

## INSTITUTIONAL SELF-STUDY TASK FORCE REPORT

Medical College of Georgia

Liaison Committee on Medical Education February 11-15, 2001

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## INTRODUCTION

This Medical College of Georgia (MCG) School of Medicine (SOM) self-study report for the Liaison Committee on Medical Education (LCME) summarizes the work of the Task Force, 15 self-study committees, a student survey committee, and an Executive Committee. One hundred seventy-eight faculty members, administrators, residents, and students were involved in the process. The self-study and subsequent summary report development represent nearly 2 years of planning, committee meetings, data collection and analysis, discussions, and writing. The self-study Task Force and Executive Committee prepared this summary report after careful, critical evaluation of the 15 committee reports. Dr. Ruth-Marie E. Fincher served as Task Force chair and provided oversight and guidance for the self-study process. Dr. Janis Work coordinated the self study. Drs. Fincher, Work, T. Andrew Albritton, Gary Bond, and Betty Wray contributed to and edited the final report.

This report represents a comprehensive interpretation of the data collected during a time when the medical school and the institution are in a period of transition. The LCME self-study and the resultant summary report will be invaluable tools as the school plans for its future. The document is based on data from academic year 1998-1999 unless otherwise noted. The acronym SOM refers

to the School of Medicine; MCG refers to the Medical College of Georgia, the University System of Georgia's Health Sciences University, including the schools of allied health sciences, dentistry, graduate studies, medicine, and nursing.

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### NEW DEVELOPMENTS SINCE 1994 LCME ACCREDITATION VISIT

1. Darrell G. Kirch, MD, was appointed dean of the SOM on February 7, 1994. He later also assumed the position of dean of the School of Graduate Studies until July 1999, when Matthew J. Kluger, PhD, was appointed vice president for research and dean, School of Graduate Studies. As part of institutional reorganization to create an integrated health care delivery system, the dean of the SOM also became senior vice president for clinical activities. The dean reorganized his office and created three vice-dean positions:

- a. Vice dean for academic affairs, Ruth-Marie E. Fincher, MD, 1994
- b. Vice dean for clinical affairs, Daniel W. Rahn, MD, 1995
- c. Vice dean for administration and research, R. Kevin Grigsby, DSW, February 2000.

2. The dean of the SOM resigned June 30, 2000, to assume a similar position at another medical school. Betty B. Wray, MD, was appointed interim dean and interim senior vice president for clinical activities July 1, 2000.

3. Other SOM administrative changes since 1994:

- a. The associate dean for minority affairs position was changed to the associate dean for special academic programs and Rosie Allen-Noble, EdD, was appointed in August 1995.
- b. Two associate dean positions were eliminated: faculty development and primary care.
- c. The associate dean for student affairs, Mason P. Thompson, MD, assumed the position of associate dean for admissions and student affairs July 2000.
- d. The assistant dean for graduate medical education, Ann Marie Flannery, MD, became associate dean in July 1997.

4. In January 2000, the University System of Georgia Board of Regents approved a one-time Early Retirement Program (ERP) for faculty and staff who met defined retirement criteria, and 104 SOM faculty and 135 staff members chose to take advantage of the program. The first

participants retired March 31, 2000, and all will have retired by June 30, 2001. Rehires will be at the 40% level, resulting in a total faculty reduction of approximately 12%. The number of medical students (180 per class) is mandated by the state legislature and will remain unchanged.

5. As of October 1, 2000, seven clinical and basic science departments (anesthesiology, biochemistry and molecular biology, medicine, neurology, ophthalmology, pathology, and radiology) had or were expecting to have interim chairs, due to the ERP or resignations to assume other positions. The searches for new chairs are being staggered. New chairs recently assumed leadership in the departments of psychiatry and health behavior (August 2000), anatomy and cellular biology (April 2000), and physiology (December 1999).

6. A new, well-equipped research facility to house the interdisciplinary Institute for Molecular Medicine and Genetics opened in 1996. The institute includes both individual research laboratories and core research facilities that study cellular and molecular biology related to major problems of human health and disease.

7. The \$53-million, 220,000-square-foot Children's Medical Center was dedicated May 1, 1998. It provides comprehensive health care for children and has been nationally recognized for its quality.

8. A not-for-profit entity, MCG Health, Inc. (MCGHI), was created to assume administration of the MCG Hospital and Clinics (MCGH&C), effective July 1, 2000. It is expected to provide more effective and efficient clinical management and also may allow expansion into a broader health care system. The Board of Regents approved the affiliation agreement in January 2000. The agreement covers MCGH&C, the Children's Medical Center, and the Georgia Radiation Therapy Center. Some University System employees of the three facilities are now MCGHI employees.

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9. In June 1999, the SOM began a mission-based management initiative with the AAMC and Computer Sciences Corporation HealthCare Group. This is an ongoing process that is not yet fully implemented. An Executive Faculty Advisory Committee was created to advise the dean on fiscal affairs and operations. Mission-based management principles are untangling funding streams and aligning funding sources with activities.

10. The SOM received two grants from the Robert Wood Johnson Foundation. The 6-year, \$2.5 million Generalist Physician Initiative grant, which ended June 30, 2000, enabled the school to implement interdisciplinary curriculum changes that consolidate and strengthen community-based primary care education and incorporate generalist principles. The second grant, the joint AAMC/HPPI, awarded \$350,000 for 5 years to the Office of Special Academic Programs in 1996.

11. The SOM became a member of the AAMC Medical Schools Objectives Project consortium and developed new educational objectives, which the Faculty Senate approved September 21, 1999. The associate dean for curriculum and the curriculum committee are developing assessment measures.

12. The Board of Regents approved the Center for Educational Excellence and the director was appointed in May 2000. Two medical educators will be hired to complete the professional staff.

The Center was created in conjunction with the University of Georgia Institute of Higher Education and will become the hub of faculty support for educational skills development.

13. During the 2000-2001 academic year, an integrated Essentials of Clinical Medicine course was implemented that spans the first 2 years of medical school. This 4-semester sequence integrates nine previously freestanding, small, clinically related courses into one multidisciplinary sequence that emphasizes small-group and preceptor activities.

14. The Educational Strategic Planning Committee was formed in early 2000 to develop a 3- to 5-year plan with goals and objectives for the educational enterprise at the institutional level. Membership consists of the dean and one other representative from each school, two library representatives, and two administration representatives. The vice dean for academic affairs and associate dean for curriculum represent the SOM. Committee members will help individual schools develop their educational plan. The committee defined five core values and submitted the plan to the senior vice president for academic affairs in the summer of 2000.

15. The library expanded digital resources for distant users, remote learners, outreach, and continuing education. It added evidence-based medicine databases, MD Consult, including standard electronic texts, practice guidelines, clinical practice series, and Micromedex. Library faculty lead the Learning Resource Center component of the Area Health Education Center (AHEC) program.

16. The president of MCG, Francis J. Tedesco, MD, will retire December 31, 2000. The chancellor appointed a search committee in July 2000 and expects to appoint a new president within 6 months.

17. The University System of Georgia converted from the quarter to the semester system in academic year 1998-1999.

18. Twenty-three endowed chairs have been created since 1994.

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## I OBJECTIVES

Institutional Priorities: The Board of Regents provides oversight for the 34 units of the University System of Georgia in developing institutional priorities. A Blue Ribbon Commission conducted the most recent review of the MCG mission statement. In 1998, the Board of Regents and university system chancellor created the commission, which consisted of MCG faculty and representatives of the Board of Regents and the state legislature. Input was gathered from the faculty and interested state residents. The resulting revised mission statement, which the MCG Academic Council and Board of Regents approved in January 1999, is the umbrella under which institutional and school priorities, goals, and objectives are set. The MCG has three missions: education, research, and service. The mission statement is posted on the following Web site: <http://www.iris.mcg.edu/plan/mission.htm>.

Since 1999, committees with diverse membership have developed strategic plans for the clinical, biomedical research, and educational enterprises. The Educational Strategic Planning Committee, established in early 2000, is developing an education strategic plan. SOM representatives included the vice dean for academic affairs and associate dean for curriculum. The SOM is adapting goals and objectives for implementation within the school.

Objectives: Prior to 1997, the SOM priorities were the same as those established by the institution. A school-wide plan to revise educational objectives began in 1997 under the direction

of the associate dean for curriculum. Using the Medical School Objectives Project (MSOP) objectives and the school's educational priorities, the curriculum committees reviewed, revised, and approved the educational objectives that were disseminated to the SOM faculty for review. In September 1999, the Faculty Senate approved the objectives, which have been distributed and posted electronically. They are used for curricular planning and two major curricular changes have been implemented as a result: the development of the Essentials of Clinical Medicine sequence in the first 2 years and a required critical care experience in the fourth year. The objectives emphasize measurable outcomes and provide the groundwork for developing outcome assessments related to attitudes, behaviors, skills, and knowledge throughout the curriculum. The vice dean for academic affairs, the associate dean for curriculum, the Curriculum Committee, and course directors will periodically review and revise the objectives. The objectives support the SOM's education mission and goals and are used as leverage in negotiating for resources, including time, space, and money. For example, specified objectives dealing with clinical assessment were essential in securing funding to support renovations and other essential components of the standardized patient program.

Resources/Activities: The balance between program resources and SOM activities has been streamlined due to recent developments.

First, the recently adopted mission-based management principles have helped align SOM resources and activities, and provided the foundation for ongoing efforts to determine the cost of student education. The Executive Faculty Advisory Committee uses the information to make decisions about allocating funds. For the first time, the cost of such activities as uncompensated indigent care, unfunded research, and teaching in various venues is being determined and funding sources, such as state resident instruction (RI), MCGHI, and the Physicians Practice Group, are being linked to appropriate activities.

Second, the Executive Faculty Advisory Committee, composed of department chairs, was created to advise the dean and assure fiscal responsibility by promoting accountability among the departments. Third, MCGHI was created and assumed management of the MCGH&C on July 1, 2000. The Articles of Agreement with the Board of Regents outline MCGHI's role in supporting the school's educational mission. The physical facilities on campus and at geographically separate sites are adequate to excellent for accomplishing the SOM's education mission. The number of inpatients at MCGH&C has decreased since the last LCME visit.

Therefore the SOM has recruited more geographically separate clinical sites and community-based clinical faculty. About 50% of SOM clinical education occurs at these sites, and most emphasize ambulatory care in community based practices.

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Faculty size will decrease about 12% due to the one-time ERP, implemented to downsize the MCG faculty and staff. The decreased faculty size resulting from ERP and natural attrition has caused widespread concern regarding the SOM's ability to meet its educational, clinical, and research responsibilities and to generate adequate clinical revenue. As of February 25, 2000, the SOM had 490 full-time faculty, and 104 chose early retirement. Many will retire after completing their 2000-2001 teaching commitments; 81 new faculty (12 basic scientists) were hired between July 1, 1999, and August 1, 2000. Faculty, including 45 primarily devoted to research, will be recruited to meet specific needs, usually research or clinical care. However, expertise and interest in teaching are explicit components of each recruitment. The greatest challenge will be to ensure that newly recruited faculty assume substantial teaching responsibilities to fulfill the educational mission.

Strategic Planning: The Educational Strategic Planning Committee is developing a plan for MCG's educational enterprise for the next 3 to 5 years. Its charge is to develop institutional goals and objectives that schools can use to develop their own educational plan. The committee developed five core values and submitted a draft plan in the summer of 2000. The vice president for research also initiated a strategic planning process that identified 10 areas of research

priorities and fosters interdisciplinary research collaboration. The clinical enterprise has done extensive strategic planning for the past 2 years, preparing MCG to transfer management of clinical activities from the hospital and school to MCGHI. Representatives from the hospital, school, faculty practice group, and Board of Regents are among those involved in clinical strategic planning. The planning process is integrated across schools and missions. Key SOM individuals who serve on institutional strategic planning committees also serve on LCME self-study committees and help integrate LCME accreditation standards with institutional planning.

## II / III GOVERNANCE AND ADMINISTRATION

MCG, the state's only public health sciences university, is a unit of the University System of Georgia and is governed by the Board of Regents. MCG is accredited by the Southern Association of Colleges and Schools (SACS). The most recent SACS accreditation visit was February 2000. The LCME was concerned during its 1994 visit that the SOM dean's authority and accountability were not clearly defined with regard to the vice president for clinical activities, the vice president for research, and the executive

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The Medical College of Georgia GRTC Adult Hospital CMC Hospital Operations Community Health Network Development Ambulatory Care Medical Affairs MCG Health, Inc. Physicians Practice Group

University System of Georgia Board of Regents director of the MCGH&C. Each concern has been addressed. Organizational changes have streamlined decision making, enhanced productivity, and facilitated communication among institutional units. Changes include (1) the senior administrative structure of the institution, (2) the structure of the clinical system, (3) the structure of the dean's office, and (4) financial management within the SOM. MCG's Senior Administrative Structure: In 1998, the MCG administration was reorganized to integrate research and educational activities among the five schools. Three senior vice president positions were created: academic affairs, clinical activities, and fiscal affairs and planning, each of whom reports to the MCG president. The dean of the SOM serves as senior vice president of clinical activities. The deans of the schools of allied health sciences, dentistry, graduate studies, and nursing report to the senior vice president for academic affairs, who is responsible for all MCG academic support units. The vice president for research is also dean, School of Graduate Studies.

Structure of Clinical System: Teams were established to help develop an integrated clinical system, and a Clinical Executive Committee, chaired sequentially by the senior vice president for clinical activities, president of the Physicians Practice Group, and president/chief executive officer of MCGHI, was formed to align clinical programs with SOM academic priorities. The chart illustrates the reporting lines.

From 1956 to 2000, MCG operated the MCGH&C under the fiscal constraints of the state legislature. Beginning July 1, 2000, MCGHI became responsible for managing hospital and ambulatory care operations, community health network development, and medical affairs. The MCGHI president/chief executive officer reports to the MCGHI board, which includes the SOM dean and the MCG president. The roles of the senior vice president/dean and president as members of the board need to be clarified. The chief operating officer of MCGHI is the former MCGH&C executive director. The following chart illustrates the reporting lines.

The Physicians Practice Group, the academic group practice of the SOM faculty, has been restructured with a permanent physician president/chief executive officer who reports to its Board of Trustees. Formal affiliation agreements and the Clinical Executive Committee define and unite the relationships among MCGHI, Physicians Practice Group, and MCG. This structure assures that the SOM priorities in education and research are always "on the table" when clinical system decisions are being made. The current structure is appropriate for MCG, and the organizational changes streamline the decision-making process and enhance flexibility in management. However, the decision of several senior administrators to accept early retirement has impacted administration at the institutional and school levels. The president of MCG will retire

December 31, 2000. A search is underway and the chancellor anticipates having a successor in place by early 2001. Despite this plan, SOM faculty, staff, students, and alumni are concerned about the impact of institutional and school leadership transitions while a president, dean, and several chairs are recruited. These concerns involve timing of recruitments and whether current strategic plans will endure under the new leadership.

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Despite these administrative changes, authoritative leadership historically has characterized the relationship between the president and senior level administrators. Their role in institutional planning, advising the president, and interacting with individuals who impact the institution has been more limited than if planning had been more interactive. In addition, the faculty at large perceive the need to have more influence on decisions and policies beyond the departmental level.

**Structure of the SOM Dean's Office:** The dean restructured the SOM administration and created three vice dean positions: academic affairs (1994), clinical affairs (1995), and administration and research (2000). The dean often meets with the department chairs and vice/associate deans as a group. The changes have streamlined and clarified reporting relationships and enhanced group decision making. This organization provides efficient and effective SOM administration.

SOM administrative personnel had few changes following the 1994 LCME visit until mid-2000, when the dean announced his resignation and two associate deans, admissions and curriculum, accepted early retirement. The vice dean for administration and research resigned in September 2000. Experienced SOM faculty were appointed promptly to the interim dean and associate dean positions. The vice deans, director of operations, and the Executive Faculty Advisory Committee have worked to maintain stable academic programs and leadership during the searches for a new president and dean.

**Financial Management within the School of Medicine:** The department chairs and vice dean for academic affairs develop their budgets and discuss financial priorities, which the Executive Faculty Advisory Committee approves and presents to the dean for approval. The director of operations oversees the SOM budget.

**Decision Making:** During the last several years, mechanisms for effective and timely decision making have been enhanced. The clinical and basic science chairs have improved their collaboration, in part through regular chairs' meetings and their representation on the Executive Faculty Advisory Committee. The Clinical Executive Committee facilitates communication among the Physicians Practice Group, MCGHI, and the SOM. Decisions can be made and implemented more quickly, and the clinical enterprise explicitly supports the school's educational priorities.

**Departmental Leadership:** Normal attrition and the ERP created the platform for unprecedented leadership change. Two of the four basic science chairs (anatomy, physiology) have been appointed since December 1999, and a third (biochemistry) will be recruited to replace the current chair, who is retiring June 30, 2001. Several of the 12 clinical science chairs also have retired (anesthesiology, neurology, radiology), resigned (psychiatry, medicine), or will be retiring by June 30, 2001 (ophthalmology, pathology). A new psychiatry chair assumed his position in August 2000, and six other departments have interim chairs. A new ophthalmology chair is expected to be appointed by the time the current chair retires. The new and interim chairs have collaborated with the retiring chairs, department members, and dean's staff to plan strategies for fulfilling education, research, and service responsibilities during the transition. Staggering the appointment of interim chairs and the searches for new chairs has maintained stability and permitted targeted resource allocation. The Vascular Biology Center has had stable leadership since the last LCME visit. The director of the Telemedicine Center was appointed in 1996. The director of the Institute for Molecular Medicine and Genetics was appointed in April 2000.

**School Committees:** Faculty members from all departments, representing the diversity of the MCG campus, serve on school committees, many of which are Faculty Senate committees. Each

Faculty Senate committee is composed of faculty members representing different ranks and departments. The Faculty Senate Bylaws Handbook describes the charges of each committee. Mission-based management has allocated “credit” for the time required to participate in many key committees, including admissions, promotions, and curriculum.

#### IV EDUCATIONAL PROGRAM FOR THE MD DEGREE

**General Education:** MCG’s primary education goal is to provide students with the knowledge, skills, and professional attitudes and behaviors that prepare them to enter residency training in their chosen specialty and, subsequently, to enter clinical practice or academic careers. Since the last LCME visit, more emphasis has been placed on a broad based generalist education, interdisciplinary collaboration, and skills of life-long learning. Topics such as health promotion and disease prevention, ethics, professionalism, and geriatrics are emphasized, especially in the first 2 years, and reinforced during the third and fourth years. The curriculum highlights learning in the context of patients, interactive groups that require active participation, and development of life-long learning skills, including facility with library and computer resources. Community-based learning experiences, especially in ambulatory settings, have been increased throughout the 4 years. Assessment methods in addition to multiple-choice examinations have been implemented to evaluate students’ accomplishments.

**Curriculum Management:** Curriculum management is a multifaceted process, led by the Curriculum Committee, under the direction of the associate dean for curriculum and the vice dean for academic affairs. The previously separate Phase 1/2 and Phase 3 curriculum committees were combined to improve communication and make the curriculum development process more interdisciplinary. The associate dean works effectively with the Curriculum Committee and meets regularly with course and clerkship directors. Students’ course and faculty evaluations, peer review of curriculum content, and peer (usually course director) assessments of teaching are used to make decisions about course modification. The Curriculum Committee now plays a leadership role in conceptualizing and overseeing curriculum management. An internally developed, computerized database complements the AAMC curr MIT database for monitoring course content and teaching effort. Centralized curriculum management and tracking of curriculum content have improved curriculum assessment and facilitated change.

**Curriculum Evolution: First and Second Years:** The SOM has implemented sequential curriculum and assessment improvements since 1994. Phase 1/2 curriculum content has been reviewed twice, at the start of the RWJF Generalist Initiative grant and again as part of the educational strategic planning process that has been initiated at the institutional level. Increased collaboration and teaching across departments has improved content coordination, reduced redundancy and filled gaps, and enhanced emphasis on common problems. Supported in part by the RWJF grant, the SOM increased community-based education, enhanced faculty teaching and evaluation skills, implemented an integrated ethics teaching program, and developed Web-based, integrated, primary care teaching and tracking resources (Medical Education on the Web). Building on these changes, an interdisciplinary group of faculty developed and the SOM implemented an Essentials of Clinical Medicine program in August 2000. The 2-year sequence replaces nine freestanding courses and emphasizes the clinical and self-directed learning skills needed for success in the third year. In the first semester of Year 1, Essentials of Clinical Medicine 1 emphasizes family, cultural, and population aspects of health care, communication skills, and information retrieval and analysis.

The second semester Essentials of Clinical Medicine 2 concentrates on health promotion/disease prevention, ethics, history taking with children and adults, and a community project. In Year 2, Essentials of Clinical Medicine 3 highlights principles of patient care throughout the life cycle and addresses interviewing and physical examination, common medical problems, and interdisciplinary topics such as ethics, nutrition, and impact of behavior on health. Teaching strategies, including interactive small groups, preceptor relationships, and lectures, are linked to

course objectives. Students are evaluated using multiple methods, including behavior-based narratives, clinical observation with patients, standardized patients, response to feedback, a group community project, written examinations, and USMLE Step 1.

Workload: Student workload is distributed equitably in the preclinical years. In 1998-1999, MCG converted from the quarter to the semester system and reorganized the curriculum so that most classes end at noon. Students have adequate time to pursue independent study in the first 2 years. About 60% of student contact time consists of lectures; the remaining instructional time is devoted to opportunities for more active learning in laboratories, small groups, and one-on-one precepting. This is an acceptable balance, considering the size of the SOM faculty and student body.

Prerequisites for the Third Year: Since 1990, all students have participated in a Clinical Skills Interface program the week before they begin their third-year clerkships. The program emphasized procedural skills, universal precautions, guidelines for successful performance on clinical clerkships, and an introduction to radiology. It will be discontinued after 2000 because the content has been incorporated into Essentials of Clinical Medicine. All students take Basic Cardiac Life Support in the spring of the second year and must be certified before beginning the third year. Students are encouraged, but not required, to take Advanced Cardiac Life Support during their third or fourth year. All students must take USMLE Step 1 prior to the third year. Those who do not pass on the first attempt can complete their rotation before taking time off to study and retake Step 1.

Third-year Clinical Clerkships: All students participate in seven core rotations (internal medicine, family medicine, pediatrics, neurology, surgery, obstetrics/gynecology, and psychiatry) spanning 12 months in the third year. The 50-50 division between inpatient and ambulatory settings is considered appropriate and reflects the shift to care in office-based settings. Some clerkships are almost completely ambulatory (family medicine) and some (surgery and psychiatry) are mainly hospital-based, but most (medicine, pediatrics, obstetrics/gynecology, and neurology) are equitably divided. About 50% of clerkship experiences are at MCGH&C or the attached VAMC. The remaining sites are dispersed around the state and emphasize ambulatory care. Students select rotation sequence and sites by lottery, and nearly all are placed at one of their desired sites. They may spend up to 7 months off campus and most complete at least one off-campus rotation.

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Site Development: The statewide AHEC clerkship coordinator, clerkship directors, and associate dean for curriculum collaboratively identify and develop teaching sites. Once a potential site is identified, often through AHEC contacts, the associate dean and clerkship director communicate with potential clinical faculty, visit the site to meet with interested physicians and assess the facilities, and identify local physician and staff coordinators. The AHEC clerkship site coordinator works with the local community to identify housing at no expense to the students and to ensure computer and Internet availability. An affiliation agreement is executed through the Curriculum and Legal offices. Before students are assigned to a new site, the clinicians participate in at least one on-site workshop to develop teaching, feedback, and evaluation skills, and the department initiates the process for their appointment as clinical faculty. The clerkship director and, usually, the associate dean for curriculum communicate with the clinical faculty to address concerns or suggestions shortly after the first students arrive. Clinical faculty are committed to participating in student education, but are concerned about the competing demands of clinical practice and teaching.

The family medicine clerkship has always been decentralized and assesses consistency among sites through annual faculty development sessions, tracking students' experiences, and site visits. State funding designated for the clerkship supported development of a model that other disciplines have adapted less expensively. Internal medicine and pediatrics simultaneously developed several sites (e.g., Rome, Albany, Covington) that have become models for

other departments (surgery, obstetrics/gynecology, psychiatry, and neurology). During the 1999-2000 academic year, 75 clinical faculty participated in 11 faculty development workshops at their local practice site.

**Curriculum and Consistency:** All clerkships have a defined curriculum, usually based on national guidelines developed by the clerkship directors' organizations. Students have access to computers and study areas at all sites and sufficient time for independent and patient-based learning. The SOM began pilot testing a Web-based system to track students' clinical experiences (patient diagnoses and procedures) in October 2000 to replace previous paper and-pencil log systems. These real-time data will be used to assign patients to individual students, assess consistency of experiences across sites on a clerkship, and track the diagnoses students have encountered on various clerkships.

Faculty evaluations of students, students' evaluation of sites and faculty, and students' performance on examinations are monitored to assess consistency.

**Medical Education on the Web:** More clinical education is taking place in geographically separate sites. Therefore, the clerkship directors, in collaboration with the Office of Academic Affairs and the Curriculum Committee, are developing a Web-based clerkship resource for students and faculty. The students will access a single site for administrative information, educational materials, and the centralized clinical tracking system for all clerkships. Once the educational and tracking components of the site are complete, student evaluations of the clerkships, faculty, and residents and faculty development materials will be included. **Fourth-year Selectives and Electives:** Since 1994, 1-month selective rotations in emergency medicine and critical care have been added to the primary care acting (sub) internship as fourth-year requirements.

Site development mirrors the core clerkship process, except housing is not necessarily provided. Students choose selectives from a group of approved rotations; electives in other medical schools do not fulfill this requirement. Students also must complete at least four electives of their choice, approved by their faculty adviser. At least one elective must be on campus, and credit is not granted for taking the same elective more than once. **Evaluation of Faculty and courses/Clerkships:** Since 1994, the SOM Evaluation Services Office has been

responsible for managing students' evaluations of all required courses and faculty who teach in the first 2 years. The course directors and Curriculum Committee developed, and Faculty Senate approved, a standard form for students to evaluate courses and faculty anonymously. The course director reviews the evaluation and is encouraged to write an evaluation of each faculty member's teaching. The course director shares the information with the appropriate department chair(s) and distributes course and individual evaluations to the faculty. These data are used to enhance teaching, improve courses, and provide peer assessment of teaching. Since 1996, the Evaluation Services Office also has been responsible for evaluation of all core clerkships. A standard form is used to evaluate the clerkship, individual faculty, and residents. The clerkship director, department chair, faculty, and residency program directors review the information.

The associate dean for curriculum, the Curriculum Committee, and vice dean for academic affairs review the evaluations and provide feedback. The evaluations are an important part of course development. Students complete them at the end of each course and clerkship, and their confidentiality is maintained. The associate dean for curriculum meets with the students to teach them how to write constructive evaluation comments with suggestions for improvement.

**Evaluation of Students:** Several methods are used to evaluate students, linking assessment of knowledge and performance with curriculum objectives. Knowledge and its application to clinical scenarios is assessed using internally developed, multiple-choice examinations in all required courses and clerkships. The vice dean for academic affairs offers annual workshops to help faculty enhance their multiple-choice item-writing skills. Most courses in the first 2 years and all of the third-year clerkships use NBME Subject Tests as an end-of-course examination.

**Essentials of Clinical Medicine** uses several assessment methods to evaluate skills, behaviors, and knowledge. These include attendance and participation in small groups; behavior-based

assessment of professionalism, skills of self directed learning and teamwork; faculty's clinical observation, performance on standard patient exercises, and written examination scores. Students who show repeated behaviors of concern meet with the associate dean for curriculum.

The Standardized Patient Program began in 1995 as a pilot study with third-year students. Standardized patients subsequently were incorporated into the ambulatory block of the medicine clerkship at MCG, where they are still used. Standardized patients have been used in the Advanced Physical Diagnosis Senior elective, neurology clerkship, Phase 1 Physical Diagnosis, Phase 2 Physical Diagnosis, residency programs (medicine and family medicine), and other programs (physician assistant and physical therapy), primarily as a teaching tool for formative evaluation.

Standardized patients have been used for teaching communication issues, psychosocial issues, physical examination skills, and clinical decision-making skills. However, the SOM has perceived a need for a more comprehensive clinical evaluation process. The facilities have been expanded to 10 examination rooms with state-of-the-art equipment, enabling implementation of a more comprehensive program. This year, the standardized patient program is being incorporated into the Essentials of Clinical Medicine courses. Standardized patients will be used for both summative and formative evaluation. An Objective Structured Clinical Examination will provide summative assessment at the end of the Essential of Clinical Medicine courses. The first-year Objective Structured Clinical Examination's primary focus will be professionalism, communication skills, and history-taking skills. The second-year Objective Structured Clinical Examination will focus on professionalism, history taking, and physical examination skills. A third-year Objective Structured Clinical Examination is under development as a summative evaluation of students at the end of the third year. The goal is to have it developed for the 2001-2002 academic year. The table below summarizes evaluation procedures.

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Summative Performance Assessments for Academic Year 2000-2001

ASSESSMENT METHOD (COURSE / CLERKSHIP)

I = Introduce; P = Practice under supervision (faculty, resident, staff as appropriate)

C = Competency demonstrated

SKILLS

Interpersonal, Communication, Interviewing, Physical Examination, Diagnostic, Decision Making, Procedure, Professionalism, Case Presentation, Written Record

Group / Team Phase 1

Standardized Patient (ECM) I I

Behavior-based Evaluation Form (ECM) I I I

Phase 2

Standardized Patient (ECM) P P P P P

Behavior-based Evaluation Form

(ECM)

P P P

Faculty Observation (ECM)

(Pediatric / Adult Encounters)

P P P P P P P

Phase 3

Newborn Examination - Faculty

Observation (Pediatric Clerkship)

P/C P/C P/C P/C P/C P/C P/C P/C

Child Examination - Faculty

Observation (Pediatric Clerkship)

P/C P/C P/C P/C P/C P/C P/C P/C

Pelvic Examination - Faculty

Observation (Ob/Gyn Clerkship)  
P/C P/C P/C P/C P/C P/C P/C P/C P/C  
Standard Clinical Skills Evaluation  
Form (ALL Clerkships)  
C C C C P C C C C

Attending physicians and residents on most clerkships submit individual behavior-based clinical evaluations. Medicine uses a team approach in which the attending physician, resident, and interns meet with a trained faculty facilitator to evaluate students at the end of each month of the clerkship. All faculty are strongly encouraged to give formal mid-rotation feedback at a minimum. The clerkship directors compare evaluations from their various sites to ensure consistency.

USMLE Step 1 and 2 results indicate that students are well prepared in the preclinical subjects and clinical disciplines, respectively. In academic years 1998 and 1999, SOM graduates' subtest scores on Step 2 were above the national mean in every category. Quality of Graduates as an Assessment of Program Effectiveness: The SOM monitors USMLE Step 3 examination pass rates. In 1996, the last year for which data are available, 98% of the graduating class passed on the first attempt and 100% ultimately passed. A survey of their residency directors also is used to evaluate SOM graduates. For 1990-1998, residency program directors rated SOM graduates as satisfactory or above average in all categories. More than 90% ranked in the upper 2/3 of their program. Student course and clerkship evaluation forms and the AAMC Graduation questionnaire provide feedback on the curriculum. The residency program directors' questionnaire provides feedback on SOM graduates' skills and performance as residents. The tracking data currently available do not include complete information on all students following their graduation.

Career Choice/Counseling: SOM students match consistently in specialties and programs of their choice, with more than 80% matching in one of their top three choices. Since 1995, more than 50% have chosen residencies in primary care programs, which include family medicine, internal medicine, and pediatrics. This is consistent with MCG's mission to meet the health care needs of Georgia residents. The multifaceted advising system begins at matriculation, when students are paired with second-year student and faculty advisors. This gives all students an early connection with faculty, which may be sustained throughout medical school. During their third year, students indicate their most likely specialty choice and choose an academic advisor in that department. The associate dean for student affairs directs the MedCareers program. The academic affairs associate deans and many other faculty advise, counsel, and mentor students.

#### V MEDICAL STUDENTS

Admissions/Recruitment: The SOM matriculates 180 students per year. The Admissions Committee, which the associate dean for admissions chairs, has 19 members, including full-time faculty, students, alumni, and community representatives. The committee makes all admissions decisions. The admissions cycle has two components, early and regular decision. Only Georgia residents are eligible to participate in early decision. During the past 3 years, an average of 123 students applied for early decision and 55 were accepted per year. Their MCAT scores and undergraduate GPAs are similar to those of applicants accepted during regular decision.

Despite on-going efforts, the SOM has not achieved the desired student diversity. Therefore, in the 1998-1999 admissions cycle, the admissions process was changed to increase student diversity and better meet MCG's mission of educating and training health care professionals who represent the geographic, economic, and ethnic diversity of Georgia residents. With Faculty Senate approval, additional diversity criteria were delineated and presented to the applicants and the Admissions Committee. These include the applicant's prior work and financial responsibilities, ethnic, socioeconomic, and cultural background, health professional needs in the region of residence, and commitment to practice in a medically underserved area of Georgia. The SOM modified the supplemental application to collect data that paralleled the diversity criteria used in the process of screening for interviews. The SOM eliminated a numerical screen based on

GPA and MCAT scores to make decisions about interview invitations and substituted a more in-depth screening conducted by a subcommittee of the admissions committee, using both academic and new diversity criteria. Applicant quality has remained consistently excellent, despite a gradual decline in applicant numbers since 1996. The cognitive data, overall GPA, Science GPA, and MCAT scores have remained relatively constant and equal or exceed the national averages. The Board of Regents mandates that at least 95% of an entering class must be Georgia residents and, for 1997 through 1999, 99% were residents. For the 2000 entering class, 808 Georgia residents applied, compared to a peak of 1018 Georgia applicants in 1996. The offices for Admissions and Special Academic Programs create and conduct recruitment initiatives. These focus mainly on three areas: pipeline programs for high school students, enrichment programs and recruitment campaigns for college students, and other programs consistent with the institution's mission for enhancing student body diversity.

Outcome indicators used to assess the admissions process and recruitment initiatives include the average MCAT score and GPA of the entering class, student performance on the USMLE, residency matching success rate, graduation rates (94.5% for 1997-1999), and retention rates (98.4% for 1997-1999). Beginning with the 1998-1999 application cycle, additional information has been collected to assess student diversity: the applicant's gender, population of his/her home city and county, size of the high school attended, educational level of grandparents and parents, origin of the financial support for undergraduate education, and personal financial obligations.

Financial Aid/Debt: The debt level for MCG medical students is well below the national average. The average debt (undergraduate plus medical school) for 1999 MCG graduates was \$51,227 (range, \$7,968 to \$96,160), compared to a national average debt of \$77,334 for public schools and \$109,264 for private schools. The low tuition and fees (\$6,688 for state residents) and the reasonable cost of living in the Augusta area (\$13,526) contribute greatly to the relatively low debt. The MCG loan repayment default rate for 1997 was 0.9% for all five schools, compared to a national rate of 8.8%. In 1998-1999, 595 MCG medical students received financial assistance totaling \$8,383,113 in loans, grants and scholarships, and work/study. Although more than 70% of SOM graduates borrow to help finance their medical education, survey data indicate that debt does not appear to influence their specialty and career choices. The Dean's Physicians Practice Group Fund provided \$364,612 in scholarships in FY00. The Dean's PPG Fund provided \$250,000 to the Stoney Group each year for FY99 and FY00. However, the SOM has inadequate scholarship money to matriculate many desirable students.

Resources: Teaching resources have improved since 1994. The clinical teaching facilities continue to improve and many are state of the art, such as the Veterans Administration Hospitals and the Children's Medical Center. Community-based clinical teaching sites give students access to more ambulatory patients. The number of volunteer teaching faculty continues to increase. The SOM is one of few schools with a computerized Testing Center that administers USMLE exams. The library is pilot testing extended hours during exam times in response to student requests, and continues to expand its electronic resources. Students have around-the-clock access to resource and small-group learning rooms that include computers with Internet access. The Finance Design Team of the mission-based management process recommended that 50% (about \$26 million) of the state RI allocation to the SOM should be used for medical student education and the remainder for research and SOM administration. Metrics to quantify teaching time and its cost, developed by the Education Design Team and approved by the Executive Faculty Advisory Committee, have been used to estimate time required for teaching in the first 2 years. The same process is being used to estimate teaching time during the third-year core clerkships.

Teaching effort for the fourth-year selectives and electives will be assessed next. Faculty are collecting prospective data during the 2000-2001 academic year to assess the validity of the metrics. Fewer full-time faculty are available for teaching, due to the ERP. However, teaching commitments will be met by realigning responsibilities, identifying teaching expectations for

newly hired research and clinical faculty, and expanding the numbers of community-based volunteer faculty.

**Student Support:** MCG offers personal counseling and advising through such venues as student and faculty advisors for new students; the associate deans for students, curriculum, and special academic programs; and the vice dean for academic affairs. Tutorial services for Phase 1/2 courses are led by the Office of Special Academic Programs. The Student Health Service provides health and dental services 5 days per week, including a clinical psychologist and referral for psychiatric care. Student health insurance is mandatory, and students may buy coverage through the MCG-recommended student group plan. The pre-matriculation immunization program is well coordinated and efficient. Students have several campus areas and activities for relaxation, socialization, and convenience. Recreational facilities on campus include exercise and weight rooms, student lounges, and game rooms. Lockers were installed for the first- and second-year students in the Research and Education Building. Students have access to recreational facilities at a local sister institution, Augusta State University. Many recreational and cultural facilities are available in the community. A new \$5.6 million Fitness Center, opening in 2002, will enhance on-campus facilities. The SOM and MCG have many student organizations, including the Student Government Association, Students for Intercultural Medicine, and various interest groups. The housing program provides clean, comfortable, and well-maintained facilities for 297 students at reasonable costs. In fall 1999, 11% of the medical students lived in MCG housing. The Public Safety Division provides conventional and special-purpose transportation services around campus. On-campus parking is adequate and students rate security as excellent. The already low campus crime rate has declined over the past 5 years. On the student survey, students rated their access to administrators as good. They interact frequently through scheduled meetings with the associate deans and the vice dean for academic affairs, the advisory system, and they have ready access to all academic affairs staff. The dean sponsors three dinners a year for class officers, vice deans, associate deans, and faculty class advisors. **Student Diversity:** Several diversity initiatives have been implemented since 1995, primarily through the Office of Special Academic Programs. Examples are a Health 1st Foundation and Health Professions Partnership Initiative, including a Saturday Learning Academy for students from three high schools with large numbers of black students and an undergraduate pipeline program. An outreach program in a 30-county rural area in south Georgia provides shadowing experiences for high school and college students. Because the new initiatives primarily target high school and undergraduate college students, outcomes are not yet available. However, for the 1999 entering class, changes in the ethnic and gender makeup were noted compared to the previous three admissions cycles. There were 46 nonwhite students, (11 African-American, 4 Hispanic, 29 Asian, and 2 Native American, or 25.5%). The 11 African Americans represent 6.1% of the class. Nationally, underrepresented minorities made up 10.7% of the 1999 entering class. Women comprised 34% of the SOM 1999 entering class, compared to an average of 28% in the previous years, and a national average in 1999 of 45.7%. Geographic origin and economic background remain to be evaluated. However, the data used for assessing diversity are not readily available for analytical processing. **Transfer Students:** Transfer into the SOM is considered for students with advanced standing in the second and third year of medical school only when there is a vacancy and the reasons for the transfer are compelling. Beginning in 1999, only students from LCME-accredited schools may be considered for transfer. There were no transfer students in 1999-2000 and none are planned for 2000-2001. In 1999, the Faculty Senate voted to have the regular admissions committee handle transfer admissions rather than a specially appointed committee. Transfer students are incorporated into the curriculum as regular students.

**Student Abuse:** The institution has a clearly stated sexual harassment policy posted on the MCG Web site. Students are directed to report incidents to the senior vice president for academic affairs or the director of student affairs. All students entering the SOM receive a copy of the "Guidelines for Discrimination and Harassment Complaints in the School of Medicine." Every 2 years, all

other students, faculty, and administrators receive a copy of the guidelines with a cover letter. All SOM orientation programs provide information regarding harassment. Students are encouraged to approach any member of the dean's staff to discuss concerns.

#### VI a FINANCES

Meeting the SOM's objectives in teaching, research, and patient care service is linked to the financial well-being of the school and institution. The school's financial condition remains stable and adequate financial resources are available to support the vital programs.

Historically, the SOM's financial support has come from state appropriations, patient care income, endowments, grants and contracts, tuition income, and hospital revenues. These resources have provided a balanced foundation for fulfilling the school's missions. Several events occurred in FY00 that will realign and, in some cases, may adversely affect the traditional sources of revenue. In addition to the familiar reimbursement issues that are affecting academic medical centers throughout the nation (growth of managed care, increased competition, and decreasing reimbursement from Medicare and Medicaid), the SOM has encountered three unique events that will temporarily increase uncertainty and may reduce financial resources. First, MCG experienced a reduction in state support due to the University System of Georgia's conversion from a quarter system to a semester system. As a result, MCG experienced an operating budget deficit of approximately \$1.1 million dollars. The SOM budget was reduced by approximately \$509,428 for its share of this deficit. Second, MCG initiated the ERP producing an unusually high faculty turnover. The ERP will result in a residual balance of \$1.69 million in RI dollars. This balance will be applied towards the SOM formula reduction in state funds, start-up funds for new faculty, new programs, and any shortfall related to the hospital transition to a not-for-profit entity (discussed below). The SOM has an active plan to recruit 45 new faculty with an educational and research interest over the next 3 years in an effort to minimize the effect on its missions.

Third, a newly created, non-profit corporation, MCGHI, assumed administration of the MCGH&C, effective July 1, 2000. Without this restructuring, managed care and similar trends in financing patient care would have continued to threaten the ability of MCG and the hospital to achieve the university's teaching, research, and patient care missions. MCGHI has increased flexibility to enter into joint ventures, form partnerships with other entities, gain access to adequate patient volume, enter into multiyear contracts, build reserves, borrow capital to finance improvements, invest in capital improvements and new technology, accept and manage risk in a competitive manner, and align and integrate the hospital and physicians. The SOM will not be significantly affected by the transition to a non-profit corporation, but the funds flow from the hospital to the Physicians Practice Group and the SOM will be altered. The SOM, through contractual agreement between MCG and MCGHI, will receive negotiated amounts for "funding Clinical Facilities-Based Education Programs to the same extent that MCG Hospital and Clinics funded them prior to the Transfer Date, to the extent that MCGHI receives funding earmarked for such programs from any source. Such funding shall include without limitation support for (a) stipends and benefits for post-graduate physicians, dentists, and other health professionals; (b) Educational Program administration; and (c) faculty efforts in Trainee supervision and training, to the extent that such supervision and training can be reasonably identified in costs reimbursed to MCGHI by third-party payors, or from other sources such as grants." Additionally, MCG is under contract to receive a margin allocation of 40% of MCGHI's adjusted income. This allocation will be transferred to the MCG Academic Development and Research Fund each year. Of concern, however, is the hospital's ability to generate profits within the immediate future. In addition, reimbursements will go directly to MCG, and it is uncertain how or if these funds will be allocated to the SOM. To better manage the changes anticipated from the ERP and the separation from MCGHI, the SOM has initiated a mission-based management program. The focus is to develop explicit objectives for teaching, research, and clinical service; monitor the funds committed to each mission; and measure the progress toward the objectives. Mission based

management will provide the SOM with information to direct its resources to the most important missions and assure the financial stability of the educational program.

Capital Needs: Processes are in place to address the school's future capital needs. Mid-year reallocation of internal funds, use of indirect cost (facilities and administrative), various state-appropriated lottery funds, and MCG foundation support are used to purchase new and replacement capital facilities. Since 1996, MCG has spent more than \$27 million in remodeling and building new facilities. The school is confident that its capital needs will continue to be met.

Faculty Concerns: The faculty have budgetary concerns including whether enough state funding will be available to support education, whether compensation for indigent care will be adequate, and how mission-based management will impact their activities and salary sources.

#### VI b GENERAL FACILITIES

Adequacy: Clinical, research, and educational infrastructure has improved due to new facilities and renovations of existing facilities, as well as large investments in technology since 1994. The Interdisciplinary Research Facility that opened in 1996 added 92,000 square feet of research space at a cost of \$22 million. New service facilities include the 149-bed Children's Medical Center and a freestanding Sports Medicine Center for treating and rehabilitating sports-related injuries. A 40,000-square-foot Fitness Center is scheduled for completion in January 2002. MCG also is planning to add 90,000 square feet of research space by 2004, at a cost of \$20 million. The MCGH&C made tremendous progress in updating capital equipment in all areas. Telecommunication facilities have increased for education and patient care with the implementation of the Georgia Statewide Academic and Medical System (GSAMS) Act of 1992. The network connects over 450 medical sites throughout the state and all K-12 and college level institutions. MCG has maintained a staff of 6,500 employees, although the ERP is likely to reduce this number.

Teaching: The infrastructure for teaching is excellent overall and continues to improve. Classrooms throughout the institution contain state-of-the-art video, computer, and audiovisual equipment. Several dedicated classrooms are available for distance learning. The school has made many improvements in recent years to facilitate small-group teaching. Electronic resources in the Greenblatt Library have greatly expanded. Students have access to E-mail, electronic databases, computers, and computer jacks for personal laptop computers. Twelve examination rooms for standardized patient exercises and 25 small-group teaching rooms, all located near one another, were equipped in 1998.

#### VI c FACULTY

Faculty Size: As of February 25, 2000, the SOM had 490 full-time faculty, 104 in basic science and 386 in clinical departments. Of those, 104 accepted early retirement: 22 basic scientists and 82 clinicians. After a 40% replacement rate, the resulting size will be similar to 1987, when there were 87 full-time basic science and 363 full-time clinical faculty. The number of medical students (720) has remained constant. MCG has appointed many excellent clinicians as community-based clinical (volunteer) faculty, for a total of about 800 in 2000 compared to 622 in 1998. All of the educational needs for 2000-2001 have been met through collaborative planning and strategic hiring. Isolated gaps are being addressed by hiring new faculty, realigning responsibilities, and possibly rehiring a few retired faculty to meet specific needs. Due in part to the chairs' commitment and effective working relationships with the SOM Office of Academic Affairs, education remains central.

Faculty Appointment, Evaluation, Promotion, and Tenure: Promotion and tenure criteria are stated in the Faculty Appointment, Development, Promotion and Tenure Manual. However, these general criteria are difficult to apply consistently as they are interpreted differently, creating frustration among faculty. These frustrations include an inconsistent relationship between fulfillment of assigned responsibilities and promotion, a perceived disparity in prestige between tenure and non-tenure tracks, and lack of recognition for some scholarly contributions. Therefore,

the SOM dean and department chairs, and senior vice president for academic affairs recently approved a Guide for Interpreting the Promotion and Tenure Policies. It (1) describes responsibilities and expectations for appointment and progression along the tenure or non-tenure track; (2) clarifies expectations for grant funding; (3) explicitly defines scholarship in addition to research, and scholarly products in addition to peer-reviewed publications; and (4) highlights the importance of pursuing scholarship related to one's primary area of responsibility. The guidelines explicitly define clinician-educator, educator-clinician, and basic science educator pathways within the tenure and non-tenure tracks. The principal differences between tracks are expectations regarding scholarship and extramural funding. A clinician-educator could be appointed to the tenure or non-tenure track based on the expectations for scholarly achievement, including grant funding. During 2000-2001, the chairs and vice dean for academic affairs are working together to ensure that faculty understand the guidelines at the time of appointment, develop responsibilities and outcome expectations to meet promotion expectations, and develop the infrastructure support needed to meet the expectations.

**Full-time Faculty:** The SOM has two faculty tracks, tenure and non-tenure, each with four ranks (instructor, assistant professor, associate professor, and professor). Most faculty appointed to the tenure track are basic scientists whose primary responsibility is research, but they are expected to do some teaching. For advancement, tenure track faculty must demonstrate "outstanding" performance in research/scholarly achievement and in one other area, either teaching or service. Most faculty appointed to the non-tenure track are clinicians whose primary responsibilities are patient care and teaching. Non-tenure track faculty are expected to demonstrate outstanding performance in one area, teaching, research/scholarly achievement, or service (usually clinical care), and to contribute to the other two. During the last decade, nearly all clinical faculty have been appointed to the non-tenure track. Faculty whose sole responsibility is research may be appointed to a non-tenure track position in the research scientist pathway.

**Volunteer (Clinical) Faculty:** The title includes a clinical modifier; (e.g., clinical assistant professor). Volunteer, community-based MCG faculty are increasingly important to the school as more clinical teaching is done in community settings. The school revised guidelines for their appointment and promotion to enhance consistency across departments and assure they are rewarded equitably for their contributions, including reappointment and promotion only for those who contribute consistently to the education mission. The revised guidelines are being applied more consistently across the departments.

**Teaching and the Promotion Process:** Prior to 1995, recognition of teaching contributions in the promotion and tenure process was erratic. Since then, all faculty have been required to document their teaching and other contributions to the education mission in an Educator's Portfolio as part of their promotion or tenure packet. The guidelines have been simplified and the portfolio shortened to emphasize highlights and quality of educational contributions. Documenting the wide disparity in responsibilities and quality of teaching and other education-related activities highlighted the importance of more clearly defining expectations in this area and laid the groundwork for developing the policy interpretation guidelines discussed above. Expectations for clinical productivity and lack of clarity regarding how clinician-educators could demonstrate scholarship have hampered scholarly activity and its recognition in the clinical departments. As part of a broader interpretation of the promotion policies, the school recognizes that faculty demonstrate scholarship when they advance or transform knowledge by applying their intellect in an informed and creative manner to produce products that are peer-reviewed for quality and disseminated in the public domain. Thus, instructional materials, assessment tools, curriculum development, and teaching may illustrate scholarship and should be rewarded. Quantity and quality of teaching and scholarship related to teaching/education are now important in the promotion and tenure process.

**Professional Development:** The vice dean for academic affairs and director of the Center for Educational Excellence, in partnership with the chairs and senior faculty, are developing a coordinated approach and infrastructure to support faculty development. Professional

development in basic science and clinical research lies primarily within departments, the Institute for Molecular Medicine and Genetics, and the Vascular Biology Center. Support for developing skills related to teaching and educational scholarship will emanate from the academic affairs unit. New faculty are acquainted with expectations regarding documenting teaching with an Educator's Portfolio and the resources available to support development in this area at their orientation. The chairs are committed to defining responsibilities and outcomes expectations at the time of appointment and annually thereafter to support the professional development of the faculty.

**Post-tenure Review:** In 1998, MCG adopted a system of required post-tenure review conducted by the SOM Promotion and Tenure Committee. While the spectrum of faculty members' contributions tends to change over time, overall productivity remains high. The review process has helped some faculty refocus their efforts.

**Recruitment/Retention:** The SOM has implemented an interdisciplinary process for recruiting faculty. Educational, research, and clinical strategic planning identified areas of need and the Executive Faculty Advisory Committee approves position descriptions. The anticipated education role for each position is discussed. The school has used ERP-stimulated turnover as an opportunity to reorganize and design new programs to meet evolving priorities.

Search committees include members who represent clinical and basic science faculty. Sixty-one faculty were hired in FY00, and 45 new faculty joined the SOM between July 1, 2000, and August 31, 2000.

Salaries for senior MCG faculty overall are comparable to similar southern institutions, but salaries for junior faculty in the basic sciences are 8% to 19% below the regional average. Uncertainty about the future may impact faculty recruitment, retention, and morale. Faculty are concerned about the impact of mission-based management, pressure to be more productive, perceived differences in how the tenure and non-tenure tracks are valued, variability in defining performance expectations, and unclear promotion/tenure expectations. Transitions at the senior administrative level also raise faculty anxiety. The changes discussed above in the section on Appointment, Promotion and Tenure, and Professional Development should alleviate many of these concerns. While some faculty have accepted positions at other institutions or in private practice, the SOM has a core of high-quality faculty to fulfill its missions while additional faculty are recruited.

The faculty and student body are similar in gender, racial, and cultural diversity, but are less diverse than the population of Georgia, which consists of approximately 28% underrepresented minorities. Underrepresented minorities comprised 6.6% (33/496) of the faculty in 1999, compared to 6.7% (12/180) of the 1999 entering class of medical students. In 1999, 77% (383/496) of the full-time faculty were men and 23% (113/496) were women, while 66% (118/180) of the entering SOM class were men and 34% (62/180) were women.

**Communication:** Faculty communicate effectively with one another and with the SOM administration. Research conferences enhance collaboration between basic scientists and clinicians and committees that bring them together to deal with curriculum planning, assessment, and teaching. Since 1994, medical education and research have become interdisciplinary rather than departmental endeavors, and the medical curriculum has been brought under central rather than departmental management. The dean's biweekly E-mail newsletter enables faculty to efficiently communicate with the dean directly. The dean communicates regularly with the faculty through meetings with the chairs, vice/associate deans, Faculty Senate, and town or department meetings. Despite more formal venues for communication, informal discussion with receptive senior administrators is probably the most effective. **Decision making:** Faculty are involved in school and institutional governance and policy making, particularly through the SOM Faculty Senate and the MCG Academic Council. The Faculty Senate appoints and the dean approves essential committees, including three that are especially critical for students. The Admissions Committee is responsible for all admissions decisions; the Promotions Committee

monitors student progress and maintains SOM academic and professional standards; and the Curriculum Committee ensures appropriate curriculum design, management, and assessment. Committee membership reflects the faculty at large. Chairmen represent faculty in regular meetings with the dean, the Executive Faculty Advisory Committee, and the Clinical Executive Committee. Faculty also have input through the Academic Support Council, Research Support Council, and the Biomedical Research Council. The Academic Council includes SOM members and leaders.

#### VI d LIBRARY

Holdings: Current journal subscriptions are sufficient to support education for medical faculty and students, but below benchmark levels for research endeavors. Quantity is the primary weakness of the journal collection rather than gaps in subject areas, especially for research titles. In 2000, the senior vice president for academic affairs and MCGHI both provided additional funds of \$100,500 and \$105,903.85, respectively, to offset inflationary increases and to acquire library resources. Library faculty continually identify, select, and organize electronic journals and routinely request recommendations from faculty and students. Since 1994, the library has expanded its digital resources. New electronic resources have strengthened and enhanced the medical school curriculum. These include MD Consult, comprising standard electronic tests, practice guidelines, and clinical practice series, and Micromedix, a comprehensive pharmaceutical resource. In 1999-2000, the library collaborated with the other four state research institutions to negotiate a state licensing agreement with Elsevier, contracting access to over 900 full-text biomedical research journals through ScienceDirect. Convenience/Resources: The library is open 95 hours a week, close to the average of 98 service hours per week for 141 health sciences libraries. The Library Information Center, a central service point for collection lending, information assistance, and referral, is staffed during all hours of operation. The library is conducting a 2-year pilot study of extended hours during exams in response to student requests. The library contains nearly 70,000 square feet, with seating for 522 users, 20 individual study carrels, and 8 small group study rooms. The wide array of technology is in excellent condition. The 38 computer workstations provide on-site access to electronic databases, the Internet, E-mail, and word-processing software. A computer-assisted instruction laboratory and two electronic classrooms are located in the library. A third electronic classroom will be implemented in FY 2001. It will house 30 PCs in recessed monitor workstations, an audio system, and a premium projection system with a variety of peripherals, including a VCR and electronic whiteboard. Students and faculty have access to learning resources at the library's primary and distance learning sites. The electronic library is always accessible to the MCG community. The library supports the electronic infrastructure of AHEC's Learning Resources Center. The assistant director of the Learning Resources Center is a member of the library faculty and provides library resource instruction throughout the state. Over the past 4 years, the library has improved interlibrary loan services. In 1996, it took a leadership role in implementing a statewide upgrade to the university system library scanner, fax, copier systems, and networks. The library beta tested the hardware and software, constructed evaluation tools for the program, and collected and reported the data. Faculty/Staff: Library faculty are responsive to users' information needs and provide formal instruction in the scope, use, and evaluation of information resources for students and faculty. They make major contributions to the medical curriculum's life-long learning component. They provide access to numerous electronic databases and training in their use. Through the Library Information Center, library staff assist student and faculty users at both primary and distance learning sites.

#### VI e COMPUTER / INFORMATION RESOURCES

CAI Use: Computers are used for instructional purposes in two general areas. The first is technical support, such as reporting grades, providing course syllabi and schedules, and giving students E-mail contact with course instructors. Several courses, including neuroscience,

pharmacology, and cell biology/development, use these services. The second area of computer use is to supplement lecture/lab course materials through Web-based or purchased software packages. While students are not required to use these software packages, most are available in the resource rooms. Supplemental software is used in anatomy, biochemistry for aspects of Mendelian inheritance, physiology for each of the major organ systems, pharmacology for actions of cardiovascular drugs, and cell biology/development for histologic images. Pediatrics, medicine, and family medicine use Web sites for clerkship materials to ensure students at all sites have access to information.

CAI Effectiveness: Cell biology/development uses student course evaluations to assess CAI effectiveness. The quality of instruction in the currently available software packages is an ongoing problem. In the neuroscience and physiology courses, the effectiveness of CAI has not been formally evaluated because of its minor role. Students consider the content and presentation of the two CAI programs used in pharmacology effective, but groups of four students are required to use the programs concurrently, impacting on content delivery. Web-based materials on the Internet have been effective in the clerkships. The major limit to more widespread student use is the relatively slow access speeds from off-campus sites. Currently, most course faculty view CAI as a supplemental teaching tool and not a suitable substitute for traditional teaching methods. However, its use may increase as the quality of computer resources improves.

#### VI f CLINICAL TEACHING FACILITIES

Resources: Fifty percent of clerkship education occurs in the MCG hospital, the Ambulatory Care Center, VAMC, or the Children's Medical Center and 50% at community-based sites. The clinical teaching facilities for MCG medical students provide adequate numbers of patients and supervisors. However, the declining hospital census and limited on-campus ambulatory care facilities have stimulated development at additional sites. Based on prior experience, full-time clinical faculty are concerned that the hospital and clinics' infrastructure is inefficient, increasing the time necessary for patient care and resulting in inadequate time for teaching. All SOM-affiliated teaching facilities support and value the educational mission for medical students. The SOM has written affiliation agreements with all of its teaching sites. Family medicine uses a well-established network of 19 community-based sites. In 1994, the medicine and pediatric clerkships did not have community-based experiences for medical students. Since then, the SOM has developed 14 community-based sites that support the outpatient clinical experiences for students on the medicine clerkship and 8 sites for the pediatric clerkship. All sites attract diverse patients with a wide range of medical problems. The state's four medical schools compete for finite clinical teaching sites, so collaborative efforts with the AHEC have been critical for all schools in identifying and developing community-based sites. Although the clinical experiences and evaluation of students among sites are similar, the community-based teaching sites are not recognized equivalently. Because the SOM relies on community-based faculty to teach its students, consistency of recognition has become more important. All community-based faculty who teach in clerkships hold a clinical faculty appointment, receive reduced rates for MCG's continuing medical education courses, receive on-site faculty development opportunities, and earn continuing medical education credits for teaching. However, financial remuneration differs among sites and specialties, a disparity that must be addressed to ensure sustained commitment. Augusta teaching hospitals (MCGH&C, VAMC) support the majority of inpatient educational experiences for all clerkships. The patient information system at the VAMC is excellent and permits access to patients' electronic medical records. The Children's Medical Center provides the clinical practice to meet medical student and resident education needs in pediatrics. The MCG Emergency Department has expanded its services, resulting in patients hospitalized on teaching services and more patients for the emergency medicine rotation.

Primary Care Education: The SOM has increased the community-based learning opportunities for medical students, especially in internal medicine and pediatrics. Decreasing the use of inpatient

settings and emphasizing community based experiences are part of the school's continuing efforts to enhance broadly based primary care clinical education for all students. These community-based affiliations strengthen the primary care teaching base in underserved parts of the state, and hopefully will impact the physician supply in these areas. Administrative and Staff Interaction: The cooperation and communication among the institution, SOM, and affiliated teaching sites are good to excellent. A full-time faculty member, usually a clerkship director or the associate dean for curriculum, visits each affiliated site at least once annually. Clerkship directors communicate regularly with onsite faculty coordinators regarding students' performance and other relevant matters. The senior MCG administration has helped with and supported development of a streamlined faculty appointment process for community-based faculty and coordination of the formal affiliation agreements with all clinical sites. The relationship between the SOM and the VAMC administrations has improved since 1994. VAMC faculty support clinical education, and are involved with student education during the first 2 years. The communication is excellent among the SOM, clerkship programs, affiliated teaching sites, and the regional AHECs. The state AHEC clerkship coordinator, located on the MCG campus, visits all affiliated-teaching sites multiple times during the academic year and facilitates the communication among students, community-based faculty, AHECs, clerkship coordinators, and directors. The AHECs help schedule and arrange faculty development sessions in their area.

#### VII GRADUATE EDUCATION IN THE BASIC MEDICAL SCIENCES

Graduate Programs Evaluation: The School of Graduate Studies governs the basic science graduate programs that include anatomy, biochemistry, molecular medicine, pharmacology and toxicology, and physiology, endocrinology, and microbiology (inactive). The Board of Regents has approved a new program in vascular biology. All graduate programs, accredited every 10 years by SACS, received favorable reviews in the February 2000 accreditation report. The senior vice president for academic affairs is developing a system for internally reviewing all academic programs more frequently. Leadership of the School of Graduate Studies includes the vice president for research and dean of the graduate school, appointed in July 1999; a new position, director of postdoctoral affairs and legal advisor; and the associate dean for graduate studies, appointed in 1999. A common admissions policy and an interdisciplinary first-year curriculum for the biomedical sciences was begun in the fall of 2000. The new curriculum is designed specifically for graduate students, in contrast to the previous model where many graduate programs enrolled their students in the basic science medical courses. Approximately 120 SOM faculty have faculty appointments in the School of Graduate Studies and are available to mentor graduate students. In addition to their mentor, candidates for the PhD degree have a five-person advisory committee. Research is carried out in the Interdisciplinary Research Building and the Sanders Research and Education Building. In 1998-1999, 70 students were enrolled and 10 PhD degrees were awarded. PhD students are awarded stipends and have reduced matriculation fees throughout their tenure in the graduate school. The School of Graduate Studies provides 3 years of competitive stipend support; either the major advisor or the student's graduate program provides support for the remaining years. Impact on Medical Education: Graduate students have minimal impact on medical student education but have an important impact on recruitment and retention of high-quality basic science faculty and their research productivity. Graduate students have comprised less than 5% of the enrollment in first-year medical courses. This load was reduced further with the advent of the interdisciplinary graduate curriculum. Graduate students do not teach medical students, with the exception of three advanced level students who participate in the gross anatomy laboratory. The graduate education programs make their major contribution to the SOM and its objectives by aiding in the recruitment of good basic science faculty and supporting the quality of the research programs. The graduate school and the SOM research mission are closely linked. Graduate student education and dissertation research are integral parts of faculty members' research programs.

#### VIII GRADUATE MEDICAL EDUCATION

Clinical Resources: Clinical resources for graduate medical education range from adequate to exceptional, depending on the service. The Children's Medical Center and the VAMC provide state-of-the-art support services. The patient base is at least sufficient, and in many cases ample, to meet accreditation standards for each residency program. Impact on Medical Education: MCG residents have a major impact on education for third- and fourth-year medical students, especially on the inpatient services, where they spend considerable time with the students. Teaching takes place in various settings, such as work rounds, on call, during patient interactions, and through informal and formal teaching sessions, conferences, and grand rounds. Students complete a standard evaluation form for all residents and faculty with whom they work, and residents get feedback about their teaching in most core clerkships. Workshop sessions on how to teach are given for residents in internal medicine, pediatrics, and family medicine, and are encouraged for the other departments. The associate dean for graduate medical education organized the first full day program directors' education retreat in August 2000. A recent SOM student survey revealed that students felt faculty do the most teaching, followed by interns and junior residents, then senior residents and chiefs. At ambulatory and community-based sites that do not have residency programs, attending physicians supervise the students on core clerkships. At sites that have residents, teaching is done by both residents and attending physicians. Program Changes: Most residencies anticipate no immediate changes in their status. The RRC downsized the urology program to one resident per year, beginning in 1999. The anesthesiology program will increase the number of residents from 22 to 29 over the next 3 years.

#### IX CONTINUING MEDICAL EDUCATION

Program: Continuing Medical Education (CME) is a major responsibility of the MCG Division of Continuing Education and Health Communication. The same person serves as the director of the Office of Continuing Medical Education and the Division of Continuing Education. SOM faculty and staff, community-based health care practitioners from throughout Georgia, and national or international health care practitioners participate in the division's high-quality continuing education programs. MCG offers or accredits a wide range of CME programs offered on campus, at selected locations in the state, or through advanced telecommunication technology.

Activities: Since 1993, mandatory CME requirements have been in effect for physicians, and demand for CME continues to be strong throughout the state. MCG offered 953 Category I programs in 1998-1999, and 15,575 persons participated, with physicians representing 85% of the total. That year, health care professionals from 138 of Georgia's 159 counties registered for Category I or II continuing education. Residents of 47 states and the District of Columbia and 83 non-U.S. residents also participated in MCG-sponsored continuing education. CME activities at the MCG SOM are closely aligned with the institution's mission and objectives. Impact on Students: Medical students have opportunities to participate directly in CME activities through grand rounds, sponsored lectures, and other formal presentations.

#### X RESEARCH

Research Activities: For FY99, MCG had more than \$26 million in funding for research, including revenue from the federal government, foundations, and the commercial sector. For FY00, sponsored funding reached \$28.5 million. However, extramural funding should be considerably larger to fulfill the institutions' research aspirations. MCG is strong in the following research areas: biomaterial tissue interaction, cancer, cardiovascular disease, developmental biology, DNA damage and repair, epithelial cell biology, molecular immunology, neuroscience, sickle cell disease, and vision. The MCG Biomedical Research Council has targeted these areas for future growth. A detailed strategic plan is being developed for each area, including a blueprint for recruiting faculty who will primarily conduct research. The 5-year goal is to at least double the current level of extramural funding.

Resources: The institution is expanding its research infrastructure to support its goals. For the last 5 years, MCG has purchased approximately \$1 million of equipment per year. The institution has numerous core laboratories and services, of which many have been supported with funds from the

Georgia Research Alliance. Research space totals 144,686 square feet and 90,000 square feet will be added with a new research facility. Basic science faculty feel that the number of graduate students in biomedical sciences is not adequate for MCG's research and education missions. As part of efforts to enhance the graduate program, MCG approved a common admissions program for students interested in the biomedical sciences. Students will take the same curriculum in year 1, then select a mentor and program at the end of the year. As of December 1999, 70 graduate students and 98 postdoctoral fellows were working with SOM faculty. MCG has intramural programs to support research and assist faculty with procuring extramural support.

Impact on Medical Students: Medical students have multiple opportunities to participate in research activities, such as the MD/PhD program, the Dean's Summer Research Fellowship Program, and many department-based research projects.

#### XI a BASIC SCIENCE DEPARTMENTS

Leadership: MCG has four basic science departments: biochemistry and molecular biology, cellular biology and anatomy, pharmacology and toxicology, and physiology. Cellular biology and anatomy and physiology are under the stable leadership of chairs appointed since December 1999. The biochemistry chair will retire June 30, 2001, and a search for a new chair is in progress. The chair of pharmacology and toxicology continues to provide strong leadership and is vice chair of the Executive Faculty Advisory Committee. The Department of Microbiology and Immunology was dissolved after the 1994 LCME visit and new faculty with expertise in the field were hired, particularly for the Institute of Molecular Medicine and Genetics. The dean of the SOM instituted a departmental review process in 1995, using a review team consisting of external experts. All basic science departments except physiology have been reviewed.

Faculty: Basic science faculty are optimistic about departmental leadership, viewing their recently appointed chairs as leaders who will have rejuvenating effects on their and the other basic sciences departments. However, they are concerned about maintaining excellence in teaching and research. Approximately 36% of the basic science faculty chose to retire between March 2000 and December 2001. The impact on individual departments varies, with about half of the physiology faculty retiring, but only two from pharmacology. Departments with a disproportionate number of senior faculty were impacted the most. This creates an opportunity to hire junior and mid-level faculty, addressing a concern raised during the 1994 self study. However, it also raises concern about meeting teaching commitments. As a result, the Executive Faculty Advisory Committee discusses teaching expectations when each new position is presented for approval. All newly hired faculty will be expected to contribute to the education mission. Plans were completed in June 2000 for meeting next year's teaching commitments. New course directors were identified promptly when current directors announced their retirement plans. A research strategic planning process identified areas that will be emphasized as new faculty are recruited.

Education: In April 2000, 67 faculty held primary appointments in basic science departments. The departments are committed to providing excellent education for medical, graduate, and allied health students, while achieving or maintaining prominence in scientific research. Their departmental and interdisciplinary leadership in education and research reflects their commitment. Since the early 1990s, the chairs and course leaders increasingly have supported interdisciplinary curricular planning and teaching. Educational gaps were identified and filled, redundancy eliminated, basic science and clinical education better integrated, and small-group activities increased. A basic scientist-educator was hired in cellular biology and anatomy to help meet the department's large teaching commitment and contribute to educational scholarship, an indication of the department's commitment to education. The clinical microbiology course director is a renowned infectious disease clinician and educator.

Generally positive student evaluations of courses and faculty, above-average student performance on the USMLE (1994-1999), and strong performance assessments from residency program directors attest to the quality of teaching and student reaction to the evolving curriculum. Course

directors review all student evaluations before sending them to faculty and providing suggestions for changes. Basic science faculty are effective in specialty-specific teaching and as small-group facilitators. They are members and leaders of education-related committees, such as admissions, curriculum, and promotions. A new core course for doctoral students in the School of Graduate Studies strengthens interdisciplinary graduate education. Resources: In general, the departments consider their finances adequate and teaching facilities good. For departmental and interdepartmental courses, mission-based management will help link funds to teaching regardless of the department or school in which the teaching is done. All departments and courses now have access to a block of small-group teaching rooms. The large lecture halls have good to excellent equipment. Currently, research space is distributed unevenly among the four departments, but that will change due to early retirement, new research groups, and new faculty hires. Mission-based management will help allocate research space in relationship to funding. Student Research: The SOM strives to excel in teaching and research, and to make research opportunities available for interested students. Students interface with basic research faculty through the following activities: the Dean's Student Fellowship Program for students between their first 2 years of medical school, the MD/PhD Program, elective courses, and research seminars. Some students have taken a 1-year leave of absence to pursue research or participate in NIH summer programs. All students who desire a research experience are accommodated. Scholarly Activities: Basic science faculty have research experience and expertise in many areas, as discussed in the committee report. Their scholarly activities include obtaining extramural funding, conducting biomedical research, publishing scholarly articles in scientific journals, hosting and participating in scientific conferences, and participating in the scientific review process.

#### XI b CLINICAL SCIENCES DEPARTMENTS

Leadership: The SOM has 12 clinical science departments: anesthesiology, emergency medicine, family medicine, medicine, neurology, obstetrics and gynecology, ophthalmology, pathology, pediatrics, psychiatry and health behavior, radiology, and surgery. Since the 1994 LCME visit, the emergency medicine section in the Department of Surgery became a department (1996) and the Department of Dermatology became a section (1994) in the Department of Medicine. All clinical departments except emergency medicine, obstetrics and gynecology, and ophthalmology have been reviewed by a team of external experts at the time of this writing. Clinical and educational expertise is excellent, but scholarly activity varies among departments. Interdepartmental basic science/clinical research collaboration has increased somewhat, and institutional research strategic planning has identified foci of interdisciplinary research emphasis. Interdepartmental planning, enhanced collaboration between basic science and clinical chairs, and collaboration among the clinical departments attest to effective leadership. The chairs have played essential roles in creating an integrated health care system. Permanent chairs are in place in emergency medicine, family medicine, obstetrics and gynecology, pediatrics, and surgery. The chair of psychiatry assumed his position in August 2000. The chairs of neurology, pathology, and radiology relinquished their positions to interim chairs before their scheduled retirements.

Medicine has had an interim chair since January 2000. The long-term ophthalmology chair will remain in his position during the search for his successor. These staggered recruitments and retirements are facilitating smooth leadership transitions. Searches are well underway for neurology and ophthalmology chairs. Faculty: Recent trends include (1) more faculty hired on the non-tenure track, which emphasizes clinical and educational, rather than research and other scholarly productivity, (2) less original scientific research, (3) increased clinical productivity, income, and care delivery sites, (4) increased dependence on patient care revenue, and (5) continuous departmental efforts to provide enough patients for education, including increasing the numbers of patients and community-based volunteer faculty. Mission-based management, the restructured Physicians' Practice Group, MCGHI, and early retirement will impact faculty recruitment, retention, activities, and clinical education. Education: The clinical departments have the experience and expertise to maintain the quality of existing programs during faculty

recruitment. As an indication of their commitment to education, MCG students perform at or above the national average on the USMLE Step 2 examination and match in postgraduate residency positions of their choice. MCG has a full spectrum of residency programs, plus fellowships in many disciplines. All but two programs (neurosurgery and cardiothoracic surgery) are fully accredited. Residency positions uniformly are filled with graduates who have good credentials. Residents and fellows are involved in student education and students generally comment favorably on their teaching. Resources: Departmental budgets stem primarily from three sources: state resident instruction (RI) funds, clinical care, and faculty practice income. Departments receive additional funds through extramural research and industrial contracts, service contracts, and sponsored instructional funds. Funding from SOM lines has declined for several departments since 1994, secondary to redirection as well as loss of RI funds used as salary support for retiring or departing faculty. Hospital funding is expected to decrease in the near future. Clinical revenues increased for FY00, but department expenses also increased. Clinical charges increased 5% over FY99, collections increased 8%, and patient visits increased 8%. Since 1994, the ophthalmology clinic has been expanded and renovated; pediatrics opened the new Children's Medical Center and is renovating the Dugas building for administrative office space; surgery opened an ambulatory surgery suite, an anesthesia preoperative suite, and an endoscopy clinical suite; and radiology opened space in the Ambulatory Care Center. Departments have sufficient space to support their core missions. Scholarly Activity: As a result of increased clinical expectations, faculty spend more time in clinical practice, albeit often with learners. The number of scholarly publications showed a downward trend from 1999-2001. Mission-based management assessments showed that considerable clinical research and other scholarly activity had been supported with RI funds, so unfunded research generally is no longer supported. The SOM's recognition of a broader definition of scholarship and its products, and enhanced attention to professional development in the education area should help clinical faculty enhance their scholarly activity.

## SUMMARY

### Strengths

1. The SOM is committed to maintaining a curriculum that is developed and evaluated in concert with national trends. The curriculum emphasizes (a) principles that underlie clinical practice, (b) integration of knowledge in the basic and clinical sciences, (c) patient-centered learning, (d) skills of life-long learning, and (e) professionalism.
2. The SOM provides clinical education experiences that are well balanced between the hospital and geographically separate, community-based sites. The combined clinical teaching facilities give students experience with diverse patient populations and health problems.
3. The SOM uses multiple methods to assess students, including standardized, behavior-based clinical assessment tools; small-group participation; bedside observation; standardized patient evaluation; open-ended, short-answer examinations and essays; internally developed multiple-choice examinations; and externally developed NBME subject tests.
4. Since 1994, the SOM has developed an integrated, centralized curriculum management and evaluation process.
5. The new Essentials of Clinical Medicine course sequence combines nine free-standing courses into an integrated continuum that spans the first 2 years.
6. Stability in the dean's office from 1994 to 2000 allowed new management structures and policies to be implemented that provide continuity during the current transition.
7. The faculty support the mission-based student admissions process, which is free of external influences and committed to enhancing student diversity and attracting highly qualified candidates. The Admissions Office works with Student Affairs and Special Academic Programs and with pipeline initiatives to attract students who will help meet healthcare needs in the state of Georgia.

8. The Center for Educational Excellence was recently established to support teaching skills development, educational scholarship, and advanced education opportunities.
9. MCG and SOM administrative units have been reorganized since 1994, clarifying lines of authority, improving communication and governance, and creating a clinical enterprise management system.
10. MCG identified and is focusing on 10 interdisciplinary, clinically relevant research priorities.
11. Results from a residency program directors' survey and the AAMC graduation survey validate that SOM graduates are well prepared for residency training.
12. The library has expanded electronic resources to support distance users, remote learners, outreach, and continuing education.

#### Concerns

1. Leadership: SOM faculty, staff, students, and alumni are concerned about the impact of institutional and school leadership transitions while a president, SOM dean, and several SOM chairs are recruited. These concerns involve timing of recruitments and whether current strategic plans will endure with new leadership.

Recommendation: The Board of Regents should appoint a new president expeditiously, followed by prompt appointment of a dean and sequential appointment of department chairs.

Recommendation: MCG and the SOM should continue strategic planning in education, research, and clinical care, implement the resulting plan, and assess the outcomes.

2. Medical School/University Administration: Historically, authoritative leadership characterizes the relationship between the president and senior-level administrators. Their role in institutional planning, advising the president, and interacting with individuals who impact the institution has been more limited than if these activities had been more interactive. The faculty at large perceive the need to have more influence on decisions and policies beyond the departmental level.

Recommendation: The SOM administration should encourage the Board of Regents and MCG administration to communicate in a timely manner those issues relevant to the school's mission and function.

Recommendation: The SOM administration needs to foster two-way communication and participatory management with the faculty.

3. Faculty Size: The decreased faculty size resulting from ERP and natural attrition has caused widespread concern regarding the SOM's ability to meet its educational, clinical, and research responsibilities and generate adequate clinical revenue.

Recommendation: MCG should apprise the Board of Regents regarding the unique and necessarily expensive components of medical student education to assure that resources are adequate to meet the SOM's tripartite mission.

Recommendation: The SOM should make better use of existing resources by fully implementing the recently developed Executive Faculty Advisory Committee process based on school-wide needs for reviewing and filling faculty positions, complete mission-based analysis of faculty time needed to educate students, and use the results to ensure adequate time allocation and compensation.

4. Clinical Infrastructure: Based on their prior experience, clinical faculty are concerned that the hospital and clinics infrastructure is inefficient, resulting in cumbersome patient care and inadequate time for teaching.

Recommendation: MCGHI should fully implement its strategic plan that the MCGHI Board of Directors approved in June 2000.

5. Budget: The faculty have budgetary concerns, including:

- . overall flat net clinical incomes despite increased volume of patient care, . whether enough state funding will be available to support education, . the sources of compensation for indigent care,

Recommendation: MCGHI and the Board of Regents need to fully implement their recently established agreements.

- . current research funding is inadequate to support the desired research enterprise,

Recommendation: MCG should fully implement the MCG Strategic Research Plan.

- . how mission-based management will impact on their activities and salary sources.

Recommendation: The SOM should implement a process where faculty and chairs agree annually on expectations and outcomes.

Recommendation: The SOM should link expected activities with appropriate funding sources and reward faculty based on whether they meet or exceed the expectations.

6. Clinical Teaching Sites: Faculty are concerned about maintaining an adequate number of clinical teaching sites, especially those that are community-based. This concern stems from

- . remuneration issues: Core clerkship community-based teaching sites are not recognized equivalently.

Recommendation: The SOM should reward all community-based volunteer faculty equivalently for comparable contributions.

- . competing demands of clinical practice and teaching.

Recommendation: The SOM should expand faculty development workshops on how to incorporate students into a busy practice.

- . competition for sites among the state's medical schools.

Recommendation: The SOM should implement a coordinated system involving the four Georgia medical schools and the state's AHEC for identifying, recruiting, and maintaining community-based teaching sites.

Include the Georgia Board for Physician Workforce and AHEC in the planning process.

- . inconsistent standards for promotion and retention.

Recommendation: The SOM should continue to develop and implement consistent standards for promotion and reappointment.

7. Faculty Rewards: The faculty are concerned about the recognition and reward system, including

- . the relationship between responsibilities and promotion/compensation.

- . expectations for promotion/tenure do not seem compatible with the increased pressure for clinical productivity.

- . the perception that they are valued more for the revenue they generate than for their educational contributions to the institution and career development.

- . a perceived disparity in prestige between the tenure and non-tenure track.

- . concern that clinical faculty making scholarly contributions are not rewarded because scholarship is narrowly defined.

Recommendation: The SOM should complete, approve, and implement the guidelines that more clearly define expectations and outcomes for promotion and tenure currently under consideration by the Executive Faculty Advisory Committee.

Recommendation: The SOM should complete the in-progress work on better definition of the faculty reward system, including promotion and tenure expectations, creation of professional tracks appropriate for academic progress of faculty whose primary contribution is teaching, clinical care, or research. Strive to implement three new tracks: clinician-educator, educator-clinician, and basic science-educator.

8. Assessment:

- . The SOM needs a more comprehensive, vertically integrated clinical skills assessment process for students.

Recommendation: The SOM should continue to expand the standardized patient, clinical skills, teaching, and assessment program.

- The SOM needs an easily accessible full-service tracking system for students.

Recommendation: The SOM should continue to enhance the student tracking system.

9. Library: The quantity of current journal subscriptions is below benchmark levels and, without increased annual revenue, the library may have to reduce its collection further.

Recommendation: MCG should continue to provide sufficient resources to support the needs of the library and its users.

10. Diversity: The SOM remains concerned that the student body and faculty do not adequately reflect the ethnic diversity of the state and region.

Recommendation: The SOM should continue supporting existing high school, college, and pre-matriculation programs.

Recommendation: The SOM should continue allocating faculty practice funds to scholarships administered by the Stoney Medical, Dental, and Pharmaceutical Society.

Recommendation: The SOM should continue support for identifying, nurturing, recruiting, and matriculating additional qualified underrepresented minority students.

Recommendation: The SOM should coordinate its efforts to recruit qualified underrepresented minority faculty.

11. Research and Scholarly Activity: The current levels of scholarly activity and extramural research funds are inadequate.

Recommendation: Implement the plan for hiring new research faculty.

Recommendation: The SOM should encourage collaborative research efforts between basic scientists and clinical faculty to promote scholarly activity and increase extramural funding.

Recommendation: The SOM should encourage more collaboration with the other research universities in the university system.

12. Scholarships: Limited availability of scholarships diminishes the school's ability to attract many desirable students.

Recommendation: The SOM should encourage the MCG Foundation to increase its scholarship funding and to designate scholarships as a fund-raising priority.

Recommendation: The SOM should continue to work with the MCG Alumni Association to increase scholarship funding.

13. The applicant data that are used for assessing diversity are not in a readily available form for analytical processing.

Recommendation: Incorporate the diversity data into the AMCAS 2002 application database in a format that will enable statistical processing for individuals and groups. Use these data for evaluating the effectiveness of the new admissions criteria for enhancing class diversity.

14. Food services: Student surveys indicate dissatisfaction with the variety and nutritional content of on-campus menu choices and the limited hours of service in the cafeteria and student center.

Recommendation: MCG should provide convenient on-campus access to food services for evening and weekend meals that have a variety of nutritious options. Ideally, these services should be readily available to students, faculty, staff, and patients and their families.