

# Criterion Three



## Teaching and Learning: Quality, Resources, and Support

The institution provides high-quality education, wherever and however its offerings are delivered.

**K**CUMB consistently provides educational programs that meet or exceed industry standards. To this end, Criterion Three of this self-study clearly provides evidence of KCUMB's quality programs, faculty, and students. Because of KCUMB's dedication and commitment to quality programs, many of its programs continued to excel and advance despite a period of great administrative change.

### ***3.A. The institution's degree programs are appropriate to higher education.***

KCUMB offers only graduate and professional degree programs [K103]. These include the doctor of osteopathic medicine (D.O.), the master of science in biomedical sciences (M.S.), and the master of arts in bioethics (M.A.). Students may concurrently earn a D.O./M.A. dual degree during their medical training. Through a partnership with Rockhurst University, KCUMB's osteopathic medical students may concurrently earn a master of business administration in healthcare leadership (D.O./MBA).

#### **APPROPRIATENESS OF CURRICULUM**

The curriculum for the D.O. degree meets or exceeds the requirements of the Commission on Osteopathic College Accreditation (COCA). COCA Standard 6.1 requires each accredited program to provide instruction in specific basic and clinical science disciplines. Each of these disciplines is represented in the KCUMB doctoral curriculum. The COM curriculum is a patient-centered, clinical presentation-based curriculum that integrates basic and clinical science disciplines within sections organized by body systems. Following the last accreditation cycle, COCA granted KCUMB accreditation to 2018 [K104]. Students provide evidence of mastery of the curriculum through the graduation requirement that each of three national examinations is passed (COMLEX 1, COMLEX 2CE and COMLEX 2PE) [K5]. These three national examinations are taken by all osteopathic students and are required for licensure. The residency match is an application and selection process in which current fourth-year medical students investigate institutions for potential internship and residency positions. KCUMB students are eligible to participate in the matching programs of both the American Osteopathic Association and the National Residency Match Program. Military students must participate in the Military Residency Match Program. All medical students participating in the competitive residency match in 2013 [K105] were successfully matched to residency sites around the nation.

The College of Biosciences (COB) currently has two degree programs [K6] that exceed standards for similar master's degree programs in currently accredited institutions of higher learning. A review of other institutions providing master of science in biomedical sciences degrees reveals that KCUMB students earn more credits than equivalent programs, demonstrating it to be a competitive program. The program is unique in requiring a cumulative exam for graduation. Table 3.1 provides a comparison to other universities' course offerings. The master in arts in bioethics program is unique in that many of its students are interested in biomedical ethics and have an interest in attending medical school. Each of the programs was reviewed by an external evaluator in 2012-2013. The evaluators were selected based upon their extensive training and backgrounds in their respective fields. These individuals reviewed data and visited the campus for interviews with faculty, students, and administrators in order to verify the appropriateness and rigor of the curriculum for the graduate level.

**TABLE 3.1 OTHER PROGRAM COURSE COMPARISONS**

| Course (Credits)   | KCUMB     | Marshall University | UMDNJ (Individualized Program) | Indiana University/IUPUI (Pre-Professional M.S., All 3 Credits) | Chatham University (Human Biology focus for Pre-Professional Students) |
|--|-----------|---------------------|--------------------------------|---|--|
| Human Anatomy  | X (6)     |                     |                                |   | X (6)  |
| Cell Biology and Histology   | X (3)     |                     |                                | A   | A (3)  |
| Human Physiology   | X (6)     | X                   | A (3-5)                        | A   | X (3)  |
| Neuroscience   | X (3)     | X                   |                                | A   | X (4)  |
| Human Genetics   | X (3)     |                     | A                              | A   | A (3)  |
| Intro to Epidemiology  | X (3)     | X                   |                                |   | X (3)  |
| Intro to Research Methodology  | X (2)     | X                   | X (2)                          |   | X (2)  |
| Biochemistry   | X (3)     |                     |                                |   | A (6)  |
| Molecular Biology  | X (3)     |                     |                                | A   | A (3)  |
| Medical Microbiology   |           | X                   |                                |   |  |
| Medical Pharmacology   |           | X                   |                                |   |  |
| Seminar/Mini-Thesis  | X (3)     | X                   | X (1)                          |   | A (1)  |
| Comprehensive Exam   | X (3)     |                     |                                |   |  |
| <b>Total Credits Required</b>  | <b>38</b> | <b>36</b>           | <b>30</b>                      | <b>30</b>   | <b>31+</b>   |
| A= Available for Students  |           |                     |                                |   |  |
| This is a comparison of other colleges/universities that offer a M.S. non-thesis degree for students interested in entering professional school. Several of these schools allow a great deal of flexibility in course choices. When available, course credit is included for other programs. |           |                     |                                |   |  |

## LEARNING OUTCOMES

The College of Osteopathic Medicine's (COM) doctor of osteopathic medicine program follows the Guiding Principles of the Medical Education Program [K108] developed by the faculty and approved by the KCUMB Curriculum Committee. These overarching principles direct the development of the curriculum within the COM. Learning objectives are provided for each section, elective, and clerkship during years one through four [K109]. These objectives are articulated in each syllabus and for individual lectures in didactic presentations [K225]. All section, elective, and clerkship objectives are linked to the American Osteopathic Association's seven core osteopathic medical competencies [K111].

The curriculum in the College of Biosciences (COB) provides training for those interested in working toward new discoveries in a biomedical research laboratory or exploring the role of bioethics in research and the practice of medicine. Learning outcomes [K112] are designed to assure the graduates of the programs have acquired the skills necessary to make an immediate contribution to the burgeoning life sciences industry. In addition, both curricula provide graduates with training that will facilitate post-graduate education.

## DELIVERY METHODS

Development and delivery of the COM curriculum is guided by competencies for all courses that are the same at all sites and utilize the same modes of delivery. Instruction during years one and two occurs at the main KCUMB campus. During the third and fourth years, students are placed throughout the country at one of 26 core sites [K4] for clinical training. Student educational experience data are collected from student electronic logs created for patient encounters and procedures. These data are analyzed to assess mastery of procedures and for documentation [K113] of achievement of learning objectives. Data indicate students obtain similar educational experiences across the distributed sites; data also assist in documenting that appropriate clinical experiences are being achieved by all students.

In the College of Biosciences, the curriculum is delivered via lecture, lab, and small groups. A small number of bioethics courses for the dual-degree (D.O./M.A.) program have been delivered online. Learning outcomes are consistent regardless of delivery modality. Learning objectives are included with each course syllabus [K115].

## OPPORTUNITIES AND INITIATIVES

During the process of self-study for both the Higher Learning Commission and the Commission on Osteopathic College Accreditation, several opportunities were identified to improve the educational program in the COM. Addressing these opportunities has been a focus for the past two years. In the past, the long-standing distributive model of clinical training at KCUMB extended to 42 core sites [K4] in multiple states. As a goal, the University decided to consolidate the number of core clinical training sites to allow increased resources to be focused on the students at those sites. There are now 26 sites, with plans to decrease the number further over the next few years, while still accommodating all students. Along with increased resources, the infrastructure was expanded to include five regional assistant deans [K32] [K33], who are responsible for curricular oversight. By fall 2013, the number of regional assistant deans will be increased to nine.

As part of the strategic planning initiative, each department created strategic goals. A need for improved data collection was recognized through the self-study process. The Department of Curricular Affairs [K117] developed a longitudinal student database. In addition, the Office of Community Clinical Education (OCCE) maintains a database to track third- and fourth-year student rotations, assignments, match, and evaluations. Collected data are provided to appropriate constituencies, including the University's Leadership Team. The data has driven assessment, budgeting, and realignment of strategic goals for OCCE and Curricular Affairs.

The self-study process also highlighted the need to improve several aspects of the COB programs. The necessity for improvement was underscored by external consultants, who reviewed the biomedical sciences and bioethics programs. The recommendations included hiring new faculty and revising administrative responsibilities. It also became clear that revisions were needed to the learning objectives for both the programs and the courses. Faculty in each of the programs met to develop and revise program learning outcomes, and to develop an assessment matrix for demonstrating achievement of the learning outcomes [K109]. A separate Curriculum Committee for the COB also was created.

In addition, as set forth in the mission, KCUMB identified the potential addition of new health-care programs as worthy of investigation. As discussed in Criterion One, a Graduate Programs Task Force completed a market analysis of programs [K43] that would be consistent with the mission of the University. The University continues to consider the addition of possible programs as it begins to implement the Campus Master Plan [K118].

## SUMMARY STATEMENTS

- The curriculum of the College of Osteopathic Medicine meets the standards currently set by the Commission on Osteopathic College Accreditation. The performance of COM students on national boards shows average to better-than-average performance compared with similarly accredited programs.



- External comparisons of the curricula in the College of Biosciences with similar programs offered at other universities reveal that KCUMB students earn more credits than equivalent programs. The biomedical sciences program is unique in requiring a cumulative exam for graduation and, as demonstrated through comparisons with similar programs, is a competitive program. The master of arts in bioethics program provides a rigorous curriculum for students interested in biomedical ethics with a subsequent desire for further graduate education.
- The learning goals for the University's three academic programs are clearly articulated and differentiated from one another. The evidence from the accreditation and external reviews shows that the institution's academic programs are appropriate to higher education at the graduate level.
- Portions of the osteopathic medical school curriculum and the bioethics curriculum are offered off site. The University utilizes techniques to ensure that program quality is similar at all sites. As part of an effort to improve quality, the number of off-campus sites for the COM was reduced from 42 to 26 sites, with the intention of a further reduction to 10 sites planned for the academic year beginning 2014. This reduction, along with the appointment of regional assistant deans, will strengthen the institution's ability to maintain consistency across off-campus sites.

### ***3.B. The institution demonstrates that the exercise of intellectual inquiry and the acquisition, application, and integration of broad learning and skills are integral to its educational programs.***

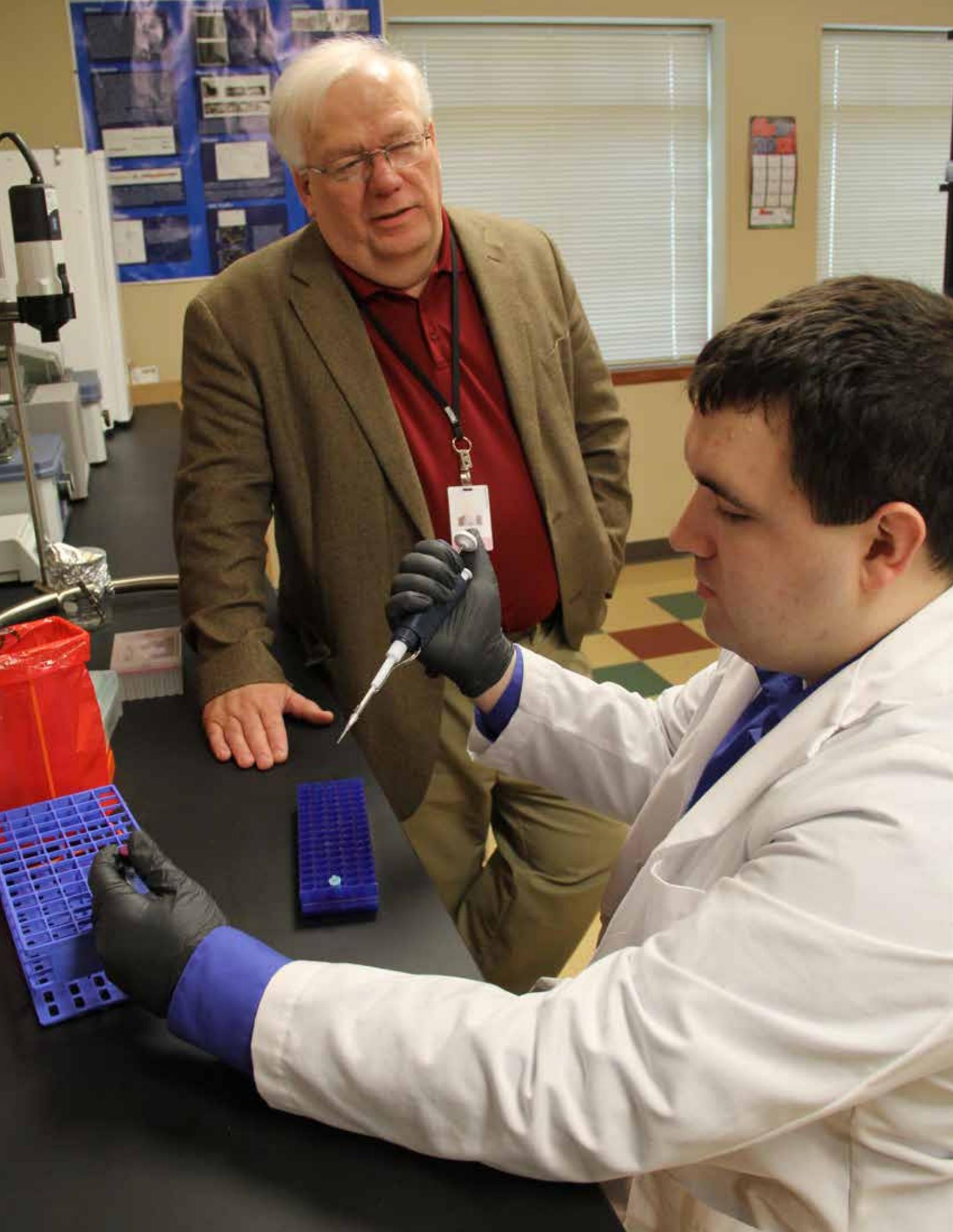
#### **GENERAL EDUCATION**

KCUMB is a graduate-level institution. General education is not part of the curriculum. However, a requirement for admission [K157] to any COM or COB program is a baccalaureate degree, or in the COM Partners Program, the completion of general education requirements at the undergraduate institution. Such a baccalaureate degree encompasses general education courses. Additionally, as discussed in Criterion One, KCUMB is focused on enrolling only highly qualified students; this is central to its mission.

#### **MODES OF INQUIRY**

The College of Osteopathic Medicine (COM) requires students to develop skills in collecting, analyzing, and communicating information, as described in the objectives and competencies of the curriculum [K109]. Medical informatics are introduced in the first section of the curriculum, Foundations of Medicine. In medical informatics, students learn to use the library to collect and analyze data. Students receive additional instruction in medical informatics in their second year [K121].

In years one and two, COM students are engaged in collecting, analyzing, and communicating information through weekly pathology labs, where they read, analyze, and present pathology cases to their peers with the guidance of the pathology faculty. The Osteopathic Clinical Skills (OCS) curriculum [K122], taught throughout years one and two, engages students in collecting, analyzing, and communicating information using standardized patients and human patient simulators. Students are taught to collect health information, analyze the obtained information, and communicate with the standardized patients, simulators, or physician evaluators the diagnosis based on collected data. Furthermore, in years three and four, preceptors evaluate student performance [K123] on clinical clerkships in the areas of collection, analysis, and communication of information from patients and cases.



Additionally, COM students have opportunities to develop skills of inquiry and demonstrate creativity through research with faculty in the basic medical sciences, clinical sciences, and applied research. Students may choose to conduct research as part of their medical school training in the form of research electives, research rotations, a summer student research fellowship program [K99], or yearlong teaching and research fellowships [K124] offered by the departments of anatomy or family and community medicine. KCUMB is also a partner in Frontiers [K77]: The Heartland Institute for Clinical and Translational Research, which is a network of scientists throughout the Kansas City region and the state of Kansas working on translational research. As a partner, KCUMB students are eligible to apply for the Multidisciplinary Predoctoral Clinical Research Training Program (TL1), which provides institutional support to students seeking a practical research introduction to clinical and translational research. The institution selects TL1 candidates, providing full-time research training support for predoctoral Ph.D. candidates and combined health professional doctorate/master's candidates. Students accepted into in this program complete a master of science in clinical research (M.S.-CR), actively engage in workshops and training opportunities designed to enhance research skills, and complete a mentored research project culminating in a published research article. Currently, four KCUMB students have completed or are enrolled in this program.

For the College of Biosciences, students interested in pursuing the accredited master of science in biomedical sciences can enroll in either a one-year track or a two-year research track, tailored to meet the needs and goals of individual students. The one-year program prepares students to pursue doctoral programs in health-care fields. It includes coursework in the following disciplines: anatomy, biochemistry, biostatistics and epidemiology, cell biology, genetics, histology, immunology, physiology, molecular biology, and research instrumentation and methodology, as well as preparation of a research paper or thesis. For individuals interested in careers as research scientists, KCUMB offers the two-year research program. While first-year coursework is similar to the one-year program, students also undertake advanced, individualized tutorial classes that complement the students' original research projects and interests. Students are also required to complete a thesis based on original research.

KCUMB's master of arts in bioethics [K126] provides students with a broad orientation to the interdisciplinary field of bioethics, acknowledging that many critical challenges in health care revolve around ethical and humanistic issues. Bioethics offers a broad and varied curriculum that promotes the development of important competencies for the practice of medicine in the 21st century. With this specialized bioethics degree, students will be qualified to become leaders on hospital ethics committees and among their colleagues at academic medical centers, clinics, group practices, and hospitals. In addition, completion of the bioethics degree will demonstrate that students, especially those in the dual-degree and one-year programs, have developed specialized clinical skills, which will enhance their applications for scholarships, internships, and residencies.

Students in the bioethics program develop critical thinking, modes of inquiry and means of communication, and demonstrate competence through a thesis, which provides evidence of the following:

- Ability to apply various methodologies in evaluating bioethical situations
- Ability to integrate humanism, professionalism, and cultural competence in working with diverse populations
- Ability to communicate effectively in written, oral, and interpersonal contexts
- Proficiency or demonstration of ethical other settings practices

To ensure that students are engaged in modes of inquiry through research, all COM and COB students are invited to attend Science Friday seminars, presented by faculty from KCUMB and other regional institu-

tions, which provide updates on current research. Students are also invited to attend four annual University Lecture Series presentations drawn from a broad spectrum of national and international speakers on topics that are relevant to the diverse University community. Finally, KCUMB also hosts an annual Research Symposium [K127], where all students are invited to attend research seminars by invited speakers and oral and poster presentations by fellow students.

Copies of the flyers advertising Science Fridays and the Research Symposium will be available in the Electronic Resource Room.

## **RECOGNIZING DIVERSITY**

KCUMB's educational programs recognize human and cultural diversity through its curriculum and service learning. Additionally, the University strives for greater institutional diversity to ensure a learning environment that reflects the cultural diversity of the world in which its students will live and work [K128].

The curricula at KCUMB include a focus on cultural and socioeconomic diversity. For example, the bioethics coursework, BETH 504 Diversity, Culture, and Bioethics, was created to explore the role of human and cultural variation in health and illness. It examines the intersection between disability, race, gender, sexual orientation, diverse spiritual beliefs, and medical practice. As part of this coursework, students are required to undertake both group and individual projects. For the group project, students are required to complete a "cultural immersion" by going to a community and interviewing its members. For the individual project, students also interview members of a culturally distinct group for the purpose of developing a fuller understanding of the individual.

Students in the biomedical sciences program receive intensive training in developing strategies for meeting the health-care needs of diverse populations and improving proficiency in cultural competence. The commitment to diversity training for all students is evidenced by the annual Bioethics, Spirituality and Humanism in Medicine Conference sponsored by the Department of Continuing Medical Education [K62].

KCUMB provides all students with extensive service-learning opportunities throughout the academic curriculum. Service learning provides students with exposure to the larger cultural and socioeconomic picture in which they will one day work as researchers and physicians and also promotes greater awareness of community resources that may be of benefit to future patients and their families. Through service-learning programs, the University has developed partnerships with local charitable and community organizations, strengthening the Greater Kansas City community while at the same time offering unique educational opportunities for KCUMB students. During the 2011-2012 academic year, more than 10,600 hours of community service [K273] were credited to KCUMB students through organized volunteer activities. Community service hours for the 2012-2013 academic year are still being tabulated. The University has partnered with and served more than 60 non-profit community agencies [K49] through curricular and extracurricular student involvement.

The University also provides curricular and co-curricular opportunities for students to learn about racial, ethnic, religious, and culturally diverse populations. KCUMB's Score 1 for Health® [K9] is a preventive health program for elementary-aged children built upon the belief that optimal health and well-being enhances one's ability to learn, grow, and develop creatively. Addressing disparities in access to health care for children and families in the Kansas City metropolitan area for more than 20 years, Score 1 for Health provides free, in-school health screenings, preventive health education and health-care mentors for children. Score 1 for Health focuses on reaching children in areas of greatest need, including urban core,



underprivileged, and low-income families. In 2012, the program screened more than 13,000 children in 50 schools within the Greater Kansas City area. KCUMB's first- and second-year osteopathic medical students participate in health screening days, gaining valuable clinical experience in pediatric health assessment, while providing an important community service to ethnically and economically diverse populations.

Recognizing that diversity is broader than race, KCUMB provides additional programs to expose students to a broad cultural and socioeconomic spectrum that also address KCUMB's commitment to service learning. KCUMB hosted its first Medical Student for a Day in May 2011; this program was developed through partnership with the Advocates for Diversity in Medicine Club and Kansas City's Northeast High School. Northeast High School serves approximately 1,100 students. The total minority enrollment is 90 percent, while 83 percent of the students are economically disadvantaged. Offering a full day of workshops and science-based activities for urban high school students, the Medical Student for a Day [K131] program provided a unique opportunity for area high school students to learn about osteopathic medicine and to gain knowledge on the skills and career path to health professions. More than 60 local high school students learned about various aspects of being a medical student and participated in hands-on sessions focusing on common medical procedures, and lessons in pathology, anatomy, and more. The tradition continued in 2012, and the inspiration from KCUMB students continues to drive the interest in producing this as an annual event. Based upon the experiences of these first years, an evaluation for this event is being developed and will be used in the future.

KCUMB annually participates in international mission trips through DOCARE International, an osteopathic medical outreach organization dedicated to providing much-needed health care to indigent and isolated people in remote areas around the world. These include medical mission experiences to Mexico and a clinical clerkship to Guatemala [K72]. In addition to these experiences, student interest prompted

the development of a new elective clerkship that was approved in January 2013 for students to accomplish clerkships in the Dominican Republic in collaboration with Universidad Central del Este in San Pedro de Macorís.

Students who have gained a level of competency speaking Spanish may work in a local Spanish-speaking clinic to earn elective credit. Students may also learn American Sign Language, with an emphasis on communication with patients. Through an organized student chapter and faculty involvement, the University has offered opportunities for student participation in electives and volunteer experiences in international medical mission trips since 1996 that are advertised as part of the elective offerings and through email announcements.



Students who have gained a level of competency speaking Spanish may work in a local Spanish-speaking clinic to earn elective credit. Students may also learn American Sign Language, with an emphasis on communication with patients. Through an organized student chapter and faculty involvement, the University has offered opportunities for student participation in electives and volunteer experiences in international medical mission trips since 1996 that are advertised as part of the elective offerings and through email announcements.

KCUMB has identified enhancing institutional diversity as one of its five primary strategic goals. KCUMB focuses significant recruitment efforts on securing the most qualified, diverse, and talented student body for all University programs. Recruiters for all programs visit cities and states with large minority populations (Figure 1 in Criterion One – Trends in Student Diversity).

In addition to information regularly supplied as part of a COM recruitment visit, COB recruiting efforts include career fairs and conferences specifically targeting graduate programs and minority students. For the 2012-2013 academic year, KCUMB visited 10 minority fairs and 12 graduate fairs to provide information about COB programs.

Programs to increase diversity in the student body, especially of underrepresented minorities include:

- Diversity Scholarships – These scholarships are annually awarded and can be renewed while the student is enrolled at KCUMB. With increasing sensitivity to issues related to a diverse health-care workforce, KCUMB's Board of Trustees recently approved the creation of six diversity scholarships: four for the College of Osteopathic Medicine, one for the biomedical sciences program, and one for the bioethics program. In addition to its University-funded scholarships, KCUMB awards donor-funded diversity scholarships each year.
- Advocates for Diversity in Medicine – The University provides financial support and other resources annually to improve and expand minority recruitment activities through this national student organization. Programs include the education of undergraduate minority students on campus about medicine and the rigors of medical school, and participation in culturally diverse community neighborhood health-care events.
- KCUMB has established matriculation programs with a number of historically black colleges and universities (HBCU). This program allows students to be selected for admission during their sophomore year at the undergraduate institution. Cooperative relationships enhance opportunities for underrepresented minority students in qualifying for admission. KCUMB is currently considering partnership agreements for COB as well.

The National Youth Leadership Forum on Medicine (NYLF/MED) [K132] is a competitive national program that introduces outstanding junior and senior high school students to careers in medicine. Although the program has a strong 20-plus year history, 2013 marks the first year the program is coming to Kansas City. As a part of the 10-day program, KCUMB will host participants (from roughly a five-state region) on campus for one day to highlight not only KCUMB’s facilities, faculty, and programs, but also osteopathic medicine and the uniqueness of what our University offers.

As a benefit of hosting a campus visit, KCUMB receives a fully paid scholarship for tuition to the program. An online scholarship application was developed and shared with KCUMB’s long-time partner, Missouri’s Area Health Education Center (AHEC). AHEC is designed to expose students to the world of health-care careers. In addition, more comprehensive one-on-one programming is offered to a select group of high school and undergraduate students actively pursuing a career in primary health care through the AHEC Career Enhancement Scholars (ACES) program [K133]. KCUMB worked with the ACES program to recruit qualified and interested high school students to apply for the scholarship. Particular consideration is given to financial need.

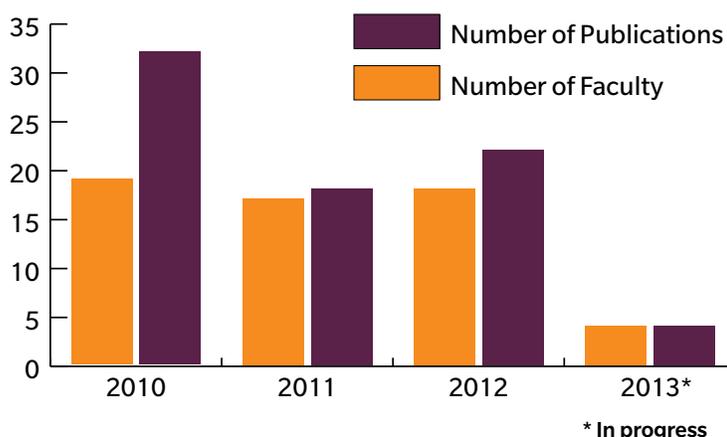
Data shared at the 2013 Admissions retreat suggest that these strategies are modestly successful. While the number of minority applicants to the COM remained the same in 2012-2013 as it did in 2011-2012 (six percent), the number of minority students interviewed increased (2.6 to 4 percent). The number of minority students accepted increased (2.4 to 4 percent), as did the number of minority matriculates (2 to 3.7 percent).

### DISCOVERY OF KNOWLEDGE

Scholarship, creative work, and the discovery of knowledge through research is embedded in the academic fabric of KCUMB. Students have multiple opportunities to participate in research with faculty. In addition to elective credit opportunities, fellowship programs are available for extended research experience. These experiences, while valuable for students, are equally valuable for faculty; the joint efforts of students and faculty lead to increased productivity for both. Faculty and students publish peer-reviewed journal articles, book chapters, or books that reflect the research and scholarship of KCUMB (Figure 3.1).

There is a research track for the master of science in biomedical sciences degree [K135]. Students pursuing a master of arts in bioethics or the two-year master of science in biomedical science degrees complete a thesis project, which may reflect a traditional thesis or a non-traditional project [K136]. Students in the master of science in biomedical sciences one-year program also complete a thesis, but they are not required to include original research. In both programs, students must demonstrate the ability to critically analyze and apply knowledge through the development of a mock manuscript for publication and seminar presentation. At the end of each program, students must be able to communicate their findings to faculty and peers.

Figure 3.1 | Faculty Publications Since 2010



Moreover, as noted in Criterion One, the University's new five-year Strategic Plan has a strong focus on discovery of knowledge through research. To assist with this goal, the University recruited a new vice president for research in 2012. Additionally, two new faculty members were hired with the expectation that they will create new research opportunities for students as well as increased opportunities for collaboration among faculty. These faculty members come to KCUMB with research experience and funding.

## **OPPORTUNITIES AND INITIATIVES**

During the self-study process, it was recognized that there was a need to make improvements in the biomedical sciences program, particularly to improve recruitment activities for the two-year research track and to increase student diversity. As a result, two full-tuition, two-year scholarships are now available for this program, and an increased emphasis has been placed on recruitment of quality applicants, who are diverse. Currently, opportunities through training grants are being sought to provide stipends for these and other graduate students. It was also recognized that the University engages in many outreach programs. An opportunity exists to leverage current community outreach initiatives, like KCUMB's Score 1 for Health, for research opportunities for faculty and students.

The Strategic Plan goal of enhancing research activities is a major initiative for the new vice president of research. During the self-study process, it was recognized that in order to meet the needs and requests of students to participate in research, a new infrastructure was needed for departments to support research. The University is progressing on developing opportunities for student research external to the University. Examples of these successes include additional international opportunities and students accepted into research programs at other universities in Kansas City. These are further described in 3.D. and 3.E. below. Until faculty research is externally funded at a level to support students, institutional support will bridge this need.

## **SUMMARY STATEMENTS**

- The University has a clear mission that is aligned with the programs it offers. Program-level missions are consistent with educational offerings and are tied to the University's mission and Strategic Plan.
- The University does not offer undergraduate general education programs. A minimum of a baccalaureate degree or evidence of completion of general education requirements is required for matriculation in all programs.
- The educational programs offered by the University engage students in collecting, analyzing, and communicating information. In all programs, students are required to assimilate, synthesize, and convey information through formative and summative examinations, individual research, and, for the COM, interaction with standardized patients and human patient simulators. Students in the COB must develop and present an original thesis. Through this collection of educational activities, KCUMB students are afforded opportunities to develop skills that increase their ability to adapt to changing environments.
- KCUMB has identified enhancing institutional diversity as one of its five primary strategic goals. Initiatives to increase diversity in the student body, especially of underrepresented minorities, have been developed, including diversity scholarships, support for the Advocates for Diversity in Medicine Club, and the establishment of matriculation programs with a number of historically black colleges and universities. These strategies have proven successful, with increase in the number of minority students interviewed (2.6 to 4 percent), accepted (2.4 to 4 percent), and matriculated (2 to 3.7 percent) in 2012-2013 as compared with 2011-2012.
- Through planned educational experiences embedded in the curriculum and through elective opportunities, the University helps its students recognize human and cultural diversity of the world in which stu-

dents live and work. In addition, extensive student learning opportunities provide students with exposure to the larger socioeconomic picture and also promote greater awareness of community resources that may be of benefit to future colleagues, patients, and their families.

- The faculty and students contribute to scholarship and the discovery of knowledge. There is an increasing emphasis on research at the institution, as evidenced by its explicit endorsement of research in its mission statement and the inclusion of enhanced research as a key objective within the University's current Strategic Plan.

### ***3.C. The institution has the faculty and staff needed for effective, high-quality programs and student services.***

#### ***FACULTY ADEQUACY***

The College of Osteopathic Medicine uses a Faculty Adequacy Model to determine if there are sufficient faculty to deliver the curriculum and perform other non-classroom duties [K138]. In brief, the model compares the amount of time needed to deliver the curriculum against the availability of faculty for teaching. Time allocations for teaching are used to determine the availability of faculty, with weighting applied to different teaching tasks (e.g., lectures are weighted more heavily than small-group instruction). Identical processes are used to determine the availability of faculty for non-classroom duties, including oversight of the curriculum and delivery of student services. Allocated research time is also included in the model. The calculations for the model suggest that, in general, there are sufficient faculty members to provide the instructional and student services needed. However, in some cases, the model indicates that additional faculty members are needed, and active recruitment is underway to identify suitably trained and experienced individuals. During the calculation and analysis of the Faculty Adequacy Model, it became apparent that the metrics for collecting data needed improvement. To affect those changes, revisions have been made to the methods for evaluating faculty performance, with a greater emphasis on the data needed to construct and evaluate the Faculty Adequacy Model for the College of Osteopathic Medicine. For example, revisions have been proposed to better account for faculty activities and accomplishments; these will be approved by the Faculty Senate. Not only are there an adequate number of faculty to accomplish the many responsibilities assumed with each position, but the mean time of employment for faculty as of May 15, 2013, is 9.5 years, indicating continuity of faculty members [K139].



The College of Biosciences meets the teaching needs for its programs with full-time faculty and community-contracted faculty. All but one of the course directors in the biomedical sciences program are KCUMB full-time faculty. Several adjunct faculty are course directors in bioethics. Faculty contracted to teach within courses are experienced in the course material as demonstrated by CVs [K139]. The full-time faculty serve as advisors to the small number of students in the COB, conduct research, and serve on University and College committees. Metrics for allocation of teaching time are under consideration so that the Faculty Adequacy Model can be applied to the COB as well.

## **ON-CAMPUS FACULTY**

Faculty members are highly trained educators, who are dedicated to teaching and preparing medical students to become professional osteopathic physicians. The minimum expectation for a faculty member is a terminal degree, with postdoctoral experience encouraged. There are a few instructors who do not hold terminal degrees and who provide specialized instruction in Spanish and health policy; in these cases, the instructor has extensive training and experience in his or her field. The University has 39 full-time faculty, 12 full-time instructors and six part-time faculty. An additional 12 administrators have faculty appointments and participate in delivery of the curriculum. In the COM, there are currently vacant basic science positions in the anatomy and physiology departments. In clinical departments within the COM, there are single faculty openings in three departments, as well as a newly created position for the chair of neuromuscular medicine/osteopathic manipulative medicine. In the COB, applications are being accepted for a two-year postdoctoral teaching fellowship in bioethics.

The faculty are diverse in discipline, training, and academic rank. Faculty members lead through exemplary integrity and teaching, as well as through the practice of holistic care to meet the mission and values of the University. The Faculty Adequacy Model [K138] will help to verify that the institution has sufficient qualified faculty to deliver high-quality didactic presentations in the classroom, and competent, caring clinicians to teach students in the delivery of patient care. Additional faculty needs for curricular delivery and/or research are supported by the budgeting process.

There are three distinctions of faculty rank: assistant professor, associate professor, and professor. In addition, faculty are classified in three ways: full-time and part-time regular faculty, community clinical faculty, and adjunct faculty. Full-time and part-time regular faculty receive one of the aforementioned ranks. Their primary roles are to deliver the curriculum for the biomedical sciences and bioethics programs, as well as the first- and second-year students in the COM. Adjunct faculty often provide a few lectures and/or may assist with entire sections or courses of the curriculum. In the bioethics program, adjunct faculty do have responsibility for individual courses, under the oversight of the department chair. The use of the term “clinical,” along with the appropriate professorial rank, is used to identify the group of faculty who serve third- and fourth-year COM students by teaching in the community settings, such as hospitals, clinics, allied-health environments, etc. These individuals, who are osteopathic or allopathic physicians, are otherwise known as preceptors, and provide the hands-on clinical exposure to third- and fourth-year students [K275]. Information is maintained by the Office of Community Clinical Education, and includes degree earned, site of practice, OPTI affiliation, academic rank, certification, and review dates.

## **FACULTY AT AFFILIATED SITES**

All faculty at KCUMB's affiliated educational partners who supervise COM student education are credentialed by the University through the Rank and Promotion Committee [K275]. The minimum requirement for faculty is a current license to practice in the state in which they are located. These affiliated partners are



not involved with delivery of any curricula within the COB. Academic rank is extended via an application process to those who so desire it. Faculty are approved by and aligned within one of the University's clinical departments, and their credentialing is reviewed and approved by the department chair. These community clinical faculty are given the opportunity to update their credentials via a hyperlink to their own faculty page at the University, which is sent to them with each evaluation of the students they supervise.

As part of a student-centered focus, regional assistant deans were identified and integrated into the clinical education process at core sites around the country. These clinicians serve the University as an extension of the on-campus faculty in didactic instruction, advising, and providing supervision. A Faculty Adequacy Model [K138] is in place and is a collaborative effort between University department chairs, regional assistant deans, on-site faculty and the Office of Community Clinical Education to successfully achieve KCUMB's mission and objectives.

Facilities at which the community clinical faculty and students provide patient care all have executed affiliation agreements prior to those experiences. Students are required to evaluate the quality of the learning experience and environment, as well as the preceptor. These assessments, the performance of the students at that particular site, as well as the quantity of student engagement in patient care while in those experiences, are shared with the appropriate director charged with the academic oversight of the facility. All are reviewed with the site annually at a minimum and more frequently as warranted. The Office of Community Clinical Education works closely with affiliate sites in support of all of these efforts.

## **CREDENTIALS AND EVALUATION**

Full-time faculty are credentialed through the Department of Human Resources at the time of hiring. The credentialing process includes a review of letters of reference and verification of academic degrees. A criminal background check and a drug screen must be completed prior to the start date. Faculty are also assigned an academic rank by the Rank and Promotion Committee, which is comprised of members of the University faculty. Faculty maintain complete curricula vitae on the University website and are responsible for regularly updating the information. In addition, faculty [K139] who hold licensure as health professionals must also maintain their knowledge through continuing education as a condition for renewal of their licenses. Clinical licensure of University faculty is reviewed annually by the practice manager at KCUMB Physician Associates; licensure for preceptors and adjunct faculty not employed by the university is reviewed and maintained by the Office of Community Clinical Education. All clinical preceptors who are not full-time faculty are credentialed by the University. These faculty are appointed as instructors, but are invited to apply for community clinical faculty appointments at the assistant, associate, and full professor levels, if they desire.

All faculty undergo an annual evaluation, in accordance with established institutional policies and procedures. Additionally, each faculty member is reviewed by all students during the CQI process [K144] at the end of each section. Each faculty is evaluated through a Performance Management and Evaluation Process (PMEP) [K145]. The development of a new faculty evaluation instrument will be finalized during the 2013-2014 academic year. The new form will better reflect the responsibilities, activities, and outcomes of faculty annually.

Annual staff evaluations in 2013 were conducted utilizing a new Performance Planning Review (PPR) form [K148]. The new evaluation form was implemented to align individual results with specific performance and productivity goals. Beginning in 2013-2014, staff goals will be jointly agreed upon by staff and managers at the beginning of the cycle.

## **PROFESSIONAL DEVELOPMENT**

The University provides a balanced program of professional development for faculty and staff. Faculty and staff development are often inextricably linked because of the nature of professional and graduate schools. Staff members are often significant contributors to program function. Professional development includes all employee training from the Leadership, Education, and Development (L.E.D.) Academy [K61], training provided to faculty under the aegis of faculty development, and targeted technical training in instructional technology facilitated by LearnIT. Professional development programs for faculty and staff are supplemented by programs offered through the departments of Human Resources, Curricular Affairs, Research, Continuing Medical Education, and Information Technology.

The L.E.D. Academy is designed to assist employees achieving career and individual goals. Supervisors and employees, working in partnership, determine the appropriate coursework for each employee. All faculty and staff are required to complete 16 hours of professional leadership training each year; eight of these may be faculty development and LearnIT. Supervisors are also responsible for 16 hours of education and development coursework, including eight hours of L.E.D. Academy coursework specifically designed for managers/supervisors.

The mission of KCUMB's faculty development program [K149] is to improve faculty members' knowledge and skills in areas relevant to their faculty roles and positions [K150]. These programs focus on the

individual faculty member. The most common focus for programs of this type is the faculty member as a teacher. A second frequent focus of such programs is the faculty member as a scholar and professional. To meet these goals, a strategic plan for faculty development was proposed in January 2013. The plan includes five strategic areas that address identified development needs and align faculty development services to the University Strategic Plan, core values and curriculum design: educational (including a master teacher curriculum), research, leadership and service, clinical practice, and office administrative.

## FACULTY-STUDENT INTERACTIONS

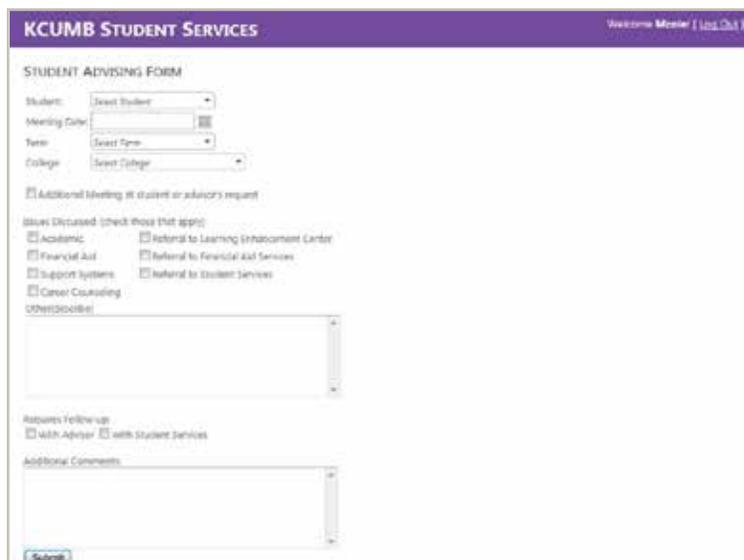
Faculty-student interaction is an important component of life on the University campus. Students meet faculty during the student application process, and more meaningful introductions occur during orientation week. Students are each assigned to a faculty advisor. Faculty advisors are required to meet with their advisees one on one at least once per semester. For each meeting, faculty advisors are asked to fill out the online Student Advising Form (Figure 3.2).

Additional resources are available for faculty on the Faculty Advising intranet page. For information on the advising process and referral options for students having trouble, an advisor training presentation is available [K151]. The faculty advising presentation provides information on referral triggers and tips for advising conversations.

Faculty advisors and students receive detailed academic reports at the end of each section that provide information about the section as well as cumulatively for the curriculum by discipline (Figure 3.3). Topics discussed include academics, support system, financial concerns, and counseling. Through the Office of Student Affairs, first- and second-year students submit a satisfaction evaluation of the advisor. In the COB, where the enrollment is considerably smaller, each student meets with the dean and at least one additional faculty member during each semester.

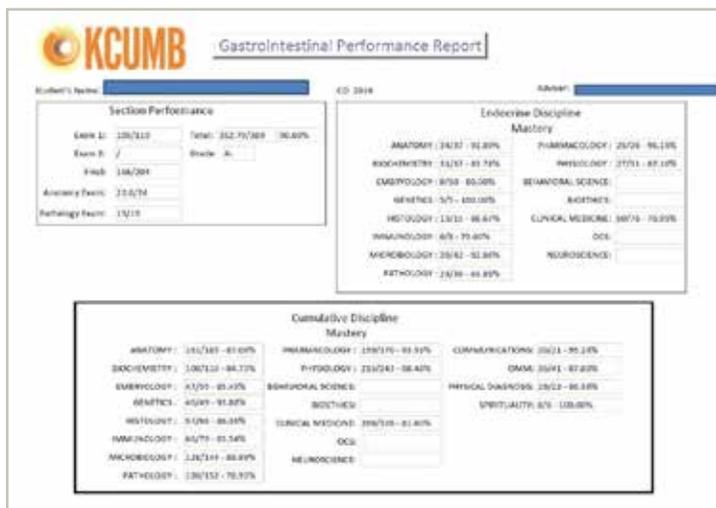
Faculty participating in sections, electives, and courses are listed on Blackboard and in syllabi along with contact information and regular office hours for both programs. Many faculty do not require appointments with students and have open-door policies. Faculty are accessible by phone, appointment, or email. Most faculty are accessible after regular hours by email. During years three and four, students in clinical clerkships maintain their campus faculty advisor, who communicates via email, phone, or office visits. In addition, students are assigned to a KCUMB clinical coordinator, who communicates monthly with students and advises them through the University and clinical site resources. They are also assigned preceptors for clerkship experiences. During the consolidation of clinical sites, discussed above in 3.A., core sites are organized under the direction of regional assistant deans. In summer 2013, a monthly newsletter,

Figure 3.2



The image shows a screenshot of the 'KCUMB STUDENT SERVICES' website, specifically the 'STUDENT ADVISING FORM'. The form is titled 'STUDENT ADVISING FORM' and includes several fields for data entry: 'Student' (a dropdown menu), 'Meeting Date' (a date picker), 'Year' (a dropdown menu), and 'College' (a dropdown menu). Below these fields, there is a checkbox for 'Additional Meeting at student or advisor's request'. A section titled 'Issues Discussed (check those that apply)' contains several checkboxes: 'Academic', 'Financial Aid', 'Support Systems', 'Career Counseling', 'Referral to Learning Enhancement Center', 'Referral to Financial Aid Services', and 'Referral to Student Services'. There is also a text area for 'Other/Describe:'. At the bottom, there are checkboxes for 'Return Follow-up' with 'with Advisor' and 'with Student Services', and a large text area for 'Additional Comments'. A 'Submit' button is located at the bottom left of the form.

Figure 3.3



*The Source* [K154], was launched to provide advising through the academic cycle for third- and fourth-year students. This communication from the Office of Community Clinical Education [K155] provides information on timelines, topical articles on things such as “staying healthy in the sick season,” realistic expectations, and preparation for the “Match.”

Along with the services of tutoring, financial aid, and academic advising, University faculty and staff also support co-curricular programs through participation in community activities and other

service events. In addition, all student organizations and clubs have a faculty advisor to manage and guide students in program and project selection.

The Office of Student Affairs [K44] staff assists students with budget issues, scheduling, and other arrangements needed for successful activities. Every two weeks, the Office of Student Affairs meets for two hours. During that meeting, education and training on policies and procedures as well as on new changes within the department are presented to department members. They also have presentations on learning enhancement strategies, as well as new services that could potentially be offered to students. They discuss how to more efficiently and effectively handle student issues.

## OPPORTUNITIES AND INITIATIVES

During the process of self-study, the faculty recognized several opportunities for improvement. As mentioned in the narrative, the Faculty Adequacy Model, first drafted in 2008, and later refined during the COCA Self Study process in 2011, has now become better defined. Currently, additional data-driven decisions are being considered to enhance the model. Specifically, data are being collected to verify weightings for teaching, service activities, and research and scholarly activities. The model will also be extended to the College of Biosciences. These data will be valuable for support of mission-linked activities in the future.

The University has undertaken an initiative that will enhance both teaching and learning through the distribution of new technologies for faculty and students. To increase sustainability across the University (strategic goal No. 4), iPads® were given to all students and teaching faculty in 2013. This will decrease paper and printing costs, while transitioning to new methods of delivering the curriculum. The Information Technology Department developed a Power Users group that tests applications for faculty; the group consists of technically savvy faculty and staff. Trainings have taken place for faculty and staff, and there is a general sense of excitement about new opportunities to deliver high-quality programs with leading-edge technology. Concurrent with the iPad initiative, exams will transition online using ExamSoft software, which was selected after a year of evaluating different online-testing platforms. This will occur as a two-step initiative, with multiple-choice exams being implemented first in the fall, followed by short answer, fill-in-the-blank, and essay tests at a later date.

## **SUMMARY STATEMENTS**

- The University developed a Faculty Adequacy Model and demonstrated it has adequate faculty to meet the teaching needs of its degree programs.
- All faculty are credentialed by Human Resources at hiring. Clinical licensure and maintenance of certification are reviewed and updated annually. The University evaluates all faculty annually. A new process is being developed and is in the final approval stage.
- The University recognizes the importance of faculty and staff development. Both faculty and staff must participate in the University's employee development program. Specific programs targeted to identify needs are offered on an as-needed basis to faculty, staff, or both. All faculty can access travel funds to professional meetings.
- Students have multiple methods to access faculty, including assigned advisors, post-lecture conversations, electronic methods, and face-to-face meetings. Faculty generally maintain an open-door policy for student contacts.
- Staff providing student support services are appropriately qualified, trained, and supported in their professional development [K58] [K61].

### ***3.D. The institution provides support for student learning and effective teaching.***

As described below, KCUMB provides multiple resources to support student learning and effective teaching from matriculation to graduation.

#### **MATRICULATION SUPPORT**

KCUMB students receive institutional support from several departments beginning with the application process and matriculation through graduation. Initially, the Office of Admissions and the Office of Financial Aid are intensely involved in supporting students through the matriculation process. These offices offer counseling and assistance to students. The Office of Financial Aid also provides information about loans, scholarships, grants, and debt management to each class. Other resources include podcasts, video libraries, and websites that are available online through the Financial Aid webpage.

Students admitted to the University meet minimum standards published in the University Catalog and website [K157]. Also, students who meet the minimum standards are admitted from Partners Program schools for early admission to the College of Osteopathic Medicine [K53]. Many students who have completed a M.A. in bioethics or a M.S. in biomedical sciences are successful in applying to the College of Osteopathic Medicine. Applicants matriculating into the COM from the University's bioethics program [K126] or from one of the University's Partners Program institutions are required to attend the Summer Learning Enhancement Program (SLEP) [K161]. SLEP is an intensive three-week course offered each summer. Other applicants identified by the Admissions Committee, such as non-traditional students, who may have been away from school for several years and who may benefit from an intensive review, are also invited to participate.

## ACADEMIC SUPPORT AND ADVISING

Institutional support for student learning is primarily directed by the Office of Student Affairs. A variety of developmental services, programs, and activities are provided in support of the academic mission of the University. To ensure continued professional development, departmental members attend a two-hour Student Affairs meeting every two weeks. During that meeting, education and training on policies and procedures as well as on new changes within the department are presented to department members. New learning enhancement strategies as well as new services that could potentially be offered to students are also presented. The Office is committed to excellence through an integration of curricular, co-curricular, and extra-curricular activities. Two full-time learning enhancement specialists provide individual academic support as needed and during 2012-2013, more than 1,900 hours of counseling were provided. KCUMB also offers classes in improving academic skills, including time management, study skills, and test-taking skills. The learning enhancement specialists also oversee the Supplemental Instructor program, which provides tutoring at no cost to University students [K163]. In addition, second-year students are assigned as peer mentors to incoming first-year students to help them navigate the rigors of beginning medical school [K164]. Many of these peer relationships are maintained through graduation and beyond.

The Office of Student Affairs collaborates with the departments of enrollment management and curricular affairs to identify and provide a variety of developmental services and programs for students who require additional services to meet their educational objectives. Students are particularly drawn to opportunities that can enhance learning strategies, as well as other programs that foster the development of leadership skills, civic responsibility and service, and personal growth [K166]. The University is cognizant of and compliant with federal regulations governing student record access, security and management (FERPA), financial aid regulations, and guidance on financial stewardship. The Student Academic and Professional Progress (SAPP) Committee was developed in 2011 as an early warning system to identify students struggling with academic or professional issues. Administrators, faculty, and staff, who interact closely with students, work collaboratively to identify concerns about students that could impact success [K50]. Currently, objective metrics are being developed to measure outcomes. For example, the graduation rate will be tracked for students previously identified by SAPP.

The faculty advisor program serves as a valuable resource for assisting students with professional development, academic issues, or during periods of personal, financial, or medical difficulties. As described above in 3.C., new students are assigned a faculty advisor



during orientation week in the fall. Advisors periodically attend training sessions to review responsibilities [K151]. As discussed, advisors and students receive a detailed report at the end of each section from Curricular Affairs. The report contains academic performance information about the student's performance in the section as well as cumulatively by discipline. In the 2012-2013 academic year, the Office of Student Affairs began surveying first- and second-year students about the effectiveness of the student advisors.

There are differences in requirements between the two colleges of the University for students who fail required components of the curriculum. In the biomedical sciences and bioethics programs, any student who fails a course is dismissed from the program. However, there are support mechanisms provided to avoid failure. Students are linked with prior graduates of the program who are in COM through the Big Brother/Big Sister program. These peers provide informal mentoring and help students navigate the difficulties of the program when needed [K164]. This occurs in addition to faculty advising for students. The faculty advisor for students in the bioethics program may also serve as a thesis advisor. Students completing a thesis also have a thesis advisory committee to assist with preparation and direction of the students' projects. Meetings between the student and thesis advisor occurs at least three times a year and are documented on an advising form [K169]. Forms are maintained in the Dean's Office.

The University's COM curriculum integrates basic and clinical science disciplines within sections organized by body systems. Students who fail a section or clerkship in the COM receive support through meetings with faculty, administrators, and learning specialists. Students must pass all sections and clerkships in order to advance toward graduation. During years one and two, there is a remediation schedule to assist students with successfully demonstrating mastery of information. Remediation is primarily accomplished during the Professional Enrichment Program, a one- to two-week experience at the end of each 12 weeks [K170]. During years three and four, the failure of any clerkship is reviewed by the Academic Review Committee to understand the cause of failure. Discussions are held with the student and preceptor separately to assist with understanding the circumstances surrounding the failure. Remediating a failure is accomplished by repeating the clerkship or participating in a structured, individualized clerkship on campus [K171].

Another requirement for graduation from COM is successful completion of two cognitive exams and one skills exam leading to licensure prior to graduation – the Comprehensive Osteopathic Medical Licensure Exam (COMLEX) [K172]. In preparation for these exams and to help students recognize their level of preparedness for the exams, several national exams are provided as formative tools for student self-assessment [K173]. Those who are unsuccessful in passing a COMLEX level 1 or 2 examination are delayed in starting clinical training or are removed from clerkships in order to refocus on passing the exam. During this time, students receive support from faculty and learning specialists while they are enrolled in independent study, a month-long, intensive preparation period prior to retaking the exam.

## **STUDENT WELLNESS AND SUPPORT SERVICES**

Important to student success is the appreciation for wellness. A new Student Activities Center provides a workout center for students. Students also have access to convenient on-campus acute care at the Student Health Center in the Dybedal Clinical Research Center [K52]. All students are required to maintain health insurance [K167]. For chronic care, students are encouraged to schedule an appointment at KCUMB Physician Associates or with a personal physician.



KCUMB offers free and confidential counseling services [K175] through New Directions Behavioral Health Employee Assistance Program [K51] for students, faculty, and staff. New Directions provides assistance with conflicts, interpersonal difficulties, marriage and family concerns, stress management, emotional upsets, financial matters, and alcohol and drug problems [K176].

### **ON-CAMPUS RESOURCES AND LEARNING ENVIRONMENT**

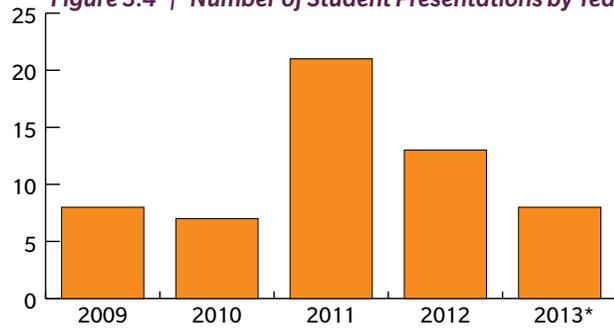
KCUMB provides state-of-the-art facilities that include a new D'Angelo Library and Student Activities Center [K177]. These and other spaces, such as Smith Hall, provide ample room for students to study and relax. Wireless internet is available throughout campus, and there is support for student learning with learning software. Librarians provide support for online searches for faculty and students. There are dedicated teaching areas for professional and graduate programs, as well as shared spaces that are scheduled as needed. Well-equipped labs are available for active learning and include traditional bench labs and an anatomy lab for small- to medium-sized groups, along with other labs for experiential learning of skills involving simulators and standardized patients. New and expanded lab facilities are included in the new Campus Master Plan. Learning is also enhanced by several programs that are bridges between community service, service learning, and curriculum – all of which address the mission of the University. Examples of these include community projects, Score 1 for Health, clinical experiences, and autopsy observations.

In an effort to ensure that KCUMB has appropriate infrastructure for its students and instructors, the University performs a review of all structures on campus for regular maintenance on a schedule ranging from daily to annual. There were 44 capital improvement projects approved for fiscal year 2013. The University is currently in the planning stage for an additional building phase as shown in the Campus Master Plan [K118]. This plan includes a new facility to house standardized patient and patient simulator programs, new classrooms and lecture halls, additional office space and expanded services for the cafeteria. To ensure the appropriateness of clinical training facilities to fulfill the education needs for students, each core facility is visited and reviewed annually.

## FOCUS ON RESEARCH OPPORTUNITIES

As mentioned throughout this self-study, research is of growing importance at KCUMB. Accordingly, the University provides students with guidance in the effective use of research. As part of the educational experience, students may participate in research activities on campus or externally with approved faculty. Research is supported in professional and graduate programs through electives and program requirements. The Office of Research and Sponsored Programs organizes an annual Research Symposium [K127] and the Summer Student Research Fellowship program during which students dedicate six to seven weeks to a research project [K99]. Many times these activities result in the presentation of results at national meetings and may also result in co-authorship of publication in peer-reviewed journals [K182] (Figures 3.4 and 3.5). To assist with the preparation of data, SPSS statistics software is available to students and faculty across campus.

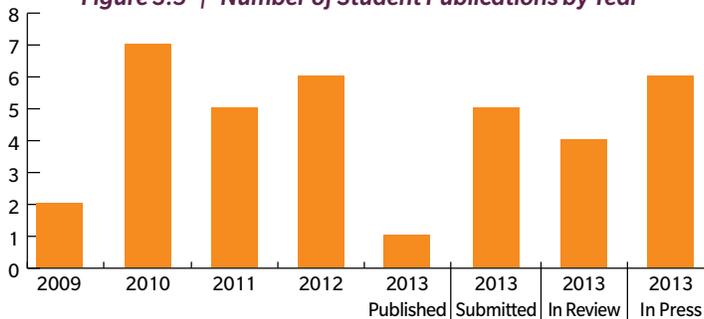
**Figure 3.4 | Number of Student Presentations by Year**



\* Data is current as of May 2013

Research experiences for students may also extend beyond the campus. KCUMB, along with other regional universities, hospitals, and community organizations are partners in the National Institutes of Health (NIH) funded Clinical Translational Science Award (CTSA), known locally as Frontiers: The Heartland Institute of Clinical and Translational Research [K77]. This collaborative award seeks to accelerate the rate

**Figure 3.5 | Number of Student Publications by Year**



at which laboratory studies are translated into real-world treatment for patients and to create a pipeline for future physician and laboratory researchers. Since this program began in 2010, four KCUMB students have been awarded competitive NIH-sponsored T32 fellowships to spend a full year conducting research and completing master's degrees in clinical research at Kansas University Medical Center.

Historically, the University's faculty have been active researchers. Now, under the direction of the new vice president for research, several new initiatives are being launched to further enhance research productivity. For example, during the summer of 2013, faculty attended an intensive on-campus grant writing workshop, with the express goal of producing grant submissions to fund research projects. These submissions are in progress. In addition to these, the Clinical Research Center has been reorganized into the Center for Community and Clinical Research, with three focal clusters: community health, child health, and clinical research. A director has been hired to lead the new center. Some faculty have been active researchers prior to the new emphasis on research. Space is available for research and modest external funding has been received.

## **OPPORTUNITIES AND INITIATIVES**

In the COM, additional resources have been created to provide objective data to advisors about advisees. The new advisor and student report provides information about student performance in each discipline of a section. This improves the former process of only providing final grades. In an integrated curriculum, the final grade does not highlight strengths and weaknesses. The report also provides cumulative information that is helpful for advising about national board exam preparation. Class data are now available for all department chairs to review their own disciplines as well as student performance in other disciplines in the integrated curriculum. These data are leading to the development of new interventions to enhance student success.

The self-study identified an opportunity to better integrate COB advising into the University advising process. Until recently, all advising was accomplished by the dean of the College. With expansion and delegation of these responsibilities, utilizing the faculty advisor training could contribute to inter-advisor reliability. This might also include utilizing a single advisor's report for all programs of the University.

During the self-study process, as well as independent of the process, it was noticed that when discussing student issues, information regarding individual students was available in different departments. It was important for discussions to take place on how to best serve the students' needs. The Office of Student Affairs developed the SAPP Committee and a SAPP database that houses information about students who have academic, personal, or professional problems. This database, developed within the University's IT Department, includes all students and can be accessed externally by approved faculty, staff, and administrators, making it an important tool for supporting students throughout enrollment at KCUMB.

The self-study highlighted the need to explore better services for all students. Key in this discussion was identifying a better and affordable student health insurance and disability plan. (Documentation of student ADA plans and audits by the DOE can be viewed in the Dean's Office.) A first step in the form of a supplemental insurance coverage was obtained by the Office of Student Affairs, and a proposal for a group plan is being investigated.

It was also noted that a better platform for communicating with students about services was needed. To this end, the University launched a new website and many departments designated individuals to be trained by the University Relations Department for maintaining an up-to-date site. Additionally, monthly e-newsletters are being developed to enhance communication with students at clinical sites about important clerkship-related topics. With the distribution of iPads to faculty and students, communication strategies are being enhanced to improve opportunities for communication.

## **SUMMARY STATEMENTS**

- The institution provides multiple resources to students beginning with the admissions process and continuing through graduation.
- The services offered to students include direct counseling provided by trained and experienced learning specialists, information about financial aid, and multiple measures to support student learning. These include tutoring and peer-to-peer learning programs, an active faculty advising effort supported by student performance data, and remediation programs.
- The infrastructure in support of learning includes a the library, enhancement of online access throughout the campus, the availability of learning support software, and the availability of well-equipped labs and learning environments. Additional study space was recently made available to students, and the institu-

tion will soon enhance its infrastructure through the addition of classroom and small-group space in a building dedicated to instructional activities.

- Students receive support in their use of information and research through learning activities organized by library personnel.

### **3.E. The institution fulfills the claims it makes for an enriched educational environment.**

The University recognizes the importance of reaching beyond the boundaries of the campus to serve the needs of the Greater Kansas City area, particularly those communities in the historic Northeast Neighborhood, where the University has remained a fixture since 1916. At KCUMB, students, as well as faculty and staff, are encouraged to contribute through institutional partnerships, programs, and service-learning opportunities that deliver a significant impact to community organizations [K60].

#### **CO-CURRICULAR PROGRAMS**

KCUMB sponsors numerous co-curricular programs for students that are inherent to the degree programs delivered. Students who are not on stipulated or conditional status may participate in the events [K183]. The three major programs include: We Care Community Service Day, service learning, and club/organization-sponsored community service projects. While the first two of these co-curricular programs are specific to students enrolled in the COM, club/organization-sponsored [K49] community service projects are available to all enrolled students regardless of program of study. Four priorities, or community learning outcomes, related to these co-curricular activities have been identified: 1) gain knowledge of and provide support to organizations that share the University's mission and strategic goals; 2) address local community needs by supporting basic institutions and services within the Greater Kansas City area, especially for those in underserved populations; 3) provide support for Kansas City's historic and diverse Northeast and the University's immediate neighborhood; and, 4) promote the health and wellness of the Kansas City community.

Below, each program is briefly described in terms of purpose for contributing to the overall educational experience of students.

1. We Care Community Service Day: During the COM first-year orientation [K184], approximately 250 medical students participate in community service projects. Students visit 13-15 organizations across Kansas City, but mainly focused in



the Northeast corridor. The organizations served vary from Harvesters Food Bank to picking up trash and planting flowers in the Northeast Neighborhood, and students are involved in a variety of projects including painting, sorting items, playing with children, and socializing with seniors and the homeless. It is during these experiences that many medical students begin to develop a passion for service and gain insight as to what it means to “give back” to the community. Participation in We Care often is a catalyst for students to continue to engage in community service throughout their enrollment at KCUMB.

2. **Service Learning:** Second-year COM students participate in a service-learning project. Service learning allows for COM students to help others while also learning a different side to medicine. Second-year COM students, on average, participate in 40-60 projects at 18-20 various organizations around the Kansas City area. Students complete a survey on their service-learning experience [K186]. This survey is used to determine the quality of the student experience and to evaluate and assess the service-learning site for continued inclusion in the program. Student participation in service learning also provides an opportunity to meet all four identified community service-learning outcomes.
3. **Club/Organization Community Service Projects [K49]:** KCUMB has more than 30 student organizations. In order for an organization to keep its charter, each organization must perform a community service project annually. Club participants are from both the COM and the COB. Organizations complete more than 500 hours of community service each year, and many exceed this goal. Clubs’ community service projects range from free sports physicals and health screenings to tutoring and mentoring school age children and young adults. Furthermore, the KCUMB Office of Student Affairs encourages student participation and works with the Office of Community Affairs to track individual student volunteer hours as a measure of student involvement in community service.

## **MULTICULTURAL EXPERIENCES FOCUSED ON STUDENT LEARNING**

KCUMB medical mission trips through DOCARE International provide students with a multicultural experience that is aligned with their studies and the University’s mission. COM students from all four years are involved in many different aspects of planning, participating, and analyzing data from the annual KCUMB DOCARE mission trips to the Dominican Republic and Guatemala [K72]. Students in clerkships can apply to participate in mission trips as an elective clerkship. Participation in Medical Spanish, an elective offered during the first two years, demonstrates active interest in community engagement. During one elective, students spend a week at a Spanish-speaking clinic and serve as an interpreter. In another elective, students participate in a medical mission to Mexico.

## **COMMUNITY SERVICE**

As discussed throughout this self-study, KCUMB is very proud of its extensive community service. One of the University’s best examples of this service is Score 1 for Health [K9], which has been affiliated with KCUMB in several ways since its inception in 1993. Through Score 1 for Health, first- and second-year COM students provide health screenings to mostly lower socioeconomic children in the Kansas City area. Students go to approximately 50 grade schools and screen more than 13,000 children annually. Participation in Score 1 for Health is often the first real clinical experience for KCUMB medical students and reinforces the sense of community for the medical students. During its affiliation with the University, student participation in this program demonstrated service learning. In 2012, it returned to the curriculum as part of student clinical training directed through the departments of family and community medicine and pediatrics.



### **RESEARCH TO PROMOTE WELLNESS**

As discussed earlier in 3.D., the University is committed to value-added experiences of research. This is clearly demonstrated in the mission of the University and the five-year Strategic Plan. The latter led to the recruitment and hiring of a new vice president for research and two new faculty researchers. There is an increased emphasis on scholarly activity and research and inclusion of these in the computations for the Faculty Adequacy Model. In addition to bench research, there is an increased interest in clinical research and medical education research. The increase in faculty efforts has correspondingly led to greater student participation in research.

### **SPIRITUALITY AND HUMANISM**

KCUMB engages students in a variety of religious and spirituality activities. KCUMB is one of eight leading medical schools, including Harvard and Vanderbilt, to twice receive a prestigious John Templeton Foundation Spirituality in Medicine Award. During the first and second years, medical students engage in a unique spirituality component of the curriculum. In addition, an elective on Spirituality in Medicine is available that exemplifies the osteopathic integration of body, mind, and spirit. In this course, students are exposed to a variety of religious beliefs, often by practitioners of those faiths. Treatment considerations of the hospitalized patient and the dying patient will be discussed in small groups and with selected chaplains from the area. Students also have an opportunity to explore their own belief system.

As an integral component of the curriculum, the Department of Bioethics facilitates small-group discussion on a variety of topics, including spirituality and religion, as well as a large-group spirituality panel, where experts in a variety of spirituality-related areas discuss their views on a variety of topics and are

available to answer medical students' questions. Students may also elect to complete a masters of arts in bioethics, in addition to the doctor of osteopathic medicine degree [K103]. The Department of Continuing Medical Education also sponsors an annual [K62] Bioethics, Spirituality, and Humanism in Medicine Conference. This conference provides a forum for addressing the salient ethical and humanistic issues health-care workers confront daily. The aim of the conference is to provide strategies for negotiating the complex ethical terrain of health care and participate in interactive sessions designed to help them maintain a positive spirit of service in an age of increasing demoralization.

## **OPPORTUNITIES AND INITIATIVES**

In 2012, a banner program was initiated to celebrate achievements of each class. The first stage of the banner program recognized the academic achievements of students in the classes of 2012 and 2013. These are displayed permanently in the Student Activities Center and are available at graduation for students, faculty, staff, and families to view. The long-term vision is for two additional banners to be developed that recognize outstanding class achievements in service and research. The criteria for these banners are still being developed.

During the past year, there have been efforts to increase research opportunities for students external to the University campus. These efforts have met with some success and the efforts will continue. There is also a plan to recognize students who engage in significant research efforts that will lead to a diploma designation of "with research distinction." It is anticipated that this will be implemented with students entering in the fall of 2014. The requirements for this distinction will be additional electives, development of a research project, and preparation of a first-authored manuscript.

It was recognized during the preparation of this self-study that the development of co-curricular programs for COB students lags behind those of COM. However, the program is relatively new with few students and a critical mass is generally required to get independent efforts started. Confounding efforts to integrate more COM and COB activities are that the programs have different start dates, the focus of the programs varies, and the services of the programs often focus on medical skills, for which COM students receive instruction through the curriculum. However, it is recognized that greater efforts in the area of intercollege activities could benefit both programs.

To support more interactions among students, several departments have created courses that can be taken concurrently by students in either college, if offered in the evenings or online.

## **SUMMARY STATEMENTS**

- The institution's co-curricular programs relate directly to the institution's mission regarding service and contribute directly to the educational experience of its students.
- In alignment with the institution's mission statement, students have significant opportunities to engage in research and take part in service learning and community engagement.
- KCUMB is one of eight leading medical schools, including Harvard and Vanderbilt, to receive a prestigious John Templeton Foundation Spirituality in Medicine Award. As such, instruction and experience related to bioethics and spirituality are a significant part of a student's educational experience. Integration of bioethics into the curriculum promotes the development of important competencies for the practice of medicine in the 21st century. Spirituality is explicitly integrated into osteopathic clinical skills training in the first two years of the didactic curriculum.

| Exhibit #            | CRITERION THREE EXHIBITS  |
|----------------------|---|
| <a href="#">K4</a>   | Core Clinical Clerkship Sites   |
| <a href="#">K5</a>   | COMLEX Report (PDF) - password protected  |
| <a href="#">K6</a>   | College of Biosciences  |
| <a href="#">K9</a>   | Score 1 for Health  |
| <a href="#">K32</a>  | CVs - Regional Deans (PDF) - password protected                                       |
| <a href="#">K33</a>  | Job Description - Regional Deans (PDF) - password protected                           |
| <a href="#">K43</a>  | Health Professions Program Report (PDF) - password protected                          |
| <a href="#">K44</a>  | Student Affairs   |
| <a href="#">K49</a>  | Community Service Project List (PDF)  |
| <a href="#">K50</a>  | Student Academic and Profession Progress Committee (SAPP) (PDF)                       |
| <a href="#">K51</a>  | New Directions Behavioral Health  |
| <a href="#">K52</a>  | Health and Wellness   |
| <a href="#">K53</a>  | Partners Program  |
| <a href="#">K58</a>  | Faculty Handbook (PDF)  |
| <a href="#">K60</a>  | Community Affairs   |
| <a href="#">K61</a>  | LED 2013-14 Schedule (PDF)  |
| <a href="#">K62</a>  | Bioethics Symposium   |
| <a href="#">K72</a>  | Medical Missions  |
| <a href="#">K77</a>  | Frontiers Research  |
| <a href="#">K99</a>  | Summer Student Research Fellowship  |
| <a href="#">K103</a> | Degree Program Description - College of Osteopathic Medicine                          |
| <a href="#">K104</a> | COCA Accreditation Letter (PDF)   |
| <a href="#">K105</a> | ERAS Match Results  |
| <a href="#">K108</a> | Guiding Principles of the Medical Education Program - College of Osteopathic Medicine |
| <a href="#">K109</a> | Objectives and Competencies - College of Osteopathic Medicine                         |
| <a href="#">K111</a> | Curricular Competencies and Objectives - College of Osteopathic Medicine - (PDF)      |
| <a href="#">K112</a> | Learning Outcomes and Assessment Rubric - Biomedical Sciences (PDF)                   |
| <a href="#">K113</a> | Site Performance Report (PDF)   |
| <a href="#">K115</a> | Syllabus Template - College of Biosciences (PDF)                                      |
| <a href="#">K117</a> | Annual Report - Curricular Affairs (PDF)  |
| <a href="#">K118</a> | Campus Master Plan (PDF)  |
| <a href="#">K121</a> | Outline of Class Presentation (Medical Informatics Training - MSII) (PDF)             |
| <a href="#">K122</a> | OCS Curriculum (PDF)  |
| <a href="#">K124</a> | Research Opportunities  |
| <a href="#">K126</a> | Degree Program Description - Bioethics  |
| <a href="#">K127</a> | Research Symposium  |
| <a href="#">K128</a> | Trends in Student Diversity (PDF)   |
| <a href="#">K131</a> | Med Student for a Day (PDF)   |
| <a href="#">K132</a> | National Youth Leadership Forum on Medicine   |
| <a href="#">K133</a> | Missouri's Area Health Education Center (AHEC)  |
| <a href="#">K136</a> | Student Handbook - Thesis Requirements for College of Biosciences (PDF)               |
| <a href="#">K138</a> | Faculty Adequacy Model (PDF)  |
| <a href="#">K139</a> | CVs - KCUMB Faculty   |
| <a href="#">K144</a> | CQI Process (PDF)   |
| <a href="#">K145</a> | Faculty PMEP Form (PDF)   |
| <a href="#">K148</a> | Staff PPR Form (PDF)  |
| <a href="#">K149</a> | Faculty Development Strategic Plan (PDF)  |
| <a href="#">K150</a> | Faculty Development Schedule (PDF)  |

| Exhibit #            | CRIT. 3 EXHIBITS  |
|----------------------|---|
| <a href="#">K151</a> | Faculty Advisor Training (PDF)  |
| <a href="#">K154</a> | The Source - 3rd and 4th Year Newsletter  |
| <a href="#">K155</a> | Office of Community Clinical Education  |
| <a href="#">K157</a> | Admissions  |
| <a href="#">K158</a> | Financial Aid   |
| <a href="#">K161</a> | University Catalog - Summer Learning Enhancement Program (pages 15-16) (PDF)        |
| <a href="#">K163</a> | University Catalog - Supplemental Instruction and Board Preparation (page 16) (PDF) |
| <a href="#">K164</a> | Mentoring/Networking - Big Brothers/Big Sisters                                     |
| <a href="#">K166</a> | Student Involvement   |
| <a href="#">K167</a> | Student Insurance   |
| <a href="#">K169</a> | Advising Form - College of Biosciences (PDF)  |
| <a href="#">K170</a> | Professional Enrichment Program   |
| <a href="#">K171</a> | IDIS 003 Syllabus (PDF)   |
| <a href="#">K172</a> | Student Handbook - Graduation Requirements (page 59) (PDF)                          |
| <a href="#">K173</a> | COMSAE Subject Exam Policies (PDF)  |
| <a href="#">K175</a> | Counseling  |
| <a href="#">K176</a> | New Directions - Utilization Report (PDF) - password protected                      |
| <a href="#">K182</a> | Student Publications (PDF)  |
| <a href="#">K183</a> | University Catalog - Academic Standing (page 98) (PDF)                              |
| <a href="#">K184</a> | Orientation   |
| <a href="#">K186</a> | Service Learning - Survey Feedback - password protected                             |
| <a href="#">K225</a> | Example Syllabi for Years 1-4 - College of Osteopathic Medicine (PDF)               |
| <a href="#">K273</a> | Community Service Hours (PDF)   |
| <a href="#">K275</a> | Licensure Data - All Clinical Appointments (PDF)                                    |