UMKC STRATEGIC PLAN
LIFE AND HEALTH SCIENCES

OBJECTIVES:

1. IMPLEMENT ORGANIZATIONAL ENHANCEMENTS TO ADVANCE THE LIFE AND HEALTH SCIENCES

ACTION:

Recruit a Vice Chancellor for Life and Health Sciences Research

The individual recruited for this position will coordinate UMKC’s research and development efforts in the Life and Health Sciences. The Vice Chancellor will consult with the Deans in all matters pertaining to graduate program development and research in the Life and Health Sciences. Additionally, given the prominent role of Life and Health Sciences research at UMKC, it would be strategically advantageous for the Office of Research Administration to be re-aligned so that it is under the direction of the Vice Chancellor for Life and Health Sciences Research.

OUTCOMES:

- Improved overall cooperation among Life and Health Sciences units;
- Increased extramural research support;
- Improved UMKC research profile;
- New Graduate Program development in the Life and Health Sciences.

ACTION:

Emphasize shared academic recruitment to reduce redundancy in the teaching mission and to establish and enhance robust collaborative research foci across academic units.

The Vice Chancellor for Life and Health Sciences Research should be provided resources to recruit 3-4 faculty positions/year for the first 3 years. These positions will be shared across academic units to bolster existing research strengths, promote graduate program development or enhancement, or pursue new strategic priorities. Although it is envisioned that these positions will be shared recruitments by 2 or more of the Life and Health Sciences Schools (e.g. Biological Sciences, Dentistry, Medicine, Nursing, and Pharmacy), shared recruitment with the School of Computing and Engineering, the College of Arts and Sciences, or other academic units may also be pursued, if there is significant potential to enhance research and education initiatives and opportunities in the life and health sciences.

OUTCOMES:
• Improved research collaborations among faculty within different Life and Health Sciences units;
• Increased extramural research support;
• Reduced redundancy in academic programs;
• Development of new foci of research expertise.

ACTION:

Establish a Life and Health Sciences Research Advisory Council

The advisory council will report directly to the Vice Chancellor for Life and Health Sciences Research and will be comprised of key investigators from the Schools of Biological Sciences, Dentistry, Medicine, Nursing and Pharmacy. Additionally, representatives from other academic units (e.g. College Arts and Sciences, School of Computing and Engineering), with research interests in the Life and Health Sciences, should also serve on the Committee. The Council’s role will be to identify obstacles encountered by Life and Health Science researchers at UMKC, propose practical solutions toward resolving these obstacles, identify new strategic opportunities for enhancing Life and Health Science research, and review existing programs.

OUTCOMES:
• Improved communication and collaboration among faculty from different Life and Health Sciences Units;
• Increased extramural research support.
• Improved research productivity for UMKC’s faculty

ACTION:

Rename UMKC’s Hospital Hill campus to reflect evolution into a Health Science Center.

Renaming the Hospital Hill campus is designed to assist in the marketing of UMKC’s Life and Health Sciences enterprise. It is also intended to provide an initial step in the reorganization of UMKC’s Life and Health Science enterprise into a more cohesive and coordinated effort. Suggested naming might include “The UMKC Health Sciences Center” or “The UMKC Health Sciences Campus”.

OUTCOMES:
• Greater brand recognition for UMKC and, specifically, the Life and Health Sciences at UMKC.
• Elevated status for UMKC’s Life and Health Sciences in the Kansas City community and the Midwest region;
2. NEW LIFE AND HEALTH SCIENCES EDUCATION INITIATIVES

ACTION:

Develop Program-specific Ph.D. degrees that span the Life and Health Sciences Units and Departments.

Program Specific Ph.D. curricula (cross unit) will be established within the organizational structure of the current Interdisciplinary Ph.D. program. The degree programs will be housed in the School of Graduate Studies and will include traditional and currently offered programs such as Cell Biology, Biochemistry, Molecular Biology, and Biochemistry, as well as new and more interdisciplinary programs such as Neuroscience, Microbiology & Immunology, Clinical & Translational Medicine, Behavioral Science, etc. These programs will have the following features: faculty representation from multiple life and health sciences units; centralized recruitment through the School of Graduate Studies; centralized promotion through the SGS website; and, cooperative funding of first year students by all participating academic units. The programs will be built within the framework of the current I-Ph.D. program, employing all of the benefits of the I-Ph.D. Importantly, however, a fresh organizational structure will be established to leverage academic and programmatic strengths among the Life and Health Sciences Schools, address current and future needs, and promote interaction and cooperation among faculty from all across the University.

OUTCOMES:

- Increased number of Ph.D. applicants
- Improved quality of Ph.D. students admitted to UMKC
- Increased number of Ph.D. degrees awarded by the Life and Health Sciences units;
- National recognition for innovative training programs.

ACTION:

Develop a Biomedical Engineering Masters Degree Program.

A Masters of Science degree in Biomedical Engineering is being developed that will be a cooperative effort by the Schools of Computing and Engineering, Biological Sciences, Medicine, Dentistry, Pharmacy and the College of Arts and Sciences. The 5-year, combined degree, program will combine a traditional four year engineering degree in Civil, Mechanical, Electrical and Informatics, with undergraduate and graduate training in the biological and medical sciences.
Emphasis will be in areas such as bioinformatics, biomechanics, biomaterials, biosensors, and tissue engineering, to name a few.

OUTCOMES:
- Increased student admissions;
- Regional and national recognition for innovative multidisciplinary training program;
- Improved cooperation between the School of Computing and Engineering and the Life and Health Sciences units.

ACTION:

Develop Interprofessional Clinical Educational Training Programs and Opportunities for the Health Professional Students.

Interprofessional clinical training for the health sciences fosters better communication, teamwork, and understanding among health professionals with different educational backgrounds. Interdisciplinary training opportunities are envisioned to involve team building, cooperative academic experiences and cross-discipline approaches to common clinical problems. An Interprofessional Training Task Force will be commissioned to develop pragmatic approaches for interprofessional education across UMKC’s health professional programs (e.g. Dentistry, Medicine, Nursing, and Pharmacy).

OUTCOMES:
- Improved quality, safety, and efficiency of patient care through enhanced interdisciplinary communication and systems development;
- Greater mutual respect between nursing, medicine, dentistry, and pharmacy for future successful collaborations;
  - National recognition for innovative training programs.
- Interprofessional expertise in the health care practitioner workforce in Missouri.

3. RESOURCE DEVELOPMENT TO FUND STRATEGIC INITIATIVES

ACTION:

Create a Director for the Advancement of Life and Health Sciences.

This new position will be shared between the new Vice Chancellor for Life and Health Sciences Research and UMKC’s Office for Advancement. The Director’s primary role will be to direct and drive advancement programs to support Life and Health Sciences initiatives that impact multiple academic units such as core facilities, graduate assistantships, etc. (see Objective 4 below). A secondary role will be to
coordinate and assist academic units with their individual advancement activities. Critical to success of this new position, is reorganization of the current UMKC Advancement web site. The front page of this site should emphasize campus priorities and fund-raising goals, while inner pages should indicate how to give and contact information.

**OUTCOMES:**

- Raise $10 million in an endowment to support Education Initiatives in Life & Health Sciences, specifically ~20 doctoral student GRAs in the Life & Health Sciences;
- Raise $10 million to support Improved Research Support in Life & Health Sciences, specifically for core facility development and support;
- Greater community awareness of key life and health sciences advancements;
- Greater cooperation among the Life and Health Sciences units on capital project development.

4. IMPROVED RESEARCH SUPPORT SERVICES

**ACTION:**

**Develop and support Centralized Core Facilities**

The Animal Care Center represents UMKC’s one true Core Facility that is supported adequately by the university. Other core facilities are supported and administered in a variety of different ways that may not be well suited to meet the needs of a broad array of researchers in multiple academic units. UMKC’s Life and Health Sciences researchers would benefit greatly from enhanced central support and oversight for existing core facilities, and development of new core facilities, where appropriate.

**OUTCOMES:**

- Establish Users Groups or Internal Review Boards for each of UMKC’s Core Facilities, with broad representation from different academic units. These groups can report directly to the Vice Provost for Life and Health Sciences for Research and to the Life and Health Sciences Research Advisory Council, discussed above.
- Evaluate the strengths and deficiencies of existing core facilities, and implement changes necessary to enhance their operation to meet institutional needs.
- Evaluate the demand for new Core Facilities and establish those Core Facilities that are strategically important to the Life and Health Sciences Research Mission.

**ACTION:**
Enhance central support for pre and post award management

The acquisition and management of extramural research funding is critical to UMKC’s Life and Health Science research mission. Different academic units provide varying levels of support to new and existing faculty to improve their competitiveness for these funds, and this will undoubtedly continue. Similarly, post awards management is handled individually by each academic unit with significant redundancies between units. The needs of each of the Life and Health Sciences Schools are quite similar, and sharing resources to provide enhanced support for all units is likely to be economically efficient. Consequently, pooling resources from individual academic units should enable us to enhanced services. Examples of services that can be added include convening grant writing workshops (1-3 per year) with participation by NIH and NSF program directors and Scientific Review Administrators. Similarly, internal and external grant review/mentoring program should be established across academic units.

OUTCOMES:

- Greater opportunity for new faculty to learn about research by faculty from other academic units;
- Increased extramural research support;
- Improved higher grant application success rate;
- More efficient resource utilization.