Ctr.	1988	4.00	291,571,000	875,175,000	15	178	1	32	118	5	12	9,138,096	16,367,590
H Lee Moffitt Cancer Ctr & Res Inst.	2004	3.00	123,783,878	321,353,957	11	9	2	30	104	0	24	115,537	288,570
Mayo Fdn. for Medical Education and Research	1986	12.90	540,000,000	1,573,000,000	78	586	5	383	1105	28	113	21,733,554	67,140,278
National Jewish Health	1994	1.00	56,434,952	170,523,720	22	101	0	26	82	3	8	211,878	680,396
RUSH-Presbyterian-St. Luke's Medical Ctr	2003	1.00	66,905,357	191,814,939	4	20	1	24	72	5	4	235,354	446,765
Sanford-Burnham Medical Research Institute	1995	7.20	93,039,000	261,724,000	2	89	NA	32	123	19	30	830,000	2,399,000
Sloan Kettering Inst. for Cancer Res.	1981	8.00	400,502,000	1,112,754,000	38	299	1	87	198	16	27	136,797,681	NA
St. Elizabeth's Medical Ctr. of Boston	1995	1.00	6,406,198	19,584,334	1	6	0	0	12	0	2	0	118,000
St. Jude Children's Research Hospital	1995	3.00	302,881,084	751,532,726	25	326	0	43	132	5	7	3,175,924	8,259,555
The General Hospital dba Massachusetts General Hospital	1976	26.00	628,384,000	1,723,050,000	164	509	5	285	874	50	147	51,837,315	432,969,356
The Jackson Laboratory	2002	1.50	55,000,000	0	29	62	0	13	0	1	2	1,200,000	0
The Salk Inst. for Biological Studies	1969	3.00	77,728,186	NA	19	238	4	51	NA	9	14	16,812,796	NA
Tufts Medical Center	1993	1.00	77,479,000	215,741,000	2	35	1	23	62	2	13	538,754	2,438,483
Whitehead Institute for Biomedical Research	1987	2.80	36,000,000	0	13	31	1	26	0	13	69	3,076,000	0
Wistar Inst.	1991	2.00	56,190,000	154,670,000	13	138	0	9	30	6	7	10,907,000	33,171,000



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Research Corporation Technologies	1987	10	0	0	7	142	0	25	74	2	8	29,653,771

**NOTE:** Institutions wishing to remain confidential are not shown or listed.

The data is sorted alphabetically by institution name.

**Performance Objective 3: WORKFORCE AND ECONOMIC DEVELOPMENT**

**Element: 3d. To the extent that information can be obtained, demonstrate progress in increasing the number of students in jobs and in increasing the performance of associate degree recipients who transfer to institutions that offer academic undergraduate degrees at the baccalaureate level or higher.**

*Narrative report: optional*

Narrative

**School of Medicine**

Students of the School of Medicine have a 100% rate of success in obtaining a post-graduate training position following graduation.

National residency match results for the 2010 graduating class revealed that 85% of LSUHSC-S graduates matched into one of their top three choices for residency as compared to a national average of 83%. Data reviewed back through the 2006 graduating class reveals a virtually identical match success rate. A more in-depth investigation of these data done for the 2010 graduating class shows that 63% of LSUHSC-S graduates actually matched into their first choice for residency program compared to the national average of 58%.

Considering the overall characteristics of entry-level students to the LSUHSC-S School of Medicine (applicant pool limited to state residents and median MCAT entry exam score lower than national median as noted in Element 1d), the achievement of USMLE medical licensing examination first-time pass rates at or above the national average in this population and more importantly, the higher than national average success in students obtaining desired post-graduate residency positions demonstrates the success of the School of Medicine in its goal to produce competent, safe physicians for the state of Louisiana and the nation.

The School of Medicine does not offer an associate degree; therefore, issues related to transfer to another institution for the attainment of a baccalaureate degree are not applicable.

**School of Allied Health Professions**

Graduates of the School of Allied Health Professions who seek employment in their chosen profession have a high placement rates approaching 100%.

The Cardiopulmonary Science Program of the School of Allied Health Professions at LSUHSC-S has created a matriculation ladder that allows students who obtain an Associate Degree in Respiratory Therapy at the Bossier Parish Community College (BPCC) to progress to a Bachelor of Science Degree in Cardiopulmonary Science. In the last five years, six Associate degree students from this BPCC program have completed the LSUHSC-S Bachelor of Science Degree and all graduates were employed.

### School of Graduate Studies

Since 2001, the LSUHSC-S School of Graduate Studies has trained 107 students who received their doctorate (PhD) degrees. Of these, 81 (75.7%) continued their training in postdoctoral positions and 26 (24.3%) accepted positions in academia, industry or government. Thus, 100% of LSUHSC-S doctoral graduates obtain advanced training or jobs immediately after graduation. The school anticipates that this level of performance will be maintained.

Also since 2001, the LSUHSC-S School of Graduate Studies has trained 50 students who received master's degrees. Of these, 18 (36%) continued their education in a health related field (medical school, dental school, or physician assistant training) or pursued further graduate studies; 22 (44%) obtained positions as research scientists, teachers, or in other related fields; no data are available for 10 (20%) of these graduates. Thus, at least 80% of master's graduates obtained jobs or additional training in scientific areas. Increased efforts are being made to track the professional progress of all master's graduates.

### Measures

#### Measures: Tracked

- Placement rates of graduates
- Placement of graduates in postgraduate training

Placement rates of graduates (within 12 months after graduation)		
	2008-09 (baseline)	2009-10
School of Medicine	99% (109/110)	112/112
School of Allied Health Professions	99% (150/151)	Not available*
School of Graduate Studies	100% (9/9)	16/16

\*Placement rates are determined within 12-months of graduation; therefore, AY2010 data will not be available until AY2011-12

Placement rates of graduates in postgraduate training (within 12 months after graduation)		
	2008-09 (baseline)	2009-10
School of Medicine	99% (109/110)	112/112
School of Allied Health Professions	99% (150/151)	Not available*
School of Graduate Studies	89% (8/9)	13/16

\*Placement rates are determined within 12-months of graduation; therefore, AY2009-10 data will not be available until AY2011-12



**Performance Objective 4: INSTITUTIONAL EFFICIENCY AND ACCOUNTABILITY**

**Element: 4a. Eliminate remedial education course offerings and developmental study programs unless such courses or programs cannot be offered at a community college in the same geographical area.**

Not applicable to LSUHSC-S.

**Element: 4b. Eliminate associate degree program offerings unless such programs cannot be offered at a community college in the same geographic area or when the Board of Regents has certified educational or workforce needs.**

Not applicable to LSUHSC-S.

**Performance Objective 4: INSTITUTIONAL EFFICIENCY AND ACCOUNTABILITY**

**Element: 4c. Upon entering the initial performance agreement, adhere to a schedule established by the institution's management board to increase nonresident tuition amounts that are not less than the average tuition amount charged to Louisiana residents attending peer institutions in other Southern Regional Educational Board states and monitor the impact of such increases on the institution. However, for each public historically black college or university, the nonresident tuition amounts shall not be less than the average tuition amount charged to Louisiana residents attending public historically black colleges and universities in other Southern Regional Education Board states.**

*Narrative report: required*

- *Annual plan for increasing non-resident tuition amounts*
- *Impact on enrollment and revenue*

Narrative

Granting Resources and Autonomy for Diplomas (GRAD) Act is legislation enacted to support the state's public postsecondary education institutions in remaining competitive and increasing their overall effectiveness and efficiency. Institutions should achieve specific, measurable performance objectives aimed at improving college completion and at meeting the state's current and future workforce and economic development needs. Institutions will be granted limited operational autonomy and flexibility in exchange for achieving such objectives.

Pursuant to the provisions of Act 741 of the 2010 Legislative Session, the LSU Board of Supervisors at its meeting of July 16, 2010, authorized campuses to increase tuition for resident students by up to five percent annually, in addition to other increases authorized by law, such increases which may be made effective beginning with the 2010 fall semester upon formal acceptance of the initial performance agreements by the Board of Regents. These increases would be based on the institutions' yearly progress in achieving specific performance goals. After reaching the average tuition of their peers, institutions may increase tuition and fees up to five percent or the amount of the increase in the Higher Education Price Index in the previous year, whichever is greater. Participating institutions will also be allowed to establish tuition and fees according to credit hours, rather than having them capped at full-time, 12-credit hour status.

Since the applicant pool for LSUHSC-S is almost entirely drawn from Louisiana residents, there would be virtually no impact on either enrollment or revenue from a non-resident tuition increase in accordance with the GRAD Act. As well, a tuition increase for Louisiana residents is not anticipated to negatively affect enrollment in the schools of LSUHSC-S. Additional revenues that would be realized from an in-state tuition increase, however, are not expected to offset the anticipated budget reduction for Louisiana higher education.

**Measures**

*Measures: Tracked*

- *Total tuition and fees charged to non-resident students: in a given academic year*

Total tuition and fees charged to full-time non-resident students		
	2009-10	Peer Comparison
School of Graduate Studies	7,521	15,570 (SREB Avg)
School of Allied Health Professions – Doctor of Physical Therapy	15,371	28,058 (Southern Dean's Avg)
School of Allied Health Professions – Graduate	10,668	16,184 (Southern Dean's Avg)
School of Allied Health Professions – Undergraduate	9,398	16,727 (Southern Dean's Avg)
School of Medicine	27,630	41,763 (SREB Avg)

**Performance Objective 4: INSTITUTIONAL EFFICIENCY AND  
ACCOUNTABILITY**

**Element: 4d. Designate centers of excellence as defined by the Board of Regents which have received a favorable academic assessment from the Board of Regents and have demonstrated substantial progress toward meeting the following goals:**

- **Offering a specialized program that involves partnerships between the institution and business and industry, national laboratories, research centers, and other institutions.**
  
- **Aligning with current and strategic statewide and regional workforce needs as identified by the Louisiana Workforce Commission and Louisiana Economic Development.**
  
- **Having a high percentage of graduates or completers each year as compared to the state average percentage of graduates and that of the institution's peers.**
  
- **Having a high number of graduates or completers who enter productive careers or continue their education in advanced degree programs, whether at the same or other institution.**
  
- **Having a high level of research productivity and technology transfer.**

The Board of Regents shall develop a policy for this element. Upon approval of the policy, measures and reporting requirements will be defined. No report on this element required for 2010-11 annual report.

# Section 5



**Louisiana State University Health Science Center – Shreveport**

**5.a.**

**Number of students by classification**

Institution Name	Fall 2009 Headcount			Total	2009-10 AY			Total FTE
	Undergraduate	Graduate	Postgraduate <sup>1</sup>		Undergrad FTE <sup>2</sup>	Grad FTE <sup>2</sup>	Postgrad FTE <sup>1</sup>	
LSUHSC-Shreveport	102	721	558	1,381	99	675	558	1,332

<sup>1</sup>Postgraduate learners at LSUHSC-S include graduate medical residents (419) and fellows (84) and other research/healthcare postgraduate trainees (55)

<sup>2</sup>SACS methodology used for undergraduate and graduate FTE calculations and includes exam-only graduate students (17)

**5.b.**

**Number of Instructional Staff Fall 2009**

Institution Name	Instructional Faculty Headcount	Instructional Faculty FTE
LSUHSC – Shreveport	382	340.6

**5.c.**

**Average class student-to-instructor ratio  
(average undergraduate class size)**

Institution name	2009-10 AY
LSUHSC – Shreveport	7 to 1*

\*Undergraduate ratio only

Source: IPEDS Fall Enrollment 2009-10

**5.d.**

**Average number of students per instructor**

2009-10 FTE enrollment per FTE Instructor
3.9 (1332/340.6)

**5.e. Number of non-instructional staff members in academic colleges and departments**

Headcount	325
FTE	316.6

**5.f. Number of staff in Administrative Areas\***

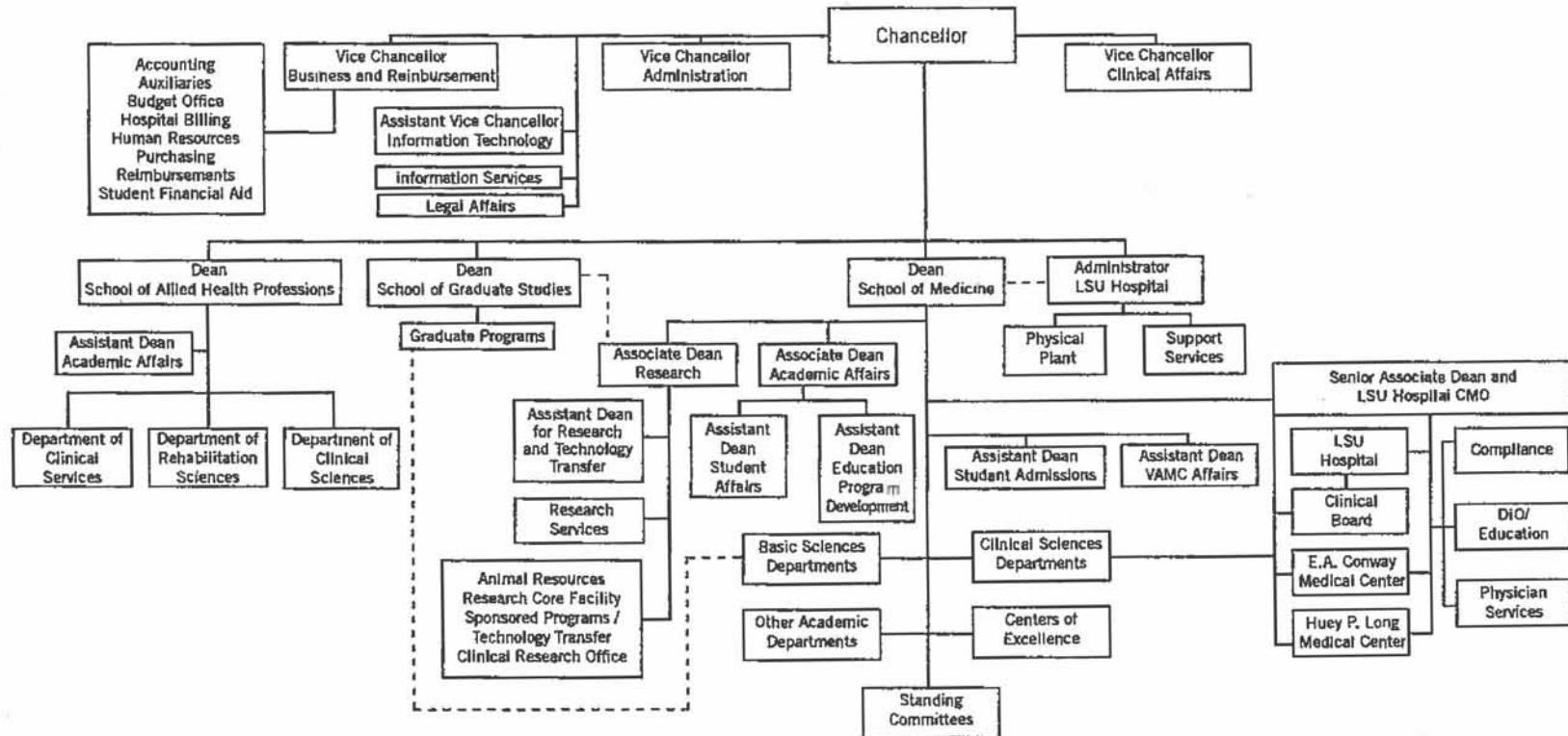
Headcount	247
FTE	118.8

*\*For LSUHSC-S, headcount is significantly higher than the FTE since percent effort for educational support was used to calculate FTE; the remaining portion supports hospital function*

LSU Health Science Center at Shreveport  
Organizational Chart

POSITION	TOTAL BASE SALARY FALL 2009	SALARY CHANGE SINCE 6/30/2008
Chancellor	\$325,000	4/1/2009 \$325,000 Previous Chancellor retired and new Chancellor hired at a greater salary
Vice Chancellor Business and Reimbursements	\$251,410.50	July 1, 2008 \$251,410.50 Current incumbent received a raise
Vice Chancellor for Administration (created 4/15/2009)	\$220,000.00	April 15, 2009 Current incumbent hired at a salary of \$220,000
Vice Chancellor Clinical Affairs		July 1, 2008 \$186,999.96 previous incumbent received increase. July 1, 2010 \$222,000 Previous incumbent retired and new Vice Chancellor hired at a greater salary
Dean School of Allied Health Professions	\$144,417.96	July 1, 2008 \$144,417.96 Current incumbent received a raise
Dean School of Graduate Studies	\$128,211.96	July 1, 2008 \$128,211.96 Current incumbent received a raise
Dean School of Medicine (created 11/01/2009)	\$270,000.00	November 1, 2009 Current incumbent hired at a salary of \$270,000
Administrator LSU Hospital	\$236,982.00	July 1, 2008 \$236,982.00 Current incumbent received a raise
Senior Associate Dean and LSU Hospital CMO (created 1/1/2010)		January 1, 2010 Current incumbent hired at a salary of \$200,000

## LSU HEALTH SCIENCES CENTER AT SHREVEPORT ORGANIZATIONAL CHART



Revised: 9/13/2010