

**Advancing the Health of Our Community
Strategic Plan 2010
UMKC School of Medicine
2010-2015**

Mission

The mission of the UMKC School of Medicine is to provide and foster excellence, innovation, and scholarship in education, research and medical care.

Vision

The vision of the UMKC School of Medicine is to be a leader in academic medicine through innovative programs and vibrant community partnerships.

Introduction and Background

The UMKC School of Medicine opened in 1971 as the result of over a decade of community efforts to establish a medical school in Kansas City, Missouri. Both the history and the current mission and operations of the UMKC School of Medicine are deeply rooted in the community at the local, state, national and international levels. As part of a growing academic health sciences campus in the urban core of Kansas City, Missouri, the School advances the health of the community through education of physicians and other health care professionals, through research and application of new knowledge to health conditions that affect our community, through direct service in the community, and through economic development. In the nearly four decades that the School has been in existence, all of the four mission areas—education, research, service, and economic development—have grown and matured along with the Hospital Hill campus where the School is located. The University of Missouri-Kansas City is a public, urban-serving, research and doctoral university; both it and the School of Medicine are poised to make an even greater contribution to “**Advancing the Health of Our Community**” in the decades to come.

School of Medicine Education Programs: The UMKC School of Medicine was founded on an innovative medical education system based on: early and continuous clinical experiences, humanities woven throughout the curriculum, small group learning communities centered around a physician “docent,” continuous assessment of student progress, and an emphasis on application of the basic sciences in clinical medicine. The combined degree program allows the school to accept the majority of its students directly out of high school and to develop the skills, knowledge, and attitudes of these students longitudinally over six years with a goal of instilling the highest standards of medical professionalism, clinical competency, humanism, and altruism during a highly formative period of their lives. The community-based setting has freed the school of fiscal and administrative concerns over the management of hospitals and practice plans. Time has proven the value of the innovative concepts and format of the original design of the medical school outlined in the original *Academic Plan*¹. The history and the first thirty-five years of education outcomes were recently published².

In addition to the baccalaureate/MD program, the School also admits three other categories of students seeking the MD degree: students who already have a baccalaureate degree and complete the last four years of the program as “MD-only” students; students who have a DDS degree and complete a combined MD/Oral Surgery residency program; and a limited number of transfer students who have completed their first two years of medical school at an accredited program. Over the past decade, all programs leading to the MD degree combined have resulted in approximately 90 graduates per year. Residency choices of students span the specialties and subspecialties, with approximately 40% initially entering the primary care fields of internal medicine, family medicine, pediatrics and medicine/pediatrics. In addition, 45% of graduates remain in the state of Missouri and the counties surrounding the two largest metropolitan areas of Kansas City and St. Louis. The school will continue its strong commitment to increasing the number of graduates of the medical school who serve the healthcare needs of Missouri.

Beginning in 2008, the school accepted its first students into graduate degree programs. The Masters of Science in Anesthesiology leading to a career as anesthesiologist assistants opened in 2008, and the Masters of Science in Bioinformatics opened in Fall 2009. The MS in Bioinformatics, with tracks in computation, genomics and clinical research, is a joint program with the School of Computing and Engineering and the School of Biological Sciences. Masters degree programs, especially in allied health are, another means to meet pressing local and regional healthcare needs.

The School of Medicine is the institutional sponsor for over 40 residency and fellowship programs accredited by the Accrediting Council for Graduate Medical Education (ACGME) conducted at affiliated hospitals. Today, there are nearly 500 residents and fellows in these programs at six affiliated hospitals. Graduates from these programs are a major source of physicians in Kansas City and the surrounding regions.

In 2008, the School of Medicine became accredited by the Accrediting Council for Continuing Medical Education (ACCME) for the first time to offer continuing medical education (CME) programs. Previously, the School relied on affiliated hospital CME departments to provide educational credits for continuing education activities held for faculty and by faculty. In looking at the future directions of required competencies and life-long learning needed for patient care and maintenance of licensure and certifications, it was decided that the School should develop these programs as part of its longitudinal medical education activities. Additionally, these programs provide infrastructure for faculty development programs in scholarship in clinical practice, education and research.

School of Medicine Research Programs: The early efforts of the school were directed toward growth and building of medical education programs on the base of strong clinical affiliations. Over the past decade, scholarly research has become a major goal in order to discover and apply new knowledge to improve human health, to develop and maintain a community of scholars in support of a robust learning environment, and to provide economic development in the region. Concurrently, there has been increasing

emphasis on research within the university as a whole and the region. The School of Medicine now has 22 endowed chairs and professorships, more than any other academic division in the University of Missouri System, and the research funding has increased exponentially. The current total extramural funding in grants and contracts in the School has increased four-fold over the past decade and is now \$23 million annually. Total federal funding represents approximately half of the total. Research efforts are focused toward impact on community health conditions, especially in areas that link to areas of clinical strength. These efforts are designed to build and utilize large databases that go beyond “translational” research in general, and to have impact on the health of our community in particular. Health impact may be either at the individual level—i.e. “personalized medicine”—or at the population level. Additionally, it may be directed at either prevention or diagnosis and treatment of disease.

School of Medicine Community Engagement: The UMKC School of Medicine is an essential community partner in advancing health through education and training of physicians and other healthcare providers, through research and application of new knowledge to address health issues, through direct provision of care (including volunteer work and service learning), and through economic development and stability in the urban core. Much has changed in the nearly 40 years since the School’s founding, but the values that relate to a commitment to serve the community have not.

The community has called for an overall strategic plan from UMKC³, including in the life and health sciences. The School of Medicine is ready to deepen this partnership with the community to advance the health of our community. The following strategic plan outlines the specific goals and objectives of the School for 2010-2015. These goals and objectives are designed to align with the overall strategic plans of the University of Missouri System and the University of Missouri-Kansas City.

References

1. Dimond EG. *The Academic Plan for the School of Medicine, University of Missouri-Kansas City*. Last updated in 2009. <http://www.med.umkc.edu/organization/default.html>
2. Drees B, Arnold L, Jonas H. The University of Missouri-Kansas City School of Medicine: Thirty-five years of experience with a non-traditional approach to medical education. *Academic Medicine*, 2007. 82:361-369
3. Time to Get It Right: A strategy for higher education in Kansas City. Greater Kansas City Community Foundation, 2005.

Summary of Goals and Strategic Objectives

Goal 1: The UMKC School of Medicine will foster and support a **vibrant health science learning community** on its Hospital Hill Campus for students, residents, faculty, staff, and community partners. The learning environment will consist of an outstanding academic program and experiences, comprehensive scholar support and a campus culture and environment that promotes student, resident, faculty and staff engagement and community participation.

Specific Objectives:

1. Recruit a highly qualified and diverse faculty, staff, resident and student body.
2. Foster a climate for scholar success leading to enhanced retention of faculty, staff, residents and students.
3. Prepare graduates to enter careers of their choice, including academics, disciplines of high need, and underserved communities in Missouri.
4. Enhance interdisciplinary learning and community engagement opportunities.

Goal 2: The School of Medicine will lead in **innovative medical education programs, including education programs for medical students, graduate students, residents, faculty, and community physicians.**

Specific Objectives:

1. Implement interdisciplinary, competency-based education programs across the continuum of medical education (students, residents, faculty, and community physicians), including emerging areas (e.g. practice assessment, patient safety, and quality of care).
2. Enhance performance assessment of learners.
3. Implement faculty development programs to enhance teaching and assessment skills and promote a culture of scholarship in education.

Goal 3: The School of Medicine will develop **strong research and scholarly programs** that improve the health of our community **with an emphasis in applied translational research to Prevent Disease, Personalize Medicine and improve Population Health.**

Specific Objectives:

1. Promote growth of research and scholarly activity in targeted areas with an emphasis on Preventive, Personalized and Population Health Research.
2. Promote a culture of research scholarship among our faculty.
3. Promote research participation among learners.
4. Promote scholarship in clinical practice and community engagement.

EXPANDED DESCRIPTION OF GOALS AND OBJECTIVES

GOAL 1: VIBRANT LEARNING COMMUNITY

Goal 1. The School of Medicine will foster and support a **vibrant health science learning community** on its Hospital Hill Campus for students, residents, faculty, staff, and community partners. The learning environment will consist of outstanding academic programs and experiences, comprehensive scholar support and a campus culture and environment that promote student, resident, faculty and staff engagement and community participation.

Specific Objectives:

1. Recruit a highly qualified and diverse faculty, staff, resident and student body.
2. Foster a climate for scholar success leading to enhanced retention of faculty, staff, residents, and students.
3. Prepare graduates to enter careers of their choice, including academics, disciplines of high need, and in Missouri communities.
4. Enhance interprofessional learning and community engagement opportunities.

Background

Both national and state of Missouri data support the need to train more physicians and non-physician healthcare providers to address urgent workforce needs. This workforce, in addition to a high degree of technical competence, will need to be able to work well in teams, be responsive to community health needs, and maintain personal wellness. The best preparation for this workforce will be in the setting of an ideal learning environment that prepares students, residents, faculty and staff for life-long personal career success as well as being responsive to the community's health. The strategic plan for the learning community was informed by the databases and self studies in preparation for the 2010 Liaison Committee on Medical Education (LCME) Accrediting Council for Graduate Medical Education (ACGME), and (Accrediting Council for Continuing Medical Education (ACCME) site visits, faculty and student surveys, as well as national literature on interdisciplinary education, the learning environment, and workforce needs.

The UMKC School of Medicine was founded in response to community physician workforce needs and has a long history of team-based learning through the Docent System of education.

The principle of community-responsiveness and the lessons learned from the education programs to date help inform the further development of a **vibrant health sciences learning community on Hospital Hill**.

Action Steps and Measures

Specific Objective 1:

Recruit a highly qualified and diverse faculty, staff, resident and student body.

A diverse learning and working environment is comprised of, but is not limited to, differences in racial and ethnic origin, socioeconomic background, rural and urban communities, geographic origins, academic backgrounds, cultural and religious backgrounds, as well as both men and women who can contribute to program success through different personal experiences. This variety of backgrounds enhances the educational environment of a medical school, enriches the working environment of staff, and assists with the preparation of a health care workforce who can care for an increasingly diverse population. Especially in the State of Missouri, the physician and non-physician providers must be able to care for both urban and rural populations.

Specific Actions

- Holistic, individualized, competitive application process for admission to all educational programs leading to the MD degree, masters degrees, residency programs and any future graduate programs.
- Identify and implement strategies to recruit and retain a diverse faculty and staff.
- Enhance existing and develop new recruitment pipelines for all educational programs, including BA/MD, MD-only, GME, masters degree programs, including partnerships with regional liberal arts colleges.
- Incorporate a cultural competency curriculum and assessment in educational programs.
- Foster an institutional culture of collegiality and an environment of success.

Measures

Achievement of this objective will be measured through the following metrics:

- Demographics review of applicant pools, offers of admission and matriculants in all educational programs.
- Demographic analysis and assessment of faculty and staff, including time in rank to promotion and turnover.
- A formal assessment of cultural competency of the curriculum as a whole will be in place.
- Employee, student (i.e. Graduation Questionnaire), staff and faculty satisfaction surveys will be conducted regularly to assess our progress and to enhance support services as needed.
- Enhance our program evaluation plans for essential and successful pipeline programs.

Specific Objective 2:

Foster a climate for scholar success leading to enhanced retention of faculty, staff, residents and students.

Specific Actions

- Enhance the undergraduate faculty mentoring system for BA/MD students.
- Implement wellness programs for students, residents and staff.
- Develop career ladders and ongoing training for faculty and staff.
- Establish a formal faculty development office to enhance our faculty's skills in teaching and research
- Develop and implement a mentoring system for new department chairs, directors, docents, assistant and associate deans, and other key administrators.
- Develop enhanced internal communication plans for faculty, staff, students, and residents.

Measures

Achievement of this objective will be measured through the following metrics:

- Attrition in the BA/MD program will be less than 15%
- The school will graduate an average of 105 medical students annually
- Practice location of graduates of residency programs
- A program evaluation plan will be in place for faculty and staff development programs
- Increased participation of students, staff, residents and faculty in wellness programs.

Specific Objective 3.

Prepare graduates to enter careers of their choice, including academics, disciplines of high need, and underserved communities in Missouri.

Specific Actions

- Develop and fully implement a new career advising plan for medical students and residency graduates.
- Develop a curriculum in preparation for practice for residents.
- Develop "pipelines to practice" in Missouri communities, with a program evaluation plan.
- Develop and implement a comprehensive financial literacy program for students. Offer financial literacy training for residents, faculty and staff

Measures

Achievement of this objective will be measured through the following metrics:

- Improved satisfaction regarding career advising on the AAMC Graduation Questionnaire and other surveys.
- National Residency Match Program statistics.
- Evaluation of resident satisfaction surveys
- Development and evaluation of databases of practice location and specialty choice of alumni, masters degree students, and graduates of residency programs.
- Develop annual report format for UMKC School of Medicine's contributions to state healthcare workforce needs, as well as student financial aid and medical education debt data.
- Compilation of annual alumni engagement measures (volunteer hours, annual gifts, etc.).

Specific Objective 4:

Enhance interprofessional learning and community engagement opportunities.

Specific Actions

- Develop co-curriculum activities with other health UMKC science schools (e.g. ethics, informatics, health disparities, end-of-life care).
- Develop joint faculty development programs with other health science schools, particularly, Nursing, Pharmacy and Dentistry.
- Develop joint educational and student affairs opportunities, such as international electives, wellness programs, community service, and student support groups.
- Develop a more formal student service learning program.
- Initiate enhanced community partnerships in a public health area for ongoing community engagement research and service learning programs.

Measures

Achievement of this objective will be measured through the following metrics:

- Association of Academic Medical Centers (AAMC) Graduation Questionnaire (GQ) and evaluations from a student affairs annual survey will indicate satisfaction with co-curricular programming among scholars.
- Annual report of community engagement activities by all learners.
- Interprofessional training opportunities are co-listed on all the health science school websites and are a part of the SOM curriculum. Develop a comprehensive database of student service learning participation activities.

GOAL 2: INNOVATIVE EDUCATION: UNDERGRADUATE, GRADUATE, AND CONTINUING MEDICAL EDUCATION

Goal 2. The School of Medicine will lead in **innovative medical education programs, including education programs for medical students, graduate students, residents, faculty, and community physicians.**

Specific Objectives:

1. Implement interdisciplinary, competency based education programs across the continuum of medical education (students, residents, faculty, community physicians), including emerging areas (e.g. practice assessment, patient safety, and quality of care).
2. Enhance performance assessment of learners.
3. Implement faculty development programs to enhance teaching and assessment skills and promote a culture of scholarship in education.

Background

The UMKC School of Medicine has a nearly 40-year history and tradition of innovation in medical education based on the *Academic Plan*. This experience, combined with strong clinical affiliations and an extraordinarily large, complex and diverse patient base positions the School well to continue innovations to educate and train physicians and allied health care providers with the skills needed for practice over the next four decades.

Responding to recent calls for reform in medical education, as well as to the prospect of health care reform, the School is uniquely positioned to direct its focus on competency-based education programs that strengthen historic knowledge and skills training, while advancing emerging clinical and academic competency in such areas as practice assessment, patient safety, quality of care, and cultural competency.

Key strategies to advance our education programs in these areas of critical competency are: 1) to merge objectives across disciplines and across the continuum of medical education, particularly undergraduate medical education, graduate medical education, and continuing medical education, 2) to incorporate emerging areas that graduates need to practice medicine in the future, 3) to make all objectives competency-based, 3) to implement performance-based milestones of competency that signal readiness to advance to the next level of training, and 4) to develop a culture of scholarship (including research) in education among the core faculty engaged in medical education.

Action Steps and Measures

Specific Objective 1:

Implement interdisciplinary, competency based education programs across the continuum of medical education

Specific Actions

- Merge the UMKC undergraduate medical education competencies with the Accreditation Council for Graduate Medical Education (ACGME) competences and when appropriate, align other graduate program competencies.
- Support, develop, share and implement curricula in areas of core competency across specialty disciplines. (Practice assessment, patient safety, and quality improvement will be targeted for development first.)
- Determine promotion for students, residents and fellows by the achievement of competency milestones.

Measures

Achievement of this objective will be measured through the following metrics:

- Required courses and clerkships at the undergraduate level, all graduate medical education training programs, and applicable graduate programs will have curricula, goals and objectives, and evaluation programs that are organized under a uniform set of core competencies.
- The percentage of residency program directors who rate the preparation the School offers its graduates for residency as better or much better than other schools' will rise with respect to each competency area.
- Educational programs covering all elements of the approved curriculum in patient safety for undergraduate and graduate medical education are available to all training programs.
- Patient safety education is integrated into the curriculum of all ACGME accredited training programs (confirmed by internal review).
- A faculty leader for education in practice assessment and quality of care is in place.
- Each required clerkship has guidelines that clearly identify expected performance measures.
- Each residency and fellowship has promotion guidelines that clearly identify expected performance measures.
- Allied Health programs (e.g. the Masters of Science in Anesthesiology) have promotion guidelines, performance measures and plan for implementation.

Specific Objective 2:

Enhance performance assessment of learners.

Performance-based assessment exercises will be available to test learners' attitudes, knowledge, and skills related to core competencies across the continuum of medical education (undergraduate, graduate, continuing education), allied health education, and graduate studies. (Performance-based Assessment is defined within this document as assessment based on observation of learners' behaviors related to competency-based tasks. PBA often involves the use of standardized tasks or scenarios, standardized criteria and checklists, and standardized patients and/or other simulation technique).

Specific Actions

- Performance-based assessment exercises will be available to test learners' attitudes, knowledge, and skills related to core competencies across the continuum of medical education – undergraduate, graduate, continuing education, allied health education, and graduate studies.
- Milestones will be used to determine the promotion of medical students and residents.
- The Youngblood Skills Laboratory will have the administrative structure and equipment necessary for the education of learners, as well as faculty adequately trained in equipment use.

Measures

Achievement of this objective will be measured through the following metrics:

- The pass rate of first-time takers on the USMLE Step II CS among students will be at or greater than the national rate.
- The percentage of residency program directors who rate the preparation the school offers its graduates for residency as better or much better than other schools' will rise with respect to clinical skills.
- The pass rate of first-time takers on certifying board examinations among residents will be at or greater than the national rate.
- The aggregated percentage of participants evaluating the continuing medical education (CME) offerings who say that this program had a positive effect on their knowledge base, competencies, or patient outcomes will increase.
- The pass rate of first time takers on the National Certification of Anesthesiologist Assistants exam (C-AA) will be at or greater than the national rate.
- Internal documentation shows that the tracking system for student achievement of learning objectives connected with selected competencies has been implemented.
- Internal documentation shows residents' promotion is evidence-based.
- The number of learners tested in the skills laboratory will increase.

Specific Objective 3:

Implement faculty development programs to enhance teaching and assessment skills and promote a culture of scholarship in education.

Clerkship and program directors will have the skills and experiences necessary to design and implement clerkship and program-specific curricula and conduct ongoing assessment of learners' performance. A culture of scholarship will be promoted through program development, strategic faculty recruitments and recognition through academic promotion.

Specific Actions

- Develop written job descriptions for clerkship and program directors with explicit performance and annual evaluation expectations
- Develop a clerkship and program director orientation program with mandatory participation, and ongoing training and professional development activities.
- Reconstitute the faculty development committee and institute programs which promote and support a culture of scholarship.
- Implement a mandatory faculty review and reappointment process which includes evidence of scholarly activity for reappointment.
- Require participation (with CME credit where appropriate) in educational activities that focus on education of learners for faculty with teaching activities.
- Identify a cadre of senior faculty members who will agree to serve as mentors for new faculty members who have been identified as strategic recruits for undergraduate and postgraduate training programs

Measures

Achievement of this objective will be measured through the following metrics:

- Yearly departmental chair reviews will include review of the activities of program and course/clerkship directors.
- Faculty participation in on-line and other development activities
- Faculty satisfaction surveys.
- Faculty promotion statistics.
- Student and resident evaluations of courses and faculty.
- New faculty reappointment policy in place which includes explicit statements on scholarship (publications), educational CME courses, statements of professionalism
- Departmental reports of faculty participation in CME offerings.
- Communications plan in place for announcement of new faculty, faculty accomplishments, development opportunities

GOAL 3: PREVENTIVE, PERSONALIZED AND POPULATION HEALTH RESEARCH

Goal 3. The School of Medicine will develop **strong research and scholarly programs** that improve the health of our community **with an emphasis on applied translational research to Prevent Disease, Personalize Medicine and improve Population Health.**

Specific Objectives:

1. Promote the growth of research and scholarly activity in targeted areas with an emphasis on Preventive, Personalized and Population Health Research.
2. Promote a culture of research scholarship among our faculty.
3. Promote research participation among learners – both students and residents.
4. Promote scholarship in clinical practice and community engagement.

Background

Scholarly research has become an increasingly important goal of the School of Medicine in order to discover and apply new knowledge to improve human health, to develop and maintain a community of scholars in support a robust learning environment, and to provide continued economic development in the region. Since the 2003 Strategic Plan, the School has focused on development of translational research in carefully focused areas, emergence of Centers of Excellence in targeted areas, and partnerships with the regional life sciences community. Substantial progress has occurred (e.g. formal research centers in Lung Diseases, Shock/Trauma, Vision Research, Mineralized Tissues and Women's Health), and these accomplishments and related developments form the guidelines for the next phase of a Strategic Plan for research and scholarly excellence that positively and strongly impacts the health of our community.

The strategic plan in research going forward will emphasize applied translational research that impacts the health of the community we serve and leverages the large clinical faculty and strong hospital affiliations, partners with other disciplines within UMKC, and focuses resources in targeted areas.

Action Steps and Measures

Specific Objective 1:

Promote the growth of research and scholarly activity in targeted areas with an emphasis in applied translational research to Prevent Disease, Personalize Medicine and improve Population Health

Targeted Research Areas

- Women's and Children's Health
- Neurosciences and Vision
- Injury and Prevention of Injury from Trauma and Infectious Diseases
- Chronic Diseases
- Medical Education

Cross-cutting Research Themes

- The applied use of bioinformatics to collect and analyze data to apply to human health on an individualized (personalized) or population basis to prevent or cure disease
- Community impact
- Interdisciplinary collaboration
- Dissemination of knowledge

Key Strategies

- Leverage the large clinical base of our strong, diverse hospital affiliations
Leverage basic and clinical interdisciplinary partnerships within UMKC
- Focus on research methodologies in health/education outcomes and genomics/bioinformatics

Specific Actions

- Strengthen core facilities in health outcomes research, genomics/bioinformatics, and medical education.
- Develop expanded and more robust clinical databases in targeted areas.
- Align existing Centers of Excellence and departmental research strategic plans with the overall research plan.
- Strengthen research partnerships with the major hospital affiliates and other academic units at UMKC.
- Develop a communication strategy for Preventive, Personalized and Population Health Research.

Measures

Achievement of this objective will be measured through the following metrics:

- The amount of research grant dollars awarded for externally funded projects will double in three years and triple in five years, to \$40 million and \$60 million respectively.
- Interdisciplinary participation will increase and be reflected in joint publications and funded grants.
- UMKC will be recognized in the community (regionally and nationally) for expertise in prevention of disease, personalized medicine and population health.
- UMKC will be recognized in the community (regionally and nationally) for expertise in focused research areas.
- Targeted programs (Women's and Children's Health, Neurosciences and Vision, Injury and Prevention of Injury from Trauma and Infectious Diseases, Chronic Diseases, Medical Education) will be nationally ranked in research funding.
- The activities of research centers will be a recruitment draw for students, residents and faculty.

Specific Objective 2:

Promote a culture of research scholarship among faculty.

Scholarly activity is an essential component of academic medicine to create a robust learning environment and improve human health. Participation by individual faculty in both basic and clinical science in the advancement and application of knowledge in their areas of interest and expertise must be based on both expectation and opportunity for developing scholarship in research, clinical practice and education. At the UMKC School of Medicine there are currently nearly 800 faculty members, six hospital affiliates, and 22 endowed chairs and professors. The endowed chairs and professors comprise a group of scholars who may be leveraged for leadership in the targeted research areas.

Specific Actions

- Accelerate recruitment programs to fill all open endowed chairs with scholars in the targeted areas.
- Establish new endowed faculty positions for development and support of research scholars.
- Establish new master degree program (e.g. public health or clinical practice) to build faculty expertise in clinical outcomes and community engagement research.
- Develop an interdisciplinary doctoral degree program (IPhD) in Clinical Research, targeting health outcomes research.
- Recruit and retain diverse research faculty in terms of discipline, gender, race and ethnicity.
- Provide pilot funding for internal research projects.

Measures

Achievement of this objective will be indicated if the following measures are met:

- The number and percent of faculty who promote each year largely based on research scholarship will increase.
- Annual faculty publications within 5 years will increase from 300 to 600. Impact factor of publications will also increase.
- A Faculty Development program will be established, with a formal set of options and guidelines, including an evaluation plan to monitor faculty development outcomes.
- At least 12 UMKC School of Medicine faculty will hold Doctoral Faculty appointments.
- The research faculty demographics will be diverse in terms of gender, race and ethnic background.

Specific Objective 3.

Promote research participation among learners (medical and graduate students, residents, and fellows):

Future success in biomedical research depends upon encouraging the interest and commitment of the formal community of all learners in the School of Medicine. Current support of medical student research activities provides a base for expanding efforts to other learner populations because it provides a successful model of organization and resource allocation. Implementing the newly approved interdisciplinary doctoral degree (IPhD) program in Biomedical Sciences will have significant positive effects on the research atmosphere in other learner populations through formal and informal interactions in classes, seminars, and the laboratory.

Specific Actions

- Develop a formal curriculum in clinical research for medical students, residents, and fellows. CITI training will be incorporated into training for all groups.
- Expand the annual student research presentation program to include other academic units on Hospital Hill (i.e. Nursing, Dentistry and Pharmacy).
- Apply for training grants to support student, resident and fellow training in research in targeted areas.
- Provide awards for recognition of student, resident and fellow research
- Recruit a diverse student body in graduate programs.

Measures

Achievement of this objective will be indicated if the following measures are met:

- At least 3 doctoral students per year will be admitted into the IPhD in Biomedical Sciences program.
- A new IPhD program in Clinical Research will be in place.
- The number of students who report participation in research on the Graduation Questionnaire will consistently be greater than 66%.
- National presentations by faculty, residents and students will increase.
- New training grants and funding through the National Institutes of Health (NIH K, F and T32 awards).
- The graduate student body will be diverse in terms of gender, race and ethnicity.

Specific Objective 4.

Promote scholarship in clinical practice and community engagement.

Our large clinical faculty (nearly 800 members) and six strong hospital affiliates provide a base for expansion of scholarship in clinical practice. The implementation of electronic medical records and the availability of population-based databases provide access to large clinical databases for support of clinical faculty research. Infrastructure for support of participation of a larger number of clinical faculty will include training in informatics, data managers, biostatisticians, epidemiologists, biobanks, and ongoing, structured research in targeted clinical and community health areas.

Specific Actions

- Recruit and fill the Rayudu Endowed Chair in Patient Safety.
- Develop and implement a curriculum for residents and students in patient safety.
- Initiate community partnerships based on participatory research methods in at least one public health area for ongoing community engagement research.
- Develop centers of excellence in preventive medicine and patient safety.
- Develop certificate and degree programs in medical informatics in collaboration with the UMKC School of Computing and Engineering.

Measures

Achievement of the steps above will be indicated if the following measures are met:

- Increased number and percent of faculty who promote with an emphasis in clinical practice.
- Masters degree and certificate programs in clinical practice, public health, and medical informatics are established.
- Grants, publications, and presentations in patient safety, informatics, community engagement will increase.