MARSHALL UNIVERSITY
Joan C. Edwards School of Medicine

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Dear Drs. Hash, Hunt and Barzansky,

We are pleased to provide our Briefing Book which addresses Marshall University Joan C. Edwards School of Medicine's response to the areas of noncompliance, areas that are in compliance with a need for monitoring and the areas of transition.

The administration, faculty, staff and students have been energized by our process of review and transformation and have expressed with certainty that we are achieving new levels of excellence in all facets of our organization.

We look forward to demonstrating for the site team evidence of significant culture change through multiple improvements in our process and outcomes in education, scholarship, and leadership.

The Briefing Book is organized according to the outline provided in the LCME letter dated November 12, 2012. It includes a section for each standard in need of follow-up as well as supporting appendices.

Do not hesitate to contact me should you have questions or require additional information.

Sincerely,

Joseph I. Shapiro, MD
Dean
Marshall University Joan C. Edwards School of Medicine

Briefing Book

Prepared for the LCME Limited Survey

Introduction

The Marshall University Joan C. Edwards School of Medicine (JCESOM) is pleased to provide this Briefing Book as supporting documentation of our unified efforts to address our areas of noncompliance, areas in compliance with a need for monitoring and the areas of transition.

The Briefing Book was compiled by eight subcommittee chairs and their subcommittees, which diligently worked to address issues cited in the LCME letter of June 15, 2011.

During this process our administration actively engaged with faculty, staff, and students to promote a prominent culture change through transparency. This transparency was most notable with the creation of an online JCESOM LCME Information page from which everyone, including the public, could follow our progress through meeting agendas and minutes. (**http://musom.marshall.edu/lcme/**)

The message of change has been promulgated through faculty meetings, departmental meetings, small group meetings, town hall meetings, websites, social media, email, and one-on-one discussions. As a result, there is a renewed atmosphere of camaraderie and pride as we have actively engaged in improving our organization.

It is without question that we are better today as a result of these efforts. We look forward to continued success as a medical institution which has actively supported the health care needs of our Appalachian region for over 30 years.

Areas of Noncompliance

IS-16

An institution that offers a medical education program must have policies and practices to achieve appropriate diversity among its students, faculty, staff, and other members of its academic community, and must engage in ongoing, systematic, and focused efforts to attract and retain students, faculty, staff, and others from demographically diverse backgrounds.

Finding: The medical school has not explicitly defined its goals for diversity and has not engaged in systematic efforts to develop programs aimed at broadening diversity among medical school applicants or recruiting faculty members and students from demographically diverse backgrounds.

Introductory Comments

The administration and faculty have conscientiously worked to ensure that the school's position and policies on diversity are more clearly defined, circulated and incorporated into the fabric of the educational environment. Through our educational curriculum and faculty modeling we will continue to promote sensitivity and cultural awareness of a diverse community of students, faculty and house staff.

In August 2011, a Multicultural Advisory Council was appointed to promote a climate that fosters belonging, respect, and value for all and encourages engagement and connection throughout the institution and community.

In February 2012, an Office of Diversity was established and a Director hired. The vision for the Office and the Director are articulated through the Diversity Mission Statement which affirms JCESOM's commitment to supporting and sustaining an educational community which is inclusive, diverse and equitable.

The Director is responsible for matters of diversity involving recruitment of faculty, staff and students and strategies for retention of the same. The Director works with undergraduate universities to develop initiatives to promote JCESOM to minority and disadvantaged students. The Director assists in planning, providing and implementing programs targeted to encourage and stimulate underrepresented minorities' interest in medicine and science.

In June 2012, data for JCESOM were received from our Diversity and Engagement Survey which was completed in cooperation with the University of Massachusetts Medical School Office of Diversity and Equal Opportunity. (**IS-16 Appendix: Diversity and Engagement Survey JCESOM**) This data helped JCESOM assess its current diversity status and reaffirm our commitment through our policies.

The JCESOM's Mission Statement, Strategic Vision, and Admissions Policies have been reviewed and revised to explicitly define our goals for diversity. Processes that create, establish, and retain a diverse workforce and student body have been reviewed.

The comprehensiveness of these improvements in our diversity program are described below.

1. ***Provide a copy of all current institutional (medical school and/or university) policies related to assuring a diverse student body, faculty, and staff. Note the dates that they were adopted.***

IS-16 Table 1: Policies Related to Assuring a Diverse Student Body, Faculty, and Staff

Document Titles	Date Adopted
IS-16 Appendix: JCESOM Strategic Vision with Mission Statement	April 4, 2012
IS-16 Appendix: Admissions Policy	April 4, 2012
IS-16 Appendix: Faculty Bylaws	April 4, 2012
IS-16 Appendix: Diversity Statement	December 12, 2012
IS-16 Appendix: Departmental Mission Statements	December 2012
IS-16 Appendix: Admissions Procedures	February 5, 2013

Describe the process by which these policies were developed, approved, and implemented at the institution.

JCESOM Strategic Vision and Mission Statement

The Strategic Vision and Mission Statement was reviewed by the Strategic Vision Committee in September 2011 to clarify JCESOM's stance on the importance of diversity. The Committee's charge was to ensure the institution's commitment to diversity was reflected in the document. Members of the committee included a diverse group of JCESOM faculty, staff, students, and representatives from main campus including the Marshall University Vice President for Multicultural Affairs. In January 2012, the document was forwarded to faculty for review and comments. The faculty submitted comments and suggested changes. The document was revised and approved on February 9, 2012 by the Committee and forwarded to the Interim Dean. It was subsequently approved and adopted at a general faculty meeting on April 4, 2012.

Admissions Policy and Faculty Bylaws

The Executive Committee of the Admissions committee revised the Admissions Policy and Faculty Bylaws to clearly define JCESOM's policy regarding diversity and student recruitment on March 8, 2012. The Admissions Committee reviewed and approved the changes to the Admissions Policy on March 19, 2012. The Admissions Policy and Faculty Bylaws changes were approved and adopted by the faculty on April 4, 2012.

Diversity Statement

The Multicultural Advisory Council developed a Diversity Statement in January 2012 to more clearly define JCESOM's goals for diversity. The Diversity Statement was emailed to faculty, residents, students and staff for feedback on March 7, 2012. After revisions the statement was approved and adopted by the faculty on December 12, 2012.

Departmental Mission Statements

After the aforementioned policies and bylaws changes were completed, department heads reviewed and revised their departmental mission statements to ensure compliance with the diversity mission of the school.

Admissions Procedure

The Executive Admissions Committee revised the Admissions Procedure document on January 15, 2013. The Admissions Committee reviewed, revised and approved the document on February 5, 2013.

2. ***Describe how the institution defines or characterizes diversity for its students, faculty, and staff. If different definitions apply to any of these groups, provide each relevant definition. What dimensions of diversity are included in the definition of diversity for students, faculty, and staff?***

The JCESOM is trying to establish and support an environment that is more inclusive by nurturing individuals from a variety of different races and ethnicities as well as cultures and socioeconomic groups. Based on our own diversity category internal review, we believe that traditionally underrepresented minorities, people derived from Asia and Pacific Islands, women, and people from a rural background represent value added groups to our medical school student body, staff and faculty which we would like to enrich. JCESOM's descriptions of diversity for its students, faculty and staff are described in **IS-16 Appendix: JCESOM Value Added Groups**

3. ***In the context of the definition of diversity, describe the programs that are in place to support diversity initiatives in the following areas:***

i. Student recruitment, selection, and retention

ii. Faculty/staff recruitment, employment, and retention

Describe the resources that are available to support programs for student and faculty recruitment and retention, including personnel and financial support.

i. Student Recruitment

JCESOM strives to recruit students who will create a diverse and rich learning environment. These efforts start by enhancing pipeline programs for high school and college students.

The Office of Diversity is involved with early outreach activities targeting students from elementary to college with the goal of encouraging interest in science and medicine, and to increase the future pool of minority students.

The Director participates in statewide, regional and national recruiting events at college and university campuses and at recruiting fairs such as AAMC and NAMME. These are graphically displayed in **IS-16 Appendix: Office of Diversity Recruitment Visits**.

Additional recruitment activities include recruiting students of color through the development of relationships with community centers, churches, and other nontraditional settings. Current minority students and alumni are involved in the recruitment effort.

Pipeline Programs for High School Students

Since 2004, JCESOM has worked with pipeline programs for West Virginia high school students to encourage medicine as a career. This focus helps to "grow our own providers" to serve the most rural and underserved parts of the state.

The pipeline program is led by staff from the Robert C. Byrd Center for Rural Health and includes 14 counties and 31 schools. These are located predominantly in the southern, most underserved part of the state. Students who have participated in the pipeline programs represent a variety of races, ethnicities, genders, underrepresented minorities in medicine as well as rural students, many of whom are first-generation college going and/or economically disadvantaged students.

Typically, two Family Medicine residents are selected to participate in the program and are assisted by two to three Family Medicine physician faculty. The faculty, residents and students participate in mentoring sessions, field trips, and hands-on workshops such as suturing. They serve as guest speakers emphasizing practical skills such as application building, interviewing, and volunteering.

During the fall of 2012, the pipeline programs averaged two events per week in high schools and colleges. The high school pipeline program focuses on raising awareness of medicine as a career, and more intensive mentoring for those who are certain about their career choice of medicine. The very low college-going rate in southern West Virginia makes it imperative that there is a focus on removing perceived barriers to attending college and medical school, and insure students are prepared for the rigors of higher education.

In order to maximize resources, JCESOM has worked with other organizations that serve minority and underrepresented students to reach these goals which include:

- **Health Sciences Technology Academy (HSTA)**
  A West Virginia University program focusing on health care careers for minority and economically disadvantaged students

- **Upward Bound**
  A federally funded program that provides fundamental support to participants in their preparation for college entrance, serving high school students from low-income families and from families in which neither parent holds a bachelor's degree

- **Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR-UP)**
  GEAR-UP is a state college-going program targeting minority and underprivileged students
- **West Virginia Chapter of the Health Occupations of America**
  A program which involves students from the most rural areas in our state

During the 2011-2012, the pipeline programs reached over 1,000 high school students in 10 counties. During the fall of the 2012-2013 academic year, the pipeline programs reached 943 students in 14 counties. Activities will continue in the spring semester of 2013. Evaluative measures have been instituted to ensure that the program is making a positive difference with both interest in, and knowledge of, medicine as a career. Pretests were given to 264 students in the fall 2012. Posttests will be given in April and May as the pipeline program will conclude for the 2013 academic year. **(IS-16 Appendix: High School Pipeline Programs)**

Pipeline Programs for College Students

The pipeline program was expanded during 2011-2012 to colleges and universities. Marshall staff and faculty visit all colleges and universities in the state annually to talk with premedical students and faculty. **(IS-16 Appendix: College and University Outreach Visits)**

The Center for Rural Health sponsors a college level chapter of Health Occupations students at Marshall to work regularly with premedical students.

Staff also work with the historically black institutions in the state, West Virginia State University and Bluefield State College, scheduling visits for their students to JCESOM, conducting interviewing workshops, and providing MCAT preparation assistance. An outreach to Hampton University in Hampton, Virginia, a historically black institution in Virginia was initiated in October 2012. The staff met with approximately 20 students and faculty January 17, 2013. Efforts are underway to establish a Memorandum of Understanding to explore collaborative opportunities. **(IS-16 Appendix: Pipeline and Outreach Map United States, IS-16 Appendix: Pipeline and Outreach Map West Virginia)** A residential summer academy is scheduled for June 3-7, 2013 for undergraduate students interested in pursuing a medical career and is open to all, but minorities and women are specifically encouraged to attend, and women and minorities are the primary speakers for this academy. Students attending the academy will experience intensive hands on educational experiences, networking with women and minority physician faculty, practical guidance in interviewing and MCAT preparation, and will be assigned a faculty mentor to follow up with them after the academy is over. **(IS-16 Appendix: Summer Academy Flyer)**

In an effort to expand recruiting of minority students, JCESOM contacted the Southern Regional

Education Board (SREB) for their assistance in reaching out to their 15 member states through their Regional Contract Program. This is a long standing program to share educational opportunities amongst member states and to increase the number of minority students pursuing professional studies.

- December 6, 2011, Dr. Stephen Kopp, President of Marshall University and Dr. Robert Nerhood, Interim Dean, JCESOM sent a letter to the Director of the (SREB) Regional Contract Program.
- December 10, 2011, Brian Noland, Chancellor, West Virginia Higher Education Policy Commission sent a letter to the SREB strongly supporting the efforts for collaboration.
- June 1, 2012 the SREB Regional Contract Program sent letters to eight states regarding JCESOM interest in collaboration.
- October 2, 2012, JCESOM brochures were sent to SREB headquarters for distribution to the states.
- January 16, 2013, SREB contacted the State of Virginia to explore a contract between JCESOM and Hampton University.

In addition to these programs specifically designed to increase student diversity, we have developed new working relationships with two historically Black universities: West Virginia State University in Institute, West Virginia and Kentucky State University in Frankfort, Kentucky.

Project PREMED (Providing Real World Experiences for Marshall Educated Doctors)

Interventions in the educational pipeline have been successful by increasing minority entrants into the health professions. Interventions at the college and post baccalaureate levels have been particularly high-yield short-term strategies for increasing health professions diversity; however tending to the educational pipeline programs is the key to increasing diversity in the health professions.

Project PREMED is a jointly sponsored program between the JCESOM Office of Diversity Programs and the Marshall University Office of Multicultural Affairs. The project was established to create opportunities for future doctors of color and to implement additional efforts to address a major barrier for students who are underrepresented in the health professions. **(IS-16 Appendix: Project PREMED Brochure, IS-16 Appendix: Project PREMED Description)**

In 2011, seven students were chosen to participate in the inaugural Project PREMED class. One student from the inaugural class has been accepted to JCESOM for 2013. In 2012, another student from the inaugural class was accepted to the Biomedical Sciences graduate program.

There were ten student participants chosen to participate in the Project PREMED program in 2012; however only seven student were able to attend. Assigned student mentors and the Director of Diversity are in constant contact with the Project PREMED mentees. A Project PREMED online logging and tracking system was created so that student mentors are able to log their contact with mentees. As of today, three students are on track to apply for admission to begin JCESOM during the 2014 academic year. Over the next two years, our plans are to

increase the number of Project PREMED participants to 15 in 2013 with an ultimate goal of continually enrolling 20 participants per year.

Neonatal Clerkship Program

The Neonatal Clerkship was created in 2005 to allow college students to become exposed to the medical field by shadowing neonatologists during the summer. The program was revised in April 2012 to focus on underrepresented minorities in medicine and attracted its first African American participant. For this upcoming summer 2013, five additional underrepresented minorities in medicine have been selected to participate.

Programs that are in place to support diversity initiatives in student selection

Applicants are selected by the Admissions Committee based upon a holistic review process. The Admissions Committee consists of 25-30 members and is composed of full-time basic science and clinical faculty, community physicians, four medical students, medical residents, medical school administrators, undergraduate faculty members from the main Marshall University campus and community representatives. Committee members are selected to give consideration to maintaining a diverse group in terms of age, gender, race, ethnicity and rural background.

The Committee receives annual training regarding JCESOM's mission, any changes in Admissions Policy, the admissions process and targeted recruitment efforts. In addition, the Office of Admission provides professional development for the committee with articles on admissions and invited speakers. Most recently the Admission's Dean from the University of Kentucky Medical School met with members of the Admissions Committee in July 2012 to discuss the holistic review process.

Selection of applicants is based on the consensus of the Admissions Committee and the evaluation of the following areas:

- The scholastic accomplishment of the applicant in college, graduate studies and other professional courses
- Performance on the MCAT
- Three letters of evaluation and recommendation, two of which must be from science faculty who have taught the applicant and one from the applicant's major department

All qualified applicants are interviewed by members of the Admissions Committee. The interview serves to assess personal characteristics, enthusiasm for medicine, and the potential to bring a unique and rich perspective to the medical school. Equally important and to add value to our learning environment is the infusion of students from a variety of cultural and ethnic backgrounds to insure that our students are prepared for life and practice in an expanded environment. In addition, the applicant has a chance to become acquainted with the Medical campus, and provide the Admissions Committee better insight into his/her personal interests and demeanor.

Programs that are in place to support diversity initiatives in student retention

Successful retention of our students through graduation is of utmost importance. As such, all students and their families are provided opportunities to feel welcomed and included at JCESOM regardless of their background and interests. This includes providing activities that promote positive social interactions, identifying and intervening in academic difficulty, recognizing and referring in situations involving wellness concerns, and providing early and consistent career advising and mentoring.

Programs that are designed to promote positive social interactions include:

- American Medical Women's Association to support female students
- Medical Mommas group that caters to the needs of female students with children
- Plus Ones support group for spouses or significant others of medical students
- Multicultural Advisory Council participation
- Medical Spanish Interest Group Support
- The Marshall University Lesbian-Gay-Bisexual-Transgender Outreach
- Gold Humanism Honor Society

Activities that identify and intervene in academic difficulty include:

- Test-by-test monitoring of student performance by administration and faculty
- Counseling sessions with students to create individualized plans to address academic concerns
- Free tutoring services
- Test-prep and pizza sessions before examinations
- Referrals to the Marshall University H.E.L.P. Program, learning specialists, and psychologists as necessary

Activities that recognize and refer in situations involving wellness concerns include:

- Referral for personal counseling sessions for students and/or their families provided by individuals who are not in a position to teach or evaluate students. The first 10 sessions are free for students and/or their families.

Activities that promote early and consistent career advising and mentoring include:

- Early Clinical Experience with rural clinical faculty for MS-1 and MS-2 students
- Opportunities for rural rotations as MS-3 and MS-4 students
- Career Development Course
- Speciality Speed Dating Activity
- Advising sessions scheduled every semester with Career Advising Clinical Faculty
- Mentoring by senior faculty through the Women in Medicine and Science (WIMS) Chapter at JCESOM
- Support for research opportunities through Student Summer Research Stipends and travel funding for student research presentations

Resources available to support programs for student recruitment and retention, including personnel and financial support:

JCESOM has allotted both financial and human resources to the recruitment and retention of a diverse student population.

Student Recruitment

- $375,000 committed beginning with the class of 2017 in the form of two full tuition waivers for highly qualified underrepresented minority applicants. This represents the commitment of approximately one-third of the available 10% tuition waivers to enhance and enrich diversity amongst our student body
- $100,000 commitment to a 1.0 FTE staff member from the Robert C. Byrd Center for Rural Health assigned to pipeline and outreach activities
- $43,000 commitment to a 0.33 FTE administrator assigned to oversee pipeline, outreach and diversity efforts as they relate to admissions
- $15,000 dedicated to a residential summer academy for West Virginia college students interested in the field of medicine (Scheduled June 2013) with a special focus on recruiting women and underrepresented minorities in medicine.
- $10,000 from the Robert C. Byrd Center for Rural Health Outreach funding dedicated to pipeline activities, including intentional collaboration with other efforts involving minority and underrepresented students
- $10,000 from the West Virginia Rural Health Initiative dedicated to recruitment in rural, economically disadvantaged areas of the state
- $5,000 of Office of Admission's budget is dedicated towards recruitment efforts in creating a diverse student population
- $5,000 of Office of Diversity budget dedicated to recruitment focused on expanding the diversity of the student and faculty population
- $3,000 dedicated to a two day camp in the spring for Marshall University Sophomores and Juniors interested in the field of medicine

ii. Faculty/staff recruitment and employment

The Director of Diversity ensures that all position postings or advertisements depict a fair, open and transparent search process. The Director certifies that minorities, women, and individuals with disabilities are informed about vacancy announcements by forwarding them to health/service and/or social organizations contacts including Marshall University Black Alumni Association, Black Greek Sororities and Fraternities, the local NAACP chapters, Minority serving Churches, and Minority Health Advocacy Groups. Position vacancy announcements are also forwarded to contacts working in Tribal Colleges (6 contacts), Land Grant Universities (18 contacts) and Historically Black Colleges and Universities (15 contacts).

University guidelines are used to guide and assist hiring officials and search committees in carrying out their search and hiring responsibilities and to ensure that these processes comply with University Policies, Federal and State regulations. The Marshall University Office of Equity

Programs trains search committees to ensure guidelines are understood and followed. This includes completing Faculty Search and Diversity Training. The JCESOM Diversity Statement has been aligned with University Policy and the Office of Diversity works closely with the Office of Public Affairs to ensure that recruitment literature includes images of women and minorities, which indicate a desire for a diversified workforce.

JCESOM adheres to the Human Resource policies established by Marshall University
http://www.marshall.edu/eeoaa/Forms/EEO-Policy.pdf
http://www.marshall.edu/EEOAA/Resources/Best_Practices_Hiring.pdf
http://www.marshall.edu/mu-advance/7539searchbro.pdf

Faculty/Staff Retention

Successful retention of our faculty is vital to sustaining a healthy academic environment. Faculty and their families are given opportunities to feel welcomed and included at JCESOM regardless of their background and interests. This includes providing activities that promote positive social interactions and by providing early and consistent professional development activities.

New faculty are welcomed at one of two New Faculty Orientation Receptions held annually. At this event, faculty are introduced to medical school administrators and are given a resource packet which includes information about available resources and programs to ensure their future success. This includes information on research opportunities, promotion and tenure, professional development events, a faculty directory as well as community information. (**http://musom.marshall.edu/fdp/newfaculty.asp**)

Programs for retention of faculty that promote positive social interactions and professional development include:

Multicultural Advisory Council (MAC)

The MAC was established in August 2011 to promote a climate that fosters belonging, respect, and value for all and encourages engagement and connection throughout the institution and community. The Council is comprised of faculty, residents, staff and students. They meet quarterly and advise the Dean and the Office of Diversity on issues and initiatives important to fostering a campus wide environment of diversity and inclusion. Some of their recommendations which have been implemented include the addition of the multicultural calendar to the JCESOM website (**http://www.multiculturalcalendar.com)** , creation of an ethnicity map to reflect the diversity among medical school employees, and a language database reflecting each language and dialect spoken by our faculty. These types of activities help build an engaged and inclusive work environment, which in turn promotes retention. **(IS-16 Appendix: Multicultural Advisory Council, IS-16 Appendix: Language Database)**

Women in Medicine and Science (WIMS)

WIMS was established in 2010 and is dedicated to the advancement of women faculty, residents, students, and postdoctoral trainees. A list of the programs provided by WIMS can be found at **http://musom.marshall.edu/fdp/women-medicine.asp.** The WIMS Leadership Forum was

implemented in May 2012 to offer numerous skills related to academic medicine career building and strategic thinking about career development. A total of $5,000 was allocated for travel and training for women faculty to attend the AAMC sponsored Early Career and Mid-Career Professional Development Seminar. As a result of this available funding one faculty member was able to attend the Mid-Career Seminar in November 2012. The project was presented as a poster at the AAMC (**www.aamc.org/download/331546/data/2012_poster_pd_leadershipforum.pdf**) **(IS-16 Appendix: Women in Medicine and Science Program and Evaluations)**

Professional Development Sessions

There have been several opportunities to enhance understanding of the multicultural nature of the JCESOM community through a Diversity and Dialogue Series. This includes presentations addressing health care disparities to improve quality, diversity, and the impact of inclusion on medical education and health systems. A list of these sessions and speakers is provided at **http://musom.marshall.edu/fdp/pies.asp**.

Mentoring Program

A formal Mentoring Program to assist faculty with research, professional development, and personal development has been in place since 2010. Please see description in FA-5 on pages 53-54.

Describe the resources that are available to support programs for faculty recruitment and retention, including personnel and financial support.

JCESOM has allotted both financial and human resources to the recruitment and retention of a diverse faculty and staff.

Office of Diversity:

- $100,000 committed for a 1.0 FTE staff member assigned to develop and oversee pipeline, outreach and diversity efforts for students, faculty and staff
- $20,000 Office of Diversity budget dedicated for recruiting and pipeline activities, including planned collaboration with other efforts involving minority and underrepresented students
    - $5,000 of Office of Diversity budget dedicated to recruitment focused on expanding the diversity of the faculty population
    - $5,000 of Office Diversity budget dedicated to support faculty professional development training and activities including planned collaborations
- $10,000 from Office of Faculty Affairs budget is dedicated for Women in Medicine and Science program
- $5,000 from office of Faculty Affairs budget is dedicated to mentor matching initiative

4. Based on the institution's definition of diversity, report in the table below information regarding the number and percentage of enrolled students and employed faculty and staff in each of the categories included in the institution's specific definition of diversity for the 2012-2013.

A table detailing the number and percentage of current students, faculty and staff who meet each of the institutions diversity definitions is found in **IS-16 Appendix: Student, Faculty and Staff Meeting JCESOM's Definition of Diversity for 2012-2013**.

Summarize changes in the percentage (number) of individuals in any of the diversity categories from the time of the 2011 full survey visit.

IS-16 Appendix: Entering Class Diversity Categories 2010-2012
IS-16 Appendix: Retention Rate by Diversity Categories for Classes Entering in 2006-2008

ED-5-A

A medical education program must include instructional opportunities for active learning and independent study to foster the skills necessary for lifelong learning.

Finding: The first two years of the curriculum are highly dependent on lecture and offer few opportunities for medical students to develop the skills necessary for lifelong learning.

Introductory Comments

The Curriculum Committee (CC) has successfully decreased the percentage of lecture based pedagogy in years one and two from 78% in 2009-2010 to 60% in 2012-2013. The 2013-2014 curriculum will contain approximately 50% didactic lectures.

Opportunities for students to engage in active learning and independent study have been added throughout the curriculum. In August 2012, the CC reviewed and adopted the MedBiquitous Learning Inventory as a means to more clearly define and standardize the terms that are reported for each instructional session and assessment methodology.

1. Complete the attached table with the instructional formats used in years one and two of the curriculum during the 2012-2013. Note changes from the time of the 2011 full survey visit.

ED-5-A Table 1- Courses and Instructional Formats and Contact Hours for Year One Comparing Academic Years 2009-2010 and 2012-2013

Course	Academic Year	Lecture	Lab	Small groups	Patient contact	Other	Total
Gross Anatomy	12-13	78.5	81.5	9	0	18	187
	09-10	89.5	96	2	0	16	203.5
Behavioral Medicine and Ethics	12-13	28	0	6	0	3	37
	09-10	55	0	1.5	0	3	59.5
Microanatomy and Ultrastructure	12-13	12	22	10	0	1	45
	09-10	34	30	3	0	0	67
Introduction to Clinical Medicine	12-13	10.5	0	16.5	6.5	1	34.5
	09-10	19	30	10	17	4	80
Molecular Basis of Medicine	12-13	93	0	13.5	0	18	124.5
	09-10	112	0	8	0	0	120
Neuroscience	12-13	85	8	26.5	0	9	128.5
	09-10	77	9	6	0	12	104
Physiology	12-13	81	0	28	0	7	116
	09-10	88	0	9	0	13	110
TOTAL	12-13	388	111.5	109.5	6.5	57	672.5
	09-10	474.5	165	39.5	17	48	744

ED-5-A Table 2- Courses and Instructional Formats and Contact Hours for Year Two Comparing Academic Years 2009-2010 and 2012-2013

Course	Academic Year	Lecture	Lab	Small groups	Patient contact	Other	Total
Approach to Patient Care	12-13	33	1	68.5	0	11.5	114
	09-10	93	0	6	1	67	167
Advanced Clinical Skills	12-13	8	0	10.5	5.25	0	23.75
	09-10	11	0	0	25	5	41
Immunology	12-13	33.5	0	15	0	2.5	51
	09-10	38	0	0	0	7	45
Medical Microbiology	12-13	74	3	6	0	2	85
	09-10	83	3	2	0	1	89
Pathology	12-13	118	0	25	0	13.5	156.5
	09-10	159	0	0	0	6	165
Pharmacology	12-13	73	1	20	0	19.5	113.5
	09-10	87	0	2	0	15	104
Psychopathology	12-13	15	0	0	0	8	23
	09-10	25	0	0	0	0	25
TOTAL	12-13	354.5	5	145	5.25	57	566.75
	09-10	496	3	10	26	101	636

ED-5-A Table 3- Year One and Year Two Total Student Contact Hours and Percentage of Didactic Lecture Hours Comparing Academic Years 2009-2010 and 2012-2013

	2009-2010	2012-2013	*2013-2014**
Year One Contact Hours	744	672.5	*650*
Year Two Contact Hours	636	567	*525*
Total Contact Hours	1380	1239.5	*1150*
Didactic Lecture Hours	970.5	742.5	*575*
Percentage of Didactic Lecture	70%	60%	*50%*

*****Predicted

2. Provide the average number of scheduled hours per week in the first and second years of the curriculum during the 2012-2013. Provide sample weekly schedules that illustrate the amount of time in the first and second years of the curriculum that students spend in schedule activities. Note any changes from the time of the 2011 full survey visit.

ED-5-A Table 4- Average Weekly Contact Hours for Year One and Year Two Students

Academic Year	2009-2010	2012-2013	*2013-2014**
Total Hours	1380	1239.5	*1150*
Total Weeks	80	81	*81*
Hours/Week	17.3	15.3	*14.2*

*Predicted breakdown

Samples of weekly schedules for year one and year two are provided in the appendices. (**ED-5-A Appendix: Sample Class Schedule Year 1 and 2**)

3. Provide a list of the types of instructional formats that the medical school characterizes as active learning

Using the definition of active learning as specified by the LCME (*Assess their learning needs, individually or in groups, Identify, analyze, and synthesize information relevant to their learning needs, Assess the credibility of information sources, Share the information with their peers and supervisors, Receive feedback on their information retrieval and synthesis skills)* the following instructional formats involve elements of active learning based on the specific activities that are required during the session.

ED-5-A Table 5- Instructional Formats JCESOM Characterizes as Active Learning

Case-Based Instruction/ Learning
Discussion, Large Group [>12]
Discussion, Small Group [≤12]
Games
Independent Learning
Journal Club
Laboratory
Peer Teaching
Problem-Based Learning (PBL)
Reflection
Self-Directed Learning
Team-Based Learning (TBL)

4. Provide examples that illustrate the opportunities that exist in years one and two of the curriculum for students to do each of the following:

A. Assess their learning needs, individually or in groups
B. Identify, analyze, and synthesize information relevant to their learning needs
C. Assess the credibility of information sources
D. Share the information with their peers and supervisors
E. Receive feedback on their information retrieval and synthesis skills

JCESOM recognizes the importance of developing life-long-learners who can critically think and problem solve independently and within groups. As a result more opportunities for these activities are added into the curriculum every year. A list of these is provided in **ED-5-A Appendix: Active Learning Examples** to illustrate where students have the opportunities to engage in the activities described above.

ED-33

There must be integrated institutional responsibility in a medical education program for the overall design, management, and evaluation of a coherent and coordinated curriculum.

Finding: Both years one and two of the curriculum have been reorganized into systems-based blocks, where the subjects are coordinated temporally but have varying degrees of horizontal content integration. As yet, there has been little attention to achieving vertical integration of content across the curriculum, except in specific subject areas.

Introductory Comments

Prior to the LCME site visit in 2011, the Faculty Bylaws deemed the CC as a recommending committee to the Dean. In 2011 the Interim Dean recognized this as a long-standing problem for the CC, specifically in its ability to have explicit authority to direct and implement curricular change.

Consequently, On April 4, 2012 the faculty approved the Bylaws changes which made the CC a reporting committee to the Dean instead of a recommending committee. This gave the CC full authority and confidence to make curricular changes without concern of them being reversed. The Senior Associate Dean for Medical Education was charged with updating the Dean on the CC activities monthly.

With this empowerment the CC began to lay out a long-term plan for curriculum integration. This integration involved phased-in changes for the 2012-2013 and 2013-2014 curriculum which are described below.

1. Describe the steps taken by the medical school leadership and the curriculum committee to support horizontal and vertical integration of the curriculum, including ensuring the content is coordinated within and across all academic periods.

Integration Changes between 2011-2013

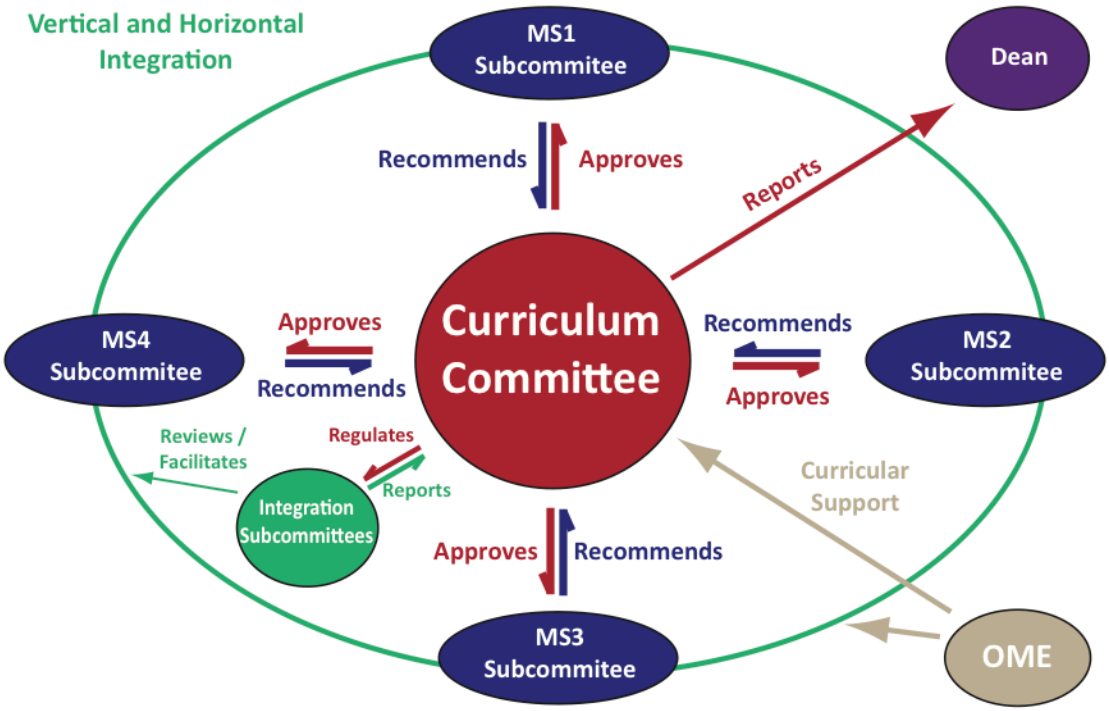
In addition to the Faculty Bylaws change regarding the CC powers, the medical school leadership recognized a need to have additional support to guide the school with curricular integration and reform. Consequently, an Associate Dean of Medical Education position was created and filled in February 2012. This full-time position was filled by an EdD with extensive experience in curricular innovation and integration from the Duke-NUS system. In his role he has guided faculty and staff through the process of content integration, while facilitating structured communication between basic scientists and clinicians. He has achieved these aims through his role as Executive Secretary of the CC, by attending all CC subcommittee meetings including the Integration Subcommittee, and through numerous one-on-one meetings with faculty.

The first integration goal was to establish the organization of the year one and two curricula for 2013-2014. This was accomplished in July 2012 and included an integrated framework which eliminated departmental based courses and created systems-based blocks. The CC subsequently

completed a thorough evaluation of the entire curriculum including years 3 and 4 using the Step 1 and Step 2 outlines as a guidepost and consulting our internal Curriculum Calendar and Searchable Database.

Once this review was complete the CC created an integration steering committee with subcommittees to work on more effectively integrating material across and within the curriculum. Basic scientists and clinical faculty have worked together to share their material, consolidate notes, eliminate redundancies, and purposefully sequence their material to align with similar topics.

The CC uses the following model for curriculum management and oversight of horizontal and vertical integration.



The CC controls the curriculum and approves the work and recommendations of all subcommittees. The CC reviews and approves or recommends appropriate changes to the content and pedagogy on a continual basis. The CC also tracks, using the curriculum database and reports from its subcommittees, the diseases, themes, competencies, pedagogies and assessments and recommends appropriate additions or modifications to the curriculum. The CC provides a curriculum report to the Dean, via its chair and the Senior Associate Dean for Medical Education, on a regular basis.

The Year Subcommittees, are composed of block leaders or clerkship directors who are responsible for the coordination and delivery of the curriculum including horizontal and vertical

integration, pedagogy and student assessment. Horizontal integration is achieved through use of the curriculum map database and regular meetings of each Year Subcommittee.

Vertical integration is achieved by regular joint meetings of the Year Subcommittees and block/clerkship representatives as appropriate. This process involves analysis of the curricular content using the curriculum map database and feedback from the faculty. Block leaders and clerkship directors provide ongoing content review for gaps and redundancies and report to the Year Subcommittees.

The Integration Subcommittee facilitates this process by reviewing the material to ensure that approved competencies, diseases and themes are integrated appropriately. The Integration Committee provides regular reports to the CC and Year Subcommittees on integration progress.

The Office of Medical Education provides curricular support to the CC and to the various subcommittees.

Specific Examples of Horizontal and Vertical Integration 2011-2013

Year One

- Implementation of an integrated comprehensive NBME final in 2011-2012, 2012-2013
- Integration of Behavioral Medicine and Ethics
- Presentation on “Assessment of Behavior” addressing clinical interview and observation as methods to collect data during history taking tied in with first clinical skills experience on history taking.
- Obesity discussion changed and given when students learned about nutrition and medical aspects of obesity that are covered in molecular basis of medicine. This lecture and a connected assignment on diet integrated behavioral aspects and treatment of obesity.
- Ethics sequence in year one integrated with Early Clinical Experience requirement so students could see practical application of Ethics as they began to work in clinical areas.
- Adherence discussion addressing behavioral factors related to adherence to treatment of chronic health conditions paired with sessions on chronic obstructive pulmonary disease and hypertension in Physiology, Histology and Introduction to Clinical Skills.
- Addition of an activity involving review of material from a recorded session on blood coagulation, viewing the documentary “Bad Blood” to examine development of new therapies from multiple viewpoints (scientific, clinical, ethical, patient) and to encounter ethical dilemma of what constitutes an acceptable risk and who is responsible. Students then answered the question "What is acceptable risk?" integrating viewpoints from basic science, patient care, and ethical principles.
- Microscopic Anatomy lectures and labs on basic tissue types were run simultaneously with Molecular Basis of Medicine to place related material from both courses in a more coordinated sequence. For example, the lectures on peripheral blood were coordinated with the above lectures on coagulation and the exercise using the “Bad Blood” documentary. Epithelium and connective tissue lectures were coordinated with Molecular Basis of Medicine lectures on cellular junctions and extracellular matrix. This alignment of material will provide opportunities in the integrated system blocks in 2013-2014 for integrated case discussions and exam questions that were not fully realized in 2012-2013.

- Addition of a homework assignment on “Stem Cells” which involved examining current literature for information on an experimental therapy and formulate recommendation. Students worked in groups to evaluate the current state of stem cell therapy for joint damage and to formulate a recommendation for a fictional elderly patient with osteoarthritis, based on scientific, clinical, and ethical considerations. This required integration of basic science knowledge, clinical recommendations and ethics of using experimental treatments.
- Added a small group problem solving session on “Ion Channels” and “Channelopathies” that included cases on paroxysmal extreme pain disorder and paralytic shellfish poisoning. This session integrated concepts of ion channels diseases (channelopathies) with physiological mechanisms of membrane excitability. This session also integrated concepts of pharmacological treatment of paroxysmal disorders with physiological mechanisms of membrane excitability.
- Added a small group problem solving session on “Peripheral Nerve” which included cases on Guillain-Barré syndrome and acute sensorimotor polyneuropathy. This session integrated concepts of peripheral nerve disease with nerve conduction testing and basic mechanisms of membrane excitability and action potential conduction.
- Added a small group problem solving session on “Pain” involving a case on pain management in a burn patient and painful diabetic neuropathy. This session integrated concepts of pain management and neuropathic pain with physiological mechanisms of pain, neurotransmitters and receptors. This session also integrated concepts of opiate and non-opiate analgesics with physiological mechanisms of pain and basic mechanisms of synaptic transmission.
- Added a small group problem solving session on “EEG and Seizure”. This problem solving session included a case on occipital lobe seizures misdiagnosed as migraine. This session integrated concepts of seizure disorders, EEG measurement of abnormal cortical activity, anatomy of central visual pathways, headache, and pharmacological treatment of paroxysmal disorders.
- Added a small group problem solving session on “Learning and Memory” which included a case of amnesia resulting from bilateral hippocampal resection as a treatment for medically intractable epilepsy. This session integrated concepts of normal declarative memory function and the role of the limbic system, seizure disorders, traumatic brain injury, and CNS somatosensory and visual pathways.
- Restructuring of cardiovascular section on electrophysiology in which the physiology professor worked with a cardiologist to integrate EKG lectures and create a hands-on workshop
- For several years, the course director for the year two immunology course and the faculty member giving Microscopic Anatomy lectures on lymphoid organs in year one have collaborated to determine the most appropriate level to introduce a basic level of understanding of innate and adaptive immunity. This material is no longer presented as lecture in year two, but is assessed by a quiz at the start of the immunology course.
- Microscopic Anatomy and Physiology of the male reproductive system integrated the teaching of spermatogenesis.

Year Two

- Integration of Approach to Patient Care and Ethics courses
- Integration of topics from three professors teaching in Approach to Patient Care, Pathology and Neurology for the neuroscience block
- Integration of material on bone and muscle taught by orthopedist and pathologist
- Integration of redundant integumentary topics between approach to Patient Care and Pathology
- Integration of Immunology and Approach to Patient Care on the topics of "Asthma and Allergy"
- Integration of Immunology and Microbiology on the topic of mucosal pathogens versus commensal organisms
- Integration of Pathology lectures on anemia into Small Group Sessions for Approach to Patient Care
- Purposeful choosing of Biostatistics and Epidemiology journal club articles with system being covered (e.g. Article on "Bronchodilators and Asthma Mortality" reviewed during Respiratory section)
- Purposeful planning of Ethics topics with case scenarios involving patients with diseases related to the system being covered
- Session on "Cultural Beliefs" added in year one to increase awareness of cultural issues in diagnosis and treatment and to vertically integrate with year two activities related to culturally bound psychiatric syndromes and a pharmacology case involving a Native American man experiencing possible psychotic symptoms
- Integration of all year two lectures on HIV and AIDS into one planned four-hour block that begins with the basic science of HIV and finishes with the clinical presentation of a patient with AIDS.
- Integrated Problem Based Learning case on Congestive Heart Failure with Approach to Patient Care, Pathology and Pharmacology which replaced three hours of didactic lecture
- Formation of Inter-professionalism Committee with School of Pharmacy, Nursing, and Physical Therapy, Communication Disorders and the organization and implementation of three Inter-professional education sessions.
    - Communications
        - Objective One: Students will demonstrate effective communication with the health care team.
        - Objective Two: Students will provide one example of how another health care discipline can aide in improved patient care
    - Ethics
        - Objective One: Students will differentiate the different roles, expertise, values, and responsibilities of other health care professions during an ethical dilemma
        - Objective Two: Students will demonstrate the ability to manage ethical dilemmas as it relates within an interprofessional health care team.
    - Pulling it all Together
        - Objective One: Students will demonstrate an understanding of the function of the health care team through a mock patient scenario.

- Objective Two: Students will demonstrate ethical behavior in a health care team through a mock patient scenario.

Integration Changes for 2013-2014

For 2013-2014 several improvements in integration have been achieved through the planning efforts of the Curriculum Committee, the Integration Steering Committee and eight Integration Subcommittees (**ED-33 Appendix: Integration Subcommittees**). The Integration Committees which reported to the Curriculum Committee were composed of basic scientists, clinicians and students from all four years of the curriculum. This composition, because it had balanced representation of all vested parties, created effective dialogue and efficient overview of the process.

Integration Committee minutes can be found at **http://musom.marshall.edu/curriculum/ .**

Integration steps achieved:

- Creation of Core Competencies with milestones for all four years to support vertical integration **(ED-33 Appendix: Core Competencies)**
- Review of the entire curriculum for gaps and redundancies using the USMLE Step 1 and 2 outlines as templates **(ED-33 Appendix: Step 1 and 2 Gaps)**
- Elimination of discipline-based courses and replacement with five Integrated System Blocks and a Clinical Skills course for years one and two **(ED-33 Appendix: 2013-2014 Curriculum)**
- Vertical and horizontal integration of 115 diagnoses and 8 themes with objectives linked to the Core Competencies across all four years (**ED-33 Appendix: Integrated Diagnoses and Themes**)
- Adoption of MedBiquitous standardized terminology for instruction, assessment, and resources. (**ED-33 Appendix: MedBiquitous Curriculum Vocabulary**)

The Integrated System Blocks are designed to achieve the following goals:

- Provide educational activities to meet the newly adopted six Core Competencies with Milestones
- Provide educational content to address curricular gaps and eliminate unnecessary redundancies identified through a review of the USMLE Step 1 outline
- Incorporate diseases and themes (e.g. communication, diversity, ethics) with specific objectives to demonstrate vertical and horizontal integration
- Ensure educational activities include at least 50% non-didactic pedagogy

Evidence of Further Integration:

- Instruction on spinal cord will move from the Nervous System and Behavior course to the musculoskeletal course to promote better integration of material dealing with (1) peripheral nerves, dermatomes, and associated sensory and motor functions, (2) vertebral column, dorsal and ventral spinal roots, and autonomic ganglia, (3) ascending and descending spinal pathways, and spinal cord functions including reflexes and pain modulation.
- Basic introductory material on muscle and nerve Microscopic Anatomy and Physiology will move from the Nervous System and Behavior Block into the Musculoskeletal and Integument Block. This will allow students to gain an understanding of muscle structure and function at the cellular level as they begin the study of the gross anatomy of the musculature.
- Integrate material formerly taught in Gross Anatomy (orbit) and Neuroscience (histology of the eye, visual optics, and retinal function) with a new clinical correlation on diseases of the eye using the ophthalmologist who also teaches on eye pathology in year two.
- A planned session to integrate the neurobiology of addiction, integrating material previously taught in behavioral medicine and neuroscience from MS1, with basic pharmacological concepts from MS2.
- Improved vertical integration. Adding a learning session to improve vertical integration between year 1 (nervous system) and year 2 (pharmacology). This session, which will be included in the Structure and Function Block 1, will serve as an introduction to neuropharmacology and will integrate basic neurophysiological principles (from MS1 curriculum) with mechanisms of action for representative CNS drugs (from MS2). Method of pedagogy is still under discussion.
- Improved vertical integration. Adding a learning session to improve vertical integration between year 1 (nervous system) and year 2 (pharmacology). This session (to be included in Structure and Function Block 2) will integrate basic function and anatomy of the dopaminergic system (MS1) with mechanisms of addiction (MS2). Method of pedagogy is still under discussion.
- Microbial cases studies will include integrated topics previously taught in microbiology, immunology, pharmacology, pathology and approach to patient care. Previously, microbiology, immunology and pharmacology have given separated case studies in each course
- Addition of a clinical correlate session on head injury concussion involving clinical faculty from sports and family medicine
- Addition of a lecture on substance abuse in pregnancy.
- Combined notes and teaching of psychiatric disorders and their treatment.
- Addition of a lecture on sleep disorders and their treatment
- Integration of the substance of abuse lectures
- Introductory material on cells, tissues and formed blood elements, formerly part of Microanatomy and Ultrastructure, will be integrated into introductory material.
- Re-ordering of lectures to bring appropriate consideration of nutrition into coordination with processes that are supported (e.g. cofactors and vitamins will be covered alongside structure and function of enzymes in which they play a critical role).

- The section on gene expression and regulation will be re-ordered to provide a smoother flow of information from DNA and nuclear structure/function to gene regulation to protein expression and processing. This will allow repeated material to be reduced and allow introduction of active learning units.
- The module on nutrition in pregnancy will be transferred to the Endocrine/Reproductive Block for inclusion with material on pregnancy.

Provide copies of documents or curriculum committee minutes illustrating the attention given to content coordination and integration.

Sample CC minutes and sample integration committee minutes have been provided in **ED-33 Appendix: Curriculum Committee Minutes** and **ED-33 Appendix: Integration Committee Minutes.** The links to all of the CC minutes, Subcommittee minutes and Integration Committee minutes can be found at **http://musom.marshall.edu/curriculum/**.

2. Describe the methods used to monitor curriculum content and identify gaps and unplanned redundancies. Provide examples, if available of gaps or redundancies that were identified and how these were addressed.

The Office of Medical Education monitors curriculum content through a comprehensive in-house electronic curriculum database. The database allows the mapping of educational activities tagged using the AAMC MedBiquitous instructional methodologies, assessment methodologies and resources, JCESOM Competencies with milestones, institutional objectives, session objectives and to the JCESOM question bank. The database is used to generate reports for the CC on these measures by session, faculty member, hours of instruction and student contact hours.

As part of the comprehensive review of the curriculum the Year 1, 2 and 3 Subcommittees of the CC reviewed the Step 1 and Step 2 content outline and noted gaps in the curriculum. **(ED-33 Appendix: Step 1 and 2 Gaps)** These gaps will be filled during the 2013-2014 academic year.

During the integration process, the Year 1 and 2 subcommittees identified several unnecessary redundancies which have been eliminated for 2013-2014. A list of those is provided in **ED-33 Appendix: Unnecessary Curricular Redundancies**.

MS-19

A Medical education program must have an effective system in place to assist medical students in choosing elective courses, evaluating options, and applying to residency programs.

Finding: A new staff member has been hired to shepherd the career advising and counseling program for medical students. To date, however, career advising has been limited and programs often have been informal and student-initiated. More formal advising has been directed at students in the later years of the curriculum.

Introductory Comments:

There have been multiple improvements to the overall "Career Advising and Counseling Program" for medical students at JCESOM since the survey visit.

Listed below are both the required and the optional programs available for students.

The formal administrative initiated improvements include creation of the:

- Required "Medical Student Advisory Program" for all medical students
- Required "Clerkship Career Counseling Sessions" in all MS-3 clerkships
- Required "Medical Career Development" (MCD) program which spans all four years
- Optional "Career Conversation" series

Students continue to initiate and hold several regular activities:

- Annual "Specialty Speed Dating" event. This event was chosen as the AMA Event of the Month in December 2012. **http://www.ama-assn.org/ama/pub/about-ama/our-people/member-groups-sections/medical-student-section/community-service/frequently-asked-questions-about-chapter-involvement/event-of-the-month.page**
- Career interest groups
- Participation in several organizations, such as AMSA, AMA-MSS, and AMWA which have career development events

1. Describe the system of career advising as it exists in the 2012-2013, including the following:

i. The number and titles of staff available to provide career advice along with their reporting relationships.

MS-19 Table 1- Staff Available to Provide Career Advice

Staff and Title	Responsibility	Reporting Relationships
Associate Dean of Student Affairs (1)	Oversight of: "Medical Career Development Program" "Medical Student Advisory Program" "Career Conversations" "Clerkship Career Counseling Sessions"	Senior Associate Dean of Office of Medical Education
Clerkship Directors (7)	Implementation of: "Clerkship Career Counseling Sessions"	Respective Chairs
JCESOM faculty (139)	Completion of: "Medical Student Advisory Program" sessions Participation in "Career Conversations"	Respective Chairs

ii. The informational session (required and optional) available to students in each year of the curriculum. For each type of session, note if it is initiated/managed by staff/administrators, by faculty, or by students.

MS-19 Table 2- Informational Sessions Available to Students

	Medical Career Development Program	Clerkship Career Counseling Sessions	Career Conversations	Student Led Events	Medical Student Advisory Program*
Year 1	Required	N/A	Optional**	Optional	Required
Year 2	Required	N/A	Optional**	Optional	Required
Year 3	Required	Required	Optional	Optional	Required
Year 4	Required	N/A	Optional	Optional	Required

* Described in section *iii.* below on page 29
** Attendance at Career Conversations is optional with the exception that MS-1 students must attend one session and MS-2 students must attend two sessions as part of the MCD program.

Medical Career Development Program

The MCD program, began in 2011-2012, and is a four year longitudinal course based on the AAMC Careers in Medicine (CiM) program. Participation in the program is a graduation requirement. Students use the CiM website as their primary source of information and meet with the Associate Dean of Student Affairs annually. During the session with the students, the Dean covers the CiM objectives as outlined below. Independent learning exercises are also completed by the students throughout the year. The outcome measures of these are listed below.

MS-19 Table 3- Outcome Measures of the Medical Career Development Program

MCD Year	Objectives	Outcome Measures
Year 1	Demonstrate familiarity with CiM as a resource for career development and decision making by submitting a personal reflection.	Completion of CiM exercises Submission of personal reflection
	Demonstrate evidence of understanding of your personal career development and exploration of your interests, values and personal influences by submission of 4-6 Power Point slides which illustrate your career development over the years, highlighting your unique characteristics.	Submission of PowerPoint slides Attendance at one "Career Conversation" session
Year 2	Review: • Charting Outcomes for the Match 2011 • NRMP Results and Data 2012 Main Residency Match • Results of the 2012 NRMP Program Director Survey and attend two "Career Conversation" sessions and submit a personal reflection that reflects the specialties you are considering and your current fit for that program.	Submission of personal reflection
Year 3	Draft an updated Curriculum Vitae and Personal Statement and submit to the Associate Dean of Student Affairs for feedback.	Submission of updated Curriculum Vitae and Personal Statement
Year 4	Attend "Interviewing Seminar" and participate in one mock interview with your Medical Student Advisor.	Attendance at "Interviewing Seminar" Completion of mock Interview

Clerkship Career Counseling Sessions

Each clerkship conducts a one-hour mandatory session discussing their specialty during every rotation. The Clerkship Coordinator initiates the scheduling of the session and it is managed by the Clerkship Directors.

Career Conversations

Career Conversations are optional sessions initiated by the Associate Dean of Student Affairs and conducted by faculty and community physicians for various specialties. These sessions are designed primarily for MS-1 and MS-2 students but are open to everyone. In 2011-2012, "Career Conversations" were conducted in: anesthesiology, emergency medicine, family medicine, internal medicine, neurology, obstetrics and gynecology, ophthalmology, orthopaedics, radiology, pediatrics, and plastic surgery. Attendance is taken at all sessions and typically includes 10-20 students. The 2012-2013 schedule includes sessions in: anesthesiology, family medicine, general surgery, ophthalmology, orthopaedics, pediatrics and plastic surgery. **(MS-19 Appendix: Career Conversations)**

Student-led Events

Optional student-led interest groups, programs and events are the final component of the "Career Advising and Counseling Program". Interest groups, which are initiated and conducted by students, all have a faculty advisor. Currently, interest groups exist in anesthesiology, emergency medicine, family medicine, internal medicine, medicine-pediatrics, neurology, ophthalmology, pediatrics, and radiology.

Through the AMA-MSS, an annual "Specialty Speed Dating" event is held and supported by the Office of Student Affairs. In 2011-2012, 67 students and 32 physicians participated in this event. In 2012-2013 60 students and 27 physicians from over 20 specialties participated.

The American Medical Women's Association student group holds an annual "Women in Medicine" panel each spring. The leadership of AMWA is responsible for arranging this event with women physicians who discuss potential women's in career decision making such as achieving a work-family balance.

iii. The availability of faculty to serve as career advisors or mentors

Medical Student Advisory Program

This program, based on the AAMC CiM program was launched November 2012 under the auspices of the Office of Student Affairs. The program is designed to assist students in their career development through meetings with Career Advisors who assist them with activities across all four years to promote student growth and professional development as well as direct them to appropriate resources. All JCESOM faculty members are available as Advisors.

The program, described at **http://musom.marshall.edu/students/advising/** allows each student to indicate their top three advisor preferences and a computer algorithm then matches the student to an advisor, much like the process used by the NRMP. Each faculty member is assigned at least two medical students with whom they are required to meet no less than once per semester throughout the student's medical education.

A Medical Student Advisory Program Manual is available for both students and faculty and can be used to guide advisory sessions. **http://musom.marshall.edu/students/advising/Student-Advisory-Program-Manual.pdf.** The manual includes topics for consideration for each year of medical education and are adapted from CiM. Advisors must electronically document the student encounter using a provided checklist of topics and a free text box for other discussion items. These reports are maintained online such that topics discussed with advisors can be viewed over the course of the student's medical education. This password-protected electronic system created and maintained by the Assistant Dean for Information Technology affords the Associate Dean for Student Affairs administrative oversight including the ability to monitor the frequency of meetings and reports.

All 283 of our medical students are matched with one of 137 unique Advisors. Several Advisors have multiple students because of their great interest in career advising and their excellent reputation with students.

iv. Other available resources

The Associate Dean for Student Affairs conducts annual workshops in creating a Curriculum Vitae and writing a Personal Statement for all interested students. She also meets individually with all rising fourth year students to review the status of their specialty selection and preparation for application to residency. Students may always seek academic and professional advice from any faculty member at any time and often utilize multiple faculty to provide feedback on their Curriculum Vitae and Personal Statements.

MS-4 students present a post-match residency workshop for MS-3 students every spring with the scheduling assistance of the Office of Student Affairs. MS-4 students provide recommendations for the residency matching process and conduct informational small groups by specialty.

The Women in Medicine and Science (WIMS), in alliance with the AAMC Group on Women in Medicine and Science (GWIMS), serves as another resource for career development under the leadership of the associate dean for faculty development. **http://musom.marshall.edu/fdp/women-medicine.asp**. WIMS hosts approximately four programs per year in which participants learn through understanding and discussion the career journeys of successful women physicians. All students are welcome to participate.

Career Advising and Counseling Program Outcome Measures

MS-19 Table 4- Graduation Questionnaire Results 2010-2012

Graduation Questionnaire Item	GQ 2010 MU (All Schools)	GQ 2011 MU (All Schools)	GQ 2012 MU (All Schools)
Satisfaction with Career Preference Assessment activities*	41% (59%)	24% (59%)	46% (61%)
Satisfaction with Information about Specialties *	49% (66%)	33% (66%)	54% (68%)
Satisfaction with Information about Alternative Medical Careers*	26% (39%)	15% (40%)	38% (41%)
Overall satisfaction with Career Services*	43% (60%)	24% (59%)	45% (62%)
Usefulness of Advising/Mentoring as resources in learning about specialty choice and career planning**	Not Asked on GQ	64% (84%)	73% (86%)
Usefulness of Careers in Medicine website as resource in learning about specialty choice and career planning**	Not Asked on GQ	44% (33%)	78% (63%)
Usefulness of Specialty Interest Group-sponsored panels and presentations as resources in learning about specialty choice and career planning**	Not Asked on GQ	72% (77%)	78% (80%)
Usefulness of School-sponsored Career Planning workshops as resources in learning about specialty choice and career planning**	Not Asked on GQ	37% (49%)	56% (58%)

*Sum of "Satisfied" and "Very Satisfied"

** Sum of "Somewhat Useful", "Moderately Useful" and "Very Useful"

Table 4 shows a modest increase in student satisfaction with career advising and counseling from 2011 to 2012. Because some of the measures have been recently instituted, the graduating seniors in 2012 did not fully benefit from their implementation. It is expected that the satisfaction levels will continue to rise over the next several years as the students experience all four years of the program as strongly suggested by our internal data summarized in MS-19 Table 5.

Internal Survey Results

MS-19 Table 5- Student Services Assessment Survey (SSAS)

SSAS Item (Percentages are a Sum of "Satisfied" and "Very Satisfied")	2012 (N=190)	2013 (N=197)
Satisfaction with Career Preference Assessment activities	47%	64%
Satisfaction with Information about Specialties	59%	75%
Satisfaction with Information about Alternative Medical Careers	23%	45%
Usefulness of Advising/Mentoring as resources in learning about specialty choice and career planning	76%	88%
Usefulness of Careers in Medicine website as resource in learning about specialty choice and career planning	76%	82%
Usefulness of Specialty Interest Group-sponsored panels and presentations as resources in learning about specialty choice and career planning	81%	89%
Usefulness of School-sponsored Career Planning workshops as resources in learning about specialty choice and career planning	45%	73%
Overall satisfaction with Career Services	43%	77%
Accessibility of the Student Dean	74%	93%
Awareness of problems by Student Dean	59%	90%
Responsiveness to student problems	54%	91%
Overall, I am satisfied with the quality of the Student Support Services	65%	91%

The SSAS was developed in January 2011 by the Associate Dean for Student Affairs in collaboration with the Office of Medical Education, the Office of Academic Affairs, and the LCME Student Services Task Force. It is a 40 item survey of which 25 items come directly from the Graduation Questionnaire. **(MS-19 Appendix: Student Services Annual Survey 2012, MS-19 Appendix: Student Services Annual Survey 2013)**

The survey is administered annually to all students and serves as our barometer for student concerns. The data reflects feedback across all four years of students and allows us to supplement the feedback we receive from the graduating students on the graduation questionnaire.

Internally, student satisfaction is rising tremendously in many areas especially in student services which has made extra efforts to focus on student needs over the past two years.

MS-23

A medical education program must provide its medical students with effective financial aid and debt management counseling.

Finding: While a staff member has recently been hired by the school to provide financial aid and debt management counseling, a longitudinal, effective financial aid and debt management program does not yet exist.

Introductory Comments

Since September 2010, the newly hired Assistant Director of Student Financial Assistance has been aggressively conducting, assessing, and improving JCESOM's financial aid and debt management program. Prior to this hiring, the office was located on the Marshall University main campus. The office is now located within the JCESOM's Office of Student Affairs for easier student access.

The strongest evidence of the program's success is reflected in the 2012 Graduation Questionnaire which demonstrate a change in satisfaction with financial aid services from 37% in 2011 to 69% in 2012, satisfaction with overall debt management counseling from 27% in 2011 to 63% in 2012 and satisfaction in senior loan exit interviews from 42% in 2011 to 74% in 2012, meeting the GQ's all schools average for 2012 in exit interviews. Continued improvements are suggested by the results of our internal survey comparing responses where 94% of students were satisfied or very satisfied with these services **(MS-19 Appendix: Student Services Annual Survey 2013**, MS 23-Table 2 on page 36).

One of the major challenges of the debt management issue continues to be our difficulties in controlling student borrowing. This has been a continuing national problem and is worsening as referenced by the AAMC in their 2012 Update published in February 2013 (**https://www.aamc.org/download/328322/data/statedebtreport.pdf**) The Assistant Director continues to aggressively counsel all students on borrowing only what they need in order to minimize the impact of future student debt.

Highlights of the Assistant Director's activities include:

- Developing and implementing the JCESOM Financial Literacy and Debt Management Program **(MS-23 Appendix: Financial Literacy and Debt Management Program)**
- Creating JCESOM Office of Student Assistance website incorporating financial education for each class level and institutional/outside program links, including outside scholarships
- Surveying and obtaining written feedback from students through evaluations after the financial literacy sessions (**MS-23 Appendix: Managing Credit and Financial Aid Budget Survey Year 1)**
- Providing required individual meetings with MS-1 students to provide awareness about their level of debt and need for financial counseling

- Serving on the JCESOM Scholarship Committee to establish a formalized scholarship program and procedures **(MS-23 Appendix: JCESOM Scholarship Policy and Procedures)**
- Working cooperatively with the WV State Rural Health Initiatives to incorporate programs on loan forgiveness opportunities within the JCESOM financial literacy program
- Serving on the JCESOM Admissions Committee which assisted in the introduction of financial literacy to incoming students
- Participation in several professional development opportunities to enhance the JCESOM financial literacy and debt management program.
    - Annual attendance at the AAMC's PDC for Financial Aid Administrators
    - Attendance at 2010 (National) Federal Student Aid Conference
    - Attendance at 2012 WV Association for Student Financial Aid Administrators Spring Conference
    - Currently taking online courses with the National Financial Educators Council's Certified Financial Education Instructor Program. Completed two out of six sessions.
    - Participating in various webinars offered by various financial aid organizations
        - National Association for Student Financial Aid Administrators (NASFAA) webinars on federal updates throughout the year
        - AAMC
            - FIRST Overview – July 2012
        - Great Lakes Educational Services
            - Loans: Helping Students Make Good Choices – April 2011
            - IBR and Alternatives for Graduate Health Professions Students – June 2011
        - Nelnet Services
            - Understanding Loan Repayment Plans – August 2012
    - National Higher Education Loan Program
        - Making a Difference with Financial Literacy Education – April 2011

1. Describe the number and position(s) of staff in the financial aid office who are available to provide financial aid and debt management counseling to medical students.

The JCESOM Office of Student Financial Assistance has one full-time Assistant Director solely dedicated to assisting medical students with financial aid and debt management counseling. The position is an extension of the Marshall University main campus Office of Student Financial Assistance which supports the core electronic processes and communication of awards through the student self-service module, myMU.

The Assistant Director reports to the Marshall University Director of Student Financial Assistance. The Associate Director of Student Financial Assistance was responsible for administering medical student aid for over 25 years before the hiring of the Assistant Director and is also available to assist medical students at the Marshall University main campus. The

Chief Financial Officer for the practice plan assists the Assistant Director with distribution of scholarship support and financial reports as necessary.

The responsibilities of the Assistant Director include:

- Creating, implementing and administering the financial literacy and debt management program for all medical students
- Processing and monitoring medical students' federal, state and institutional aid
- Awarding and maintaining accounts of all institutional scholarships
- Maintaining all medical student financial aid files/documents
- Individual financial counseling
- Conducting financial education by class sessions and electronic correspondence
- Maintaining the JCESOM Student Financial Assistance website
- Working cooperatively with the main campus Office of Student Financial Assistance with annual updates of medical student electronic data as well as the Office of the Bursar in troubleshooting student accounts

2. Describe the required and optional financial aid and debt management counseling sessions available to students in each year of the curriculum. Note the sessions that were offered to students during the 2012-2013.

MS-23 Appendix: Financial Services-At-A-Glance-Calendar
MS-23 Appendix: Financial Literacy and Debt Management Program
MS-23 Appendix: Financial Literacy and Debt Management Program Sessions

3. List other resources, such as online programs, available to help students understand and manage their debt.

- The JCESOM Office of Student Financial Assistance website (**http://musom.marshall.edu/students/osfa/**) provides:
  - Online guidance of Marshall University financial aid processes and financial planning steps by each class year
  - Links to the JCESOM Student Financial Assistance Guide (**MS-23 Appendix: Medical School Guide**)
  - Access to pertinent financial aid forms and institutional related information
  - Links to outside financial literacy programs, such as the "AAMC First" website, relevant U.S. Department of Education websites, and links to outside scholarship opportunities
- A Student Financial Aid Newsletter is emailed to all newly admitted students in early February prior to the new student's entering the fall semester. The Newsletter is also available online. **(MS-23 Appendix: Student Financial Aid Newsletter)**
- "AAMC First" fact sheets are given to students during financial literacy sessions
- All new MS-1 students and MS-4 graduates receive a hard copy of AAMC's Debt Manager book during entrance and exit sessions, respectively **(MS-23 Appendix: Orientation August 2012, MS-23 Appendix: Federal Assistance for Year 4)**

- All students are mailed individual indebtedness reports in February with accompanied repayment information and instructions in accessing AAMC's Medloans Organizer and Calculator
- Ongoing email reminders and important federal updates are sent to students throughout the year

4. From the 2012 AAMC Medical School Graduation Questionnaire and from an internal survey of medical students in all classes, provide data on student satisfaction with the process of and resources for financial aid and debt management counseling.

MS-23 Table 1- Student Satisfaction with Financial Aid and Debt Management Counseling

Graduation Questionnaire Item	GQ 2010 MU (All Schools)	GQ 2011 MU (All Schools)	GQ 2012 MU (All Schools)
Satisfaction with Financial Aid Services	60% (75%)	37% (76%)	69% (78%)
Satisfaction with Overall Debt Management Counseling	30% (64%)	27% (65%)	63% (68%)
Satisfaction with Senior Loan Exit Interviews	33% (70%)	42% (70%)	74% (74%)

MS-23 Table 2- Student Services Assessment Survey (SSAS): Student Satisfaction with the process of and resources for Financial Aid and Debt Management Counseling

SSAS Item	April 2012	January 2013
Satisfaction with Financial Aid Services*	81%	94%
Satisfaction with Overall Debt Management Counseling*	59%	85%
Respondents who found the school-sponsored financial aid/debt management workshops useful*	61%	79%
Respondents who utilized AAMC's FIRST website found useful*	29%	62%
Respondents who completed AAMC's FIRST Basic modules and found them useful* (Requirement for Class of 2016 – MS-1)	N/A**	51% (N=86)
Respondents who **have not completed** AAMC's FIRST Basic modules	N/A**	29% (N=86)
Respondents who **have not utilized** AAMC's FIRST website	52%	31%

*Percentages are the sum of "Satisfied" and "Very Satisfied" or "Useful" and "Very Useful"
**N/A – Not Available since question was newly added in the SSAS for 2013 and is the first year as a requirement for MS1 students.

The SSAS was developed in January 2011 by the Associate Dean for Student Affairs in collaboration with the Office of Medical Education, the Office of Academic Affairs, and the LCME Student Services Task Force.

The survey is administered annually to all students and serves as our barometer for various student concerns. The SSAS is a 40 item survey of which 25 items come directly from the Graduation Questionnaire.

MS-23 Table 3- FLDMP Session Evaluations September 2011 – November 2012

Session Title	Class Year	Date	% Helpful + Very Helpful	% Feel More Knowledgeable
Managing Credit and Financial Aid Budgets	MS-1 (N=67)	September 2011	54%	85%
Money Management	MS-1 (N=51)	October 2012	86%	82%
Save and Serve Financial Forum	MS-1 MS-2 (N=78)	February 2012	70%	97%
Understanding Credit Cards	MS-2 (N=35)	November 2011	46%	66%
Keeping Up With Your Debt	MS-2 (N=43)	November 2012	77%	95%
Exit Counseling	MS-4 (N=35)	March 2012	80%	97%

MS-24

A medical education program should have mechanisms in place to minimize the impact of direct educational expenses on medical student indebtedness.

Finding: Student debt has been increasing, with 32% of the class of 2010 graduating with debt of over $200,000. Scholarship support is well below the national mean and fundraising to support scholarships has not, to date, added significantly to the amount of financial aid that is available.

Introductory Comments

Under the leadership of the Dean, fundraising has significantly increased, providing new scholarships and debt reduction resources.

As JCESOM moves forward with a renewed and vigorous emphasis on fundraising and debt reduction, a number of changes have and will continue to be implemented:

- Senior leadership with a commitment to fundraising and immersion in the process
- Development of a medical school advisory board to assist on several fronts including development **(MS-24 Appendix: Dean's Advisory Board)**
- Cultural changes throughout the JCESOM to have faculty, staff and students be more involved in the development process
- An emphasis on productivity and profitability of Marshall Health, the practice plan, enabling the departments to invest in scholarships and tuition waivers while also enabling the Dean's Fund to be utilized for scholarships, research and academic development
- A commitment from senior administration to freeze tuition for current students and for the entering Class of 2017
- Implementation of targeted assistance to regional waiver to reduce tuition for medical students who live in bordering counties in Ohio and Kentucky
- The Marshall University Foundation, the investment arm of Marshall University, recently contracted with a new investment firm and implemented significant investment strategy changes that will allow for improved return on investments **(MS-24 Appendix: JCESOM Endowment History)**

A medical education program should have mechanisms in place to minimize the impact of direct educational expenses on medical student indebtedness.

1. ***Provide a copy of the most recent LCME Part 1-B Financial Aid Questionnaire.***

MS-24 Appendix: LCME Part-1-B Financial Aid Questionnaire

2. Please complete the following table for the indicated academic years.

MS-24 Table 1- First Year Tuition and Fees

	2010-2011	2011-2012	2012-2013
In-state students	$18,536 Tuition = $17,570 Fees = $966	$19,476 Tuition = $18,410 Fees = $1,066	$20,080 Tuition = $19,010 Fees = $1,070
Out-of-state students	$45,326 Tuition = $44,360 Fees = $966	$46,266 Tuition = $45,200 Fees = $1,066	$47,670 Tuition = $46,600 Fees = $1,070
Average medical school debt of graduating students with debt	$166,124 64 Borrowers	$162,010 58 Borrowers	$169,793 69 Borrowers
Average medical school debt of graduates with debt excluding repeat students	$165,828	$166,236	$158,698
Average medical school debt of total graduates	$151,967 70 Graduates	$146,822 64 Graduates	$156,209 75 Graduates
Percentage of enrolled students receiving institutional scholarship support	24% 74 out of 304	33% 97 out of 296	51% 146 out of 288
Average scholarship support to students receiving institutional scholarships	$6,228	$8,490	$13,522

MS-24 Table 2- Percentage of Students with Debt > $200,000

	2010-2011	2011-2012	2012-2013
Total Enrollment	304	296	288
Percentage of students with medical school debt > $200,000 (excludes pre-med debt)	8% 24 > $200,000	8% 23 > $200,000	7% 21 > $200,000
Percentage of graduates with medical school debt > $200,000 (excludes pre-med debt)	23% 15 out of 64	24% 14 out of 58	17% 12 out of 69
Percentage of graduates with debt over $200,000 (includes pre-medical debt)	31% 20 out of 64	28% 16 out of 58	20% 14 out of 69

MS-24 Table 3- Total Institutional Scholarship 2010-2013

2010-2011 Class Total	2011-2012 Class Total	2012-2013 Class Total
$460,893 Waiver = $228,683 Scholarship = $232,210	$823,615 Waiver = $450,407 Scholarship =$373,208	$1,974,217 Waiver = $703,917 Scholarship = $1,270,300

3. Compare the amount of institutional scholarship support available during the 2012-2013 academic year with that available at the time of the 2011 full survey visit.

MS-24 Appendix: Scholarship and Tuition Waiver Charts

Describe steps currently being taken to increase scholarship funding.

- Development of a Dean's Advisory Board to assist with fundraising
- Development of a partnership with Marshall Health which resulted in a $500,000 commitment for student scholarships in 2013-2014
- Request made by the Dean to the ten clinical departments to create endowed or expendable scholarships
    - Currently Family Medicine, Obstetrics and Gynecology, Orthopaedics (Two scholarships), Pathology and Surgery have fulfilled the request
- Development of a new initiative with the Marshall University Foundation to establish a $5 million campaign for scholarships for 2013-2014 with the goal of raising $20 million over a five-year period **(MS-24 Appendix: Student Scholarship and Endowments)**
    - Implementation by Marshall Health of a payroll deduction option for employees for scholarships
- Increased commitment from the Edwards Charitable Trust in 2014 to approximately $1,000,000 for scholarships through 2018. The Trust is currently over $36,000,000.
- On-going personal and written solicitations to alumni and prospective supporters to create scholarship endowments

4. Summarize other steps being taken to limit medical student debt.

- Provide individual and class financial literacy and debt management sessions
- Provide web based resources for debt management
- Provide annual individual indebtedness reports to students with accompanied repayment information and instructions in accessing AAMC's Medloans Organizer and Calculator
- Removal of student health insurance allowance from the overall budget in 2012-2013 for students that are covered by a parent or government assistance
- Provide outside scholarship and loan forgiveness opportunities on the Office of Student Financial Assistance website
- Email students information regarding new scholarship opportunities
- The Marshall Foundation provided notification of endowment amounts at an earlier time to allow for early awarding of scholarships and to clarify the students' budget needs

MS-26

A medical education program must have an effective system of personal counseling for its medical students that includes programs to promote the well-being of medical students and facilitate their adjustment to the physical and emotional demands of medical education.

Finding: There are limited programs and practices available to support student well-being and no system to promote student emotional health. There is no designated individual for students to access for emotional health issues who has no role in student evaluation.

Introductory Comments

The Office for Student Affairs was relocated to the Byrd Clinical Center, a major teaching site for MS-1 and MS-2 students, in January 2012 in order to more effectively provide student access and services, particularly those which promote well-being. The relocation has dramatically increased student traffic and, as illustrated by the table below, accessibility, awareness, and responsiveness of the student dean to student problems is comparable to national standards.

MS-26 Table 1- Accessibility to the Student Dean Compared to Schools Nationwide

Graduation Questionnaire Item*	GQ 2010 MU (All Schools)	GQ 2011 MU (All Schools)	GQ 2012 MU (All Schools)
Accessibility of the Student Dean	60% (80%)	58% (79%)	80% (81%)
Awareness of problems by Student Dean	51% (73%)	56% (74%)	73% (75%)
Responsiveness to student problems	43% (71%)	52% (71%)	71% (73%)

*Percentages are the sum of "Satisfied" and "Very Satisfied"

1. Describe the programs and resources available to medical students during the 2012-2013 to promote their well-being and adjustment to medical school.

The Associate Dean for Student Affairs brought LCME citation MS-26 to the attention of the Medical Student Wellness Committee in April 2011. Committee members discussed ideas about how students could have a better outlet for discussing emotional problems and how they could be better informed about referral for medical care without concern that the physician was in a supervisory role in medical school. The Cabell Huntington Hospital Counseling Center Agreement and Healthcare Resources for Medical Students were two endeavors that came from their efforts. **(MS-26 Appendix: Student Affairs Newsletter)**

Cabell Huntington Hospital Counseling Center Agreement

A contract to provide medical students with confidential personal counseling was completed in July 2011 with Cabell Huntington Hospital Counseling Center. The Counseling Center provides medical students (including their spouse and/or children) up to 10 free counseling sessions annually by providers who do not teach or evaluate medical students.

Students attended 90 sessions in 2011-2012 and 57 sessions so far for 2012-2013. This contractual relationship is aligned with the "Policy for the Provision of Health Care Services to Students" approved in November 2011 and developed in response to MS-27-A, which states that medical students are discouraged from seeking health care from faculty or residents of the institution.
(http://musom.marshall.edu/students/documents/Policies/HealthCareServices_to_Students.pdf)

If a student elects to establish a provider relationship with a faculty member or resident, that individual is precluded from any evaluation role for that student, irrespective of the wishes of the medical student. This policy is monitored through the use of a confirmation checkbox that appears on all MS-3 and MS-4 clinical evaluations which states: "No person contributing to the evaluation has had a provider relationship with this student." This policy was disseminated to all faculty in November 2011 and was a topic of discussion at the regularly scheduled meetings of the Clerkship Directors as well as the Dean's Advisory Committee.

Healthcare Resources for Medical Students

The Office of Student Affairs maintains an updated list of Healthcare Resources for Medical Students which includes community primary care providers who do not teach or evaluate medical students.
http://musom.marshall.edu/students/documents/HealthcareResourcesforMedicalStudents.pdf

Marshall University Recreational Center

All medical students have free access to the Marshall University Recreation Center (**www.marshallcampusrec.com**), a 123,000 square-foot, facility located on the main campus which features:

- Wood gym courts for basketball, volleyball, badminton, and dodge ball
- Outdoor Pursuits center with a 35′ climbing wall and bouldering area
- A 4,000 square-foot Aquatics Center with 3 lap lanes, a leisure swim area, vortex pool and 20-person spa
- Men's and Women's locker rooms, and a separate Family Changing room with lockers
- 17,000 square feet designated to fitness including free weights, machines, and cardio equipment with LCD televisions
- Four group exercise studios at which multiple classes are available to students including yoga, spinning, and kick-boxing
- A 3-lane 1/7 mile track overlooking the first floor

- Fitness Assessment Room
- Lobby with pro shop and lounge area
- A pool deck extending outdoors in a fenced area for sun bathing and relaxing
- Complete accessibility for persons with disabilities

Student Engagement
All Administrators at JCESOM have an open-door policy for students. Students are given personal cell phone numbers of all key administrators and are told that they may call us at any time, day or night, including weekends for any reason.

Students can interact with the Dean in multiple ways including:

- Office of the Dean open office hours every Friday from 2:00-4:00 pm
- Dean led focus groups every two weeks with a cross-section of medical students
- Dean led monthly meetings with class leaders and the Associate Dean for Student Affairs

These meetings encourage the exchange of information and expression of opinions between students and administrators. Consequently, student needs are more easily heard and addressed.

Student reminders and informational updates are also provided by the Associate Dean for Student Affairs through a quarterly student newsletter. Electronic surveys are used periodically to collect student opinion on various issues such as tutoring preferences, study space, and use of social media.

2. Describe the current activities of the Student Wellness Committee and include any evidence for the committee's effectiveness. Note which faculty member/administrator serves as the advisor to this committee.

The Medical Student Wellness Committee was established in December 2010. The Associate Dean for Student Affairs serves as advisor. At least two students from each class serve on the Committee. The Committee's charge was to create programs that foster self-care, emotional well-being, and personal/professional balance. Facilitating student adjustment to the demands of medical education has been at the center of the Committee's efforts. According to internal survey data from April 2012, 97% of respondents (190) were aware of the Wellness Committee. Satisfaction with student programs and activities that promote effective stress management, a balanced lifestyle, and overall well-being, increased from 49% in 2011 to 55% in 2012 on the Graduation Questionnaire. Again, further improvements on future Graduation Questionnaires are suggested by improvements in analogous questions on the internal student survey (**MS-19 Appendix: Student Services Annual Survey 2013**, MS-26 Table 3 on page 45).

MS-26 Table 2- Satisfaction with Student Programs and Activities that Promote Effective Stress Management, a Balanced Lifestyle and Overall Well-Being

Graduation Questionnaire Item*	GQ 2010 MU (All Schools)	GQ 2011 MU (All Schools)	GQ 2012 MU (All Schools)
Personal Counseling	56% (70%)	42% (70%)	67% (76%)
Satisfaction with student programs/activities that promote effective stress management, a balanced lifestyle, and overall well-being	47% (67%)	49% (68%)	55% (72%)

*Percentages are the sum of "Satisfied" and "Very Satisfied"

The Committee's effectiveness can be seen in the activities described below:

Physical Fitness Events
Two physical fitness events were held in February-April 2011 and February–May 2012 in which 77 and 69 students participated, respectively.

Physical Fitness Equipment
An extensive collection of recreational equipment was purchased in October 2012 for students by the Office of Student Affairs in response to a request from the Wellness Committee to facilitate interaction and physical activity during study breaks or for use in scheduled intramural sports activities. In October 2012, an intramural soccer competition was held after fitness equipment was purchased for the students.

Cabell Huntington Hospital Counseling Center Agreement
See description on page 42

Healthcare Resources for Medical Students
See description on page 42

JCESOM Plus Ones
The JCESOM "Plus Ones" was created in December 2012 at the suggestion of the Wellness Committee. The "Plus Ones" is designed to provide support to spouses/significant others of medical students. They have held nine social events since their organization in March of 2012. The "Plus Ones" participated in orientation activities for the Class of 2016 including hosting a dinner for the class. The Wellness Committee and the "Plus Ones" hosted a Fall Festival at a local park which was well attended by students and their families. "Plus Ones" members maintain a Facebook page to correspond with one another.

3. ***From an internal survey of medical students in all classes, provide data on student satisfaction with the availability of programs to promote student wellness.***

MS-26 Table 3- Student Awareness and Satisfaction with the Availability of Programs to Promote Student Wellness

Student Services Assessment Survey Item*	2012 (N=190)	2013 (N=197)
Awareness of Wellness Committee	97%	99%
Satisfaction with Personal Counseling**	59%	75%
Satisfaction with Student Programs/Activities that promote effective stress management, a balanced lifestyle, and overall well-being (e.g. Activities promoted by Wellness Committee and Office of Student Affairs)	44%	70%

*Percentages are the sum of "Satisfied" and "Very Satisfied"
** The 2012 and 2013 versions of this question were changed slightly.

2012 Question
"Indicate your level of satisfaction with the following: Personal Counseling"

- 149/190 indicated they "Did Not Use" the service. Of the 41 that did use it, 24/41 were either "Satisfied" or "Very Satisfied" with the service

2013 Question
"Indicate your level of satisfaction with the availability of personal counseling sessions."

- 148/197 indicated they were "Satisfied" or "Very Satisfied" with the availability of the service

FA-5

A faculty member in a medical education program should have a commitment to continuing scholarly productivity that is characteristic of an institution of higher learning.

Findings: Scholarly activity by the faculty is quite variable among the departments, with the departments of surgery, family medicine, and psychiatry demonstrating virtually no activity.

Introductory Comments

Marshall University has taken this citation to heart and instituted fundamental changes in the leadership at JCESOM. After a national search in which nearly 1,000 candidates were considered, the search committee, search firm and President Dr. Stephen Kopp selected Dr. Joseph I. Shapiro as Dean. Dr. Shapiro was previously the Chair of Medicine and Associate Dean for Business Development for the University of Toledo. In addition to his administrative work, Dr. Shapiro continues to maintain an active translational research program with NIH funding for both basic and clinical research. He has moved this research to Marshall University and is actively working to expand the research activity (**FA-5 Appendix: Curriculum Vita Dr. Shapiro**).

With his first significant recruitment, the Dean appointed Dr. Nader Abraham as the Vice-Dean for Research in November 2012 to solidify the research administration **(FA-5 Appendix: Curriculum Vita Dr. Abraham)**. Both Dr. Shapiro and Dr. Abraham have multiple, currently active NIH grants as well as s substantial track records of research funding, publishing and mentoring. Both have brought a number of additional research scientists to Marshall University, and these scientists have been distributed with respect to their primary appointments amongst a number of departments within the JCESOM.

In addition, Dr. Zijian Xie is being hired as the director of the Marshall Institute for Interdisciplinary Research (MIIR) **(FA-5 Appendix: Curriculum Vita Dr. Xie's)** Dr. Xie will share a joint appointment at JCESOM. He is a well-funded and well published scientist with a successful track record of collaborating with clinical scientists.

There are active searches for a new director for the cancer center, a new permanent chair for the Department of Psychiatry and a new director of the division of Endocrinology, each of which are nearing completion at the time this document is being prepared. Our leadership is using each of these opportunities to bring in leaders with proven scholarship to effectively support the desired culture change at JCESOM. The funding that has supported these successful and ongoing recruitments has been derived almost entirely from proceeds from the practice plan.

The Office of Informational Technology created an internal on-line scholarly activity database which catalogs all faculty scholarly activity. Faculty can upload their scholarly activity at any time including downloading publications from PubMed. As a result of this effort, a comprehensive analysis of JCESOM scholarly activity across all departments was obtained. These data are summarized in FA-5 Table 1 on page 49.

On another front, JCESOM developed a partnership with the University of Kentucky on a Clinical and Translation Science Application (CTSA). This Award was granted by the NIH in July 2011. Since that time, JCESOM has been awarded a subcontract of approximately $153,000 in clinical trials research funds annually for the next five years. These funds have been used to provide additional personnel support, create a pilot program, participate in clinical research, educational training opportunities, research collaborations, joint research strategy meetings, and in the Appalachian Translational Research Network. **(FA-5 Appendix: CTSA Contract)**

As we assess our performance and plans, we believe that our appointment, promotion and tenure procedures need to reflect and support our commitment to research and scholarship. Based on an evaluation of preclinical faculty, it was clear that JCESOM had a substantial deficit in the number of RO1 funded investigators. To address this, we developed the following strategies:

- New job offers into the basic science department will only be made to investigators having at least 25% of their salary on an extramural grant. We feel strongly that we will need to focus our limited recruitment dollars on recruiting faculty who already have a track record of attracting sponsored support.
- An ad-hoc committee has developed new P&T guidelines for the SOM faculty which call out much more specific criteria for research excellence. These guidelines have been reviewed by the SOM faculty and recently passed by an overwhelmingly positive vote in a general faculty meeting held on February 21, 2013. The revised Promotion and Tenure Regulations are present in **FA-5 Appendix: Promotion and Tenure Regulations**.

Of course, to enhance the research mission of the medical school, some funding and additional recruitment is necessary. We have addressed the pilot funding in the following ways:

- Seed funding for pilot research projects has been developed using the physician practice plan (Marshall Health) as the financial source. Specifically, we have funded 6 projects with between $25,000 and $50,000 after peer review and ranking of these proposals.
- Seed funding for planning grants for COBRE applications has been developed, again using Marshall Health as the financial source. We hope to fund between three to five planning grants with $25,000-50,000 of support.
- Summer research fellowship stipends ($2,000 per summer) are being offered to all first year students for a research experience during the summer of 2013 working with either JCESOM faculty or other qualified faculty (at Marshall or at other institutions). We expect that most of these fellowships will occur with JCESOM faculty. Again, Marshall Health is the financial source.
- New research endowments have been established at the JCESOM. (**FA-5 Appendix: Research Endowment**) At the time this document is being prepared, in part because of a very successful state matching program called “bucks for brains”, the JCESOM has raised more than $7 million in the past year. We plan to use the projected interest (4.5% x $7 million or approximately $300,000 per year) to support pilot clinical and translational grants. These projects will be coordinated by the laboratory of our new Vice-Dean for the JCESOM, Dr. Nader Abraham. Since Dr. Abraham is well funded by NIH, he has dedicated his startup funds towards the development of these projects. These projects have already spurred 6-8 new IRB applications and include approximately 18 clinicians

engaged in clinical research from the departments of Obstetrics and Gynecology, Endocrinology, Pediatrics, Cardiology and Nephrology. **(FA-5 Appendix: IRB Applications)**

1. Complete the attached table on faculty scholarly productivity.

A website link was created to continuously identify and update scholarly activity of the faculty. The most recent faculty scholarly activity can be viewed at the following website. **http://musom.marshall.edu/research/sa/fa5-report.asp**

Provide the following data, by department (basic science and clinical), for the most recently completed year (academic or calendar year, whichever is used in the medical school's accounting of faculty scholarly efforts).

FA-5 Table 1- Faculty Scholarly Activity by Department

2012 Calendar Year	Number of:		Departmental Faculty Members Who		
Department	**Articles in Peer-reviewed Journals**	**Books and Book Chapters Published**	**Members of National Study Sections or Committees**	**Journal Editors or Members of Editorial Boards**	**PIs on Extramural Grants**
Anatomy and Pathology	5	2	3	2	1
Biochemistry and Microbiology	17	5	5	4	7
Family Medicine	2	4	3	2	2
Internal Medicine	35	4	5	3	11
Obstetrics and Gynecology	4	0	2	0	3
Pediatrics	9	0	2	0	3
Pharmacology, Physiology and Toxicology	13	4	7	2	8
Psychiatry and Neuroscience	7	1	0	0	2
Surgery, Orthopaedics and Ophthalmology	17	5	4	2	4
TOTALS	**109**	**25**	**31**	**15**	**41**

*Note that faculty who have multiple memberships or grants are only counted once in this table.

FA-5 Table 2- Faculty Scholarly Activity by Department, 2009 vs. 2012

2009 vs. 2012 Calendar Years	Number of:				Departmental Faculty Members Who Are:					
Department	Articles in Peer-reviewed Journals		Books and Book Chapters Published		Members of National Study Sections or Committees		Journal Editors or Members of Editorial Boards		PIs on Extramural Grants	
	2009	2012	2009	2012	2009	2012	2009	2012	2009	2012
Anatomy and Pathology	5	5	0	2	1	3	1	2	0	1
Biochemistry and Microbiology	11	17	0	5	5	5	2	4	8	7
Family Medicine	1	2	0	4	3	3	2	2	2	2
Internal Medicine	5	35	1	4	2	5	1	3	2	11
Obstetrics and Gynecology	2	4	0	0	2	2	0	0	0	3
Pediatrics	12	9	0	0	2	2	0	0	3	3
Pharmacology, Physiology and Toxicology	6	13	0	4	3	7	1	2	6	8
Psychiatry and Neuroscience	3	7	2	1	0	0	0	0	1	2
Surgery, Orthopaedics and Ophthalmology	10	17	0	5	2	4	2	2	2	4
TOTALS	**55**	**109**	**3**	**25**	**20**	**31**	**8**	**15**	**24**	**41**

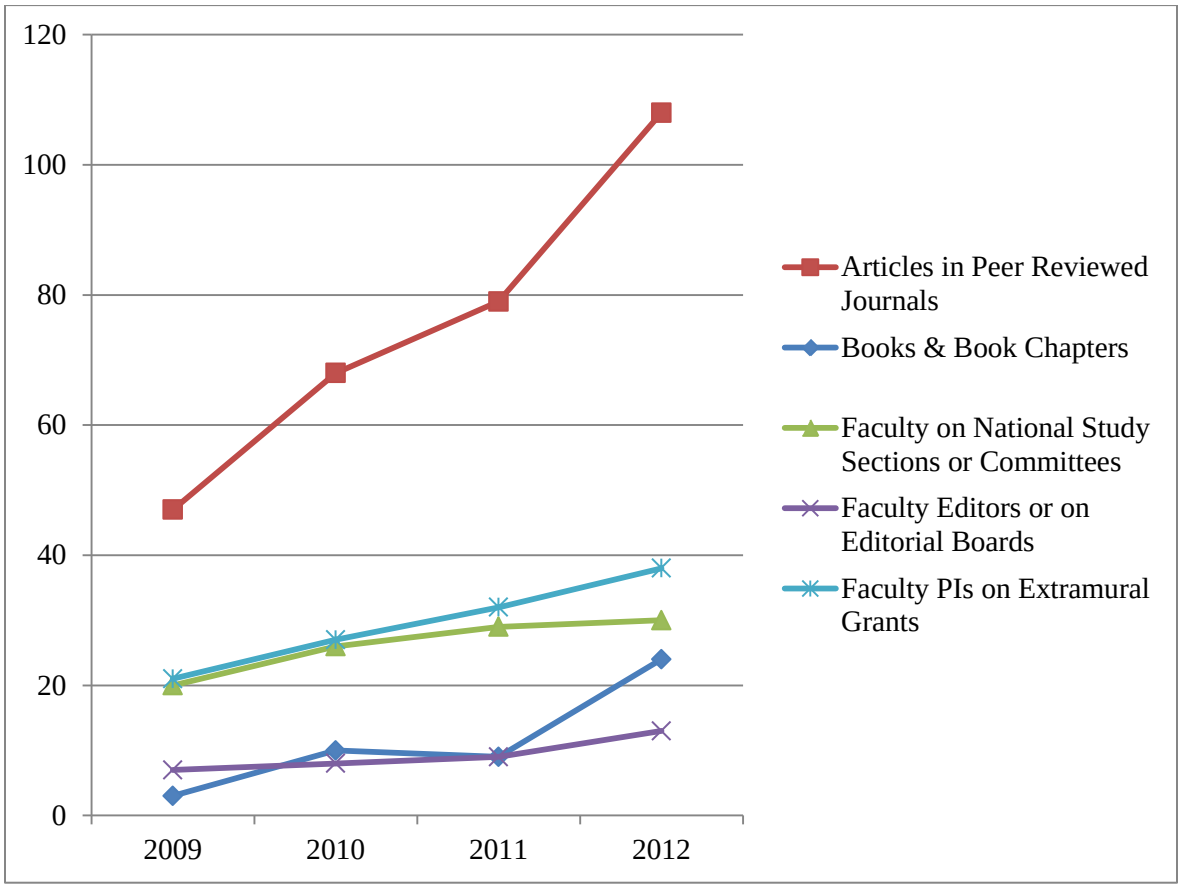
*Note that faculty who have multiple memberships or grants are only counted once in this table.

FA-5 Table 3- Growth of Institutional Scholarly Activity, 2009-2012

Scholarly Activity Category	2009	2010	2011	2012	Growth 2009-2012
Articles in Peer Reviewed Journals	55	72	85	109	**98.2%**
Books and Book Chapters	3	10	9	25	**733.3%**
Faculty on National Study Sections or Committees	20	27	29	31	**55.0%**
Faculty Editors or on Editorial Boards	8	9	10	15	**87.5%**
Faculty PIs on Extramural Grants	24	29	34	41	**70.8%**

*Note that faculty who have multiple memberships or grants are only counted once in this table.

FA-5 Graph 1- Growth of Institutional Scholarly Activity, 2009-2012



We would re-emphasize the point that scholarship is still not where we want it at the JCESOM, and intense efforts continue to address this critical area. Focusing just on the three departments noted to have no scholarly activity during the last report, we believe that we have either uncovered reporting difficulties as well as made substantial cultural improvements in both Family Medicine and Surgery, especially in Surgery where the placement of basic scientists into the department appears to be quite effective. Unfortunately, we are less sanguine about what we have been able to accomplish in Psychiatry/Neurosciences to date. In this case, major emphasis is being placed on new recruitment, especially the recruitment of a new department chair, who

will lead the revitalization of the Psychiatry department to achieve greater balance between its clinical and academic missions. A search firm has been engaged, and no less than eight Psychiatry chair candidates have had on site interviews. Unfortunately, one individual was offered and declined the position because of personal considerations. At present, there are three candidates who have had successful first visits and are being courted for this position. We are optimistic that with new leadership in the critical department of Psychiatry, we will be able to effectively create a culture of scholarship. In the interim, we have successfully encouraged case reports from existing MD faculty in 2013 as well as developed a joint appointment for psychologist/neuroscientist (Dr. M. Bardi) to enrich the scholarly environment of Psychiatry. That said, it is very clear to us that new leadership of Psychiatry is necessary to address this issue in a sustainable way.

2. Describe the means by which faculty scholarship is fostered in the medical school. For example, is there a formal mentorship program across departments to assist faculty in their development as scholars? Note any informal opportunities for mentorship or other types of support for faculty scholarly activities.

Faculty scholarship is fostered in the medical school through the following means:

- A Clinical Research Directors' (CRD) Committee was formed in September 2012 that consists of Research Directors from each clinical department. The Assistant Dean for Research serves as Chair of this committee. The Departmental Research Director is charged with identifying and mentoring faculty within their respective department with promising research potential, organizing and leading departmental 'research in progress' conferences, and identifying departmental resources necessary to conduct scholarly activity. All scholarly activity is reported to the CRD committee.
- The Clinical Research Center (CRC) was established in August 2011 as part of the opening of the Translational Genomics Research Institute within the Edwards Cancer Center. In 2011 there were five non-cancer clinical trials administered through the CRC. Presently, there are 13 trials administered through the CRC, five of which are investigator initiated. Similarly, in 2011, there were 13 clinical trials in oncology with one being an investigator-initiated trial. Presently, there are 27 clinical trials in oncology with six being investigator-initiated. **(FA-5 Appendix: Oncology Clinical Trials)**
- The aforementioned Marshall Health Pilot Grant program was initiated earlier this academic year. The Pilot Grant is an internal program whose purpose was to increase collaborative translational research efforts between clinicians and basic scientists and to generate research data for extra-mural grant applications. Requests for application were released in September 2012 and 27 applications were received. Six grants with a score of three or better (NIH scale) were approved for a total of $150,000 in total funding. **(FA-5 Appendix: Marshall Health Pilot Grant Program)**
- The Robert C. Byrd Center for Rural Health in collaboration with the CRC awarded grants to medical students, residents and fellows of approximately $15,000 for rural research in October 2012 for approximately $175,000 total allocation. **(FA-5 Appendix: Grants from RCB Rural Health and CRC)**
- University of Kentucky CTSA has allowed clinical faculty to participate in clinical research courses via video links.

- A CTSA collaborative community-based diabetes research project led by JCESOM faculty from the departments of Family Medicine and Internal Medicine is underway with 27 patients enrolled, some already at the 6-month follow-up visit.
- Ten JCESOM faculty members gave oral or poster presentations at the 2011 and 2012 Annual Appalachian Health Summit sponsored by the University of Kentucky CTSA
- Three pilot grants were awarded to JCESOM faculty through the competitive pilot grant program of the University of Kentucky CTSA
- JCESOM successfully competed for surplus funds from year one of the University of Kentucky CTSA (awarded $103,000) to install the i2b2 informatics program that will extract clinical information from our EHR- Allscripts, for use by our faculty in clinical research studies. Access to de-identified data will be facilitated by connecting multiple institutions in the Appalachian Translational Research Network through a federated query sequence.
- The Assistant Dean for Clinical Research and the Associate Dean for Faculty Affairs and Professional Development met with the Chairs of Family Medicine, Surgery and Psychiatry (acting Chair) to establish a plan for increasing scholarly activity within their respective department. Psychiatry has three FTE MD psychiatrists and an interim chair. A national search is underway for a new chair of psychiatry to rebuild and invigorate this department. The Research Director for Psychiatry performed a needs assessment and developed a research and scholarly activity plan specifically for the department.
- The Assistant Dean for Information Technology has developed a centralized website to capture all faculty scholarly activity, capable of use queries and generation of reports.
- JCESOM is the lead institution in WV-INBRE grant (**www.wv-inbre.net)** an infrastructure award designed to strengthen the predominantly undergraduate institutions in WV in the area of biomedical training and research. Details about this grant are supplied in **FA-5 Appendix: Progress Report WV-INBRE**.
- A Center of Biomedical Research Excellence grant was submitted in February 2013 to the NIGMS – IdeA Division. This $7.2 million direct cost grant would support four research projects, a genomics core and an administrative core. This application is shown in **FA-5 Appendix: COBRE Grant Application**.
- Mentoring Program
    - A formal Mentoring Program to assist faculty with research, professional development, and personal development has been in place since 2010. Keeping in Touch Sessions (KITS) involved dinner meetings with dedicated senior faculty who lead discussions on needs identified by junior faculty such as research, promotion and tenure guidelines, and teaching resources.
    - An online comprehensive mentoring guide can be found at **http://musom.marshall.edu/fdp/mentoring/**. This website offers direction for clinicians, basic scientists, researchers, educators, and administrators on the role of the mentoring process. It provides template forms to assess need and monitor mentoring relationships. It includes the JCESOM Leadership and Mentoring Directory, which gives opportunity for junior faculty to obtain personalized mentoring in research, teaching, and clinical service.

- In 2012, under the guidance of our new Vice Dean for research, the mentoring program has expanded to include six annual targeted mentoring panels for junior faculty.
- JCESOM strongly believes that the future of an institution depends, to a great extent, on the degree to which it is successful in nurturing the career development of its junior faculty. Mentoring offered through the programs like the JCESOM Academy of Medical Educators and Women in Medicine and Science provides additional mentoring opportunities essential to empower faculty and facilitate their future success.

ER-9

A medical education program must have written and signed affiliation agreements in place with its clinical affiliates that define, at a minimum, the responsibilities of each party related to the educational program for medical students.

Finding: There is no affiliation agreement with the River Park Psychiatric Hospital

An affiliation agreement was in place with River Park Hospital on April 1, 2011. All major inpatient hospital affiliation agreements, including River Park Hospital, were reviewed and signed by the Dean after he assumed his position in July 2012.

1. Provide a copy of the affiliation agreement with River Park Psychiatric Hospital

ER-9 Appendix: Affiliation Agreement River Park Psychiatric Hospital

Areas in Compliance with a Need for Monitoring

IS-11

List any current department chair vacancies and vacancies anticipated to occur in the near future. Describe any succession planning underway to replace departmental leadership who may be retiring.

Finding: The medical school leadership at the dean and department chair levels has, in general, been in place for a significant period. There is no obvious succession planning underway at the institutional level.

Effective July 1, 2011 the former Dean assumed the role of Vice President for Health Sciences Advancement in the Office of the President. A recently retired Clinical Chair who was also serving as Senior Associate Dean for Clinical Affairs at JCESOM was appointed Interim Dean. In August, 2011 a search committee was formed and a national search firm hired. As a result of that search, a permanent Dean was selected and hired effective July 1, 2012.

There are currently no department chair vacancies. There is an interim-Chair of Psychiatry and a search for a permanent Chair is underway. There are currently no Chairs retiring or transitioning in 2013-2014. The Department of Pediatrics successfully transitioned an internally developed leader into the Chair position in 2011 when the existing Chair took a position as Senior Associate Dean for Clinical Affairs. Likewise, the Department of Internal Medicine successfully transitioned an internally developed leader when the existing Chair took a position as Dean of our new School of Pharmacy.

The Dean and all Chairs have designated an individual in their department to serve as their successor in case of an immediate replacement need. Each Chair has also designated one or more faculty members in their department to participate in annual leadership development training in order to prepare them for a future position as Chair. **(IS-11 Appendix: Dean Succession Planning, IS-11 Appendix: Leadership Programs)**

ED-21

The faculty and medical students of a medical education program must demonstrate an understanding of the manner in which people of diverse cultures and belief systems perceive health and illness and respond to various symptoms, diseases, and treatments.

> ***Instruction in the medical education program should stress the need for medical students to be concerned with the total medical needs of their patients and the effects that social and cultural circumstances have on patients' health. To demonstrate compliance with this standard, the medical education program should be able to document objectives relating to the development of skills in cultural competence, indicate the location in the curriculum where medical students are exposed to such material, and demonstrate the extent to which the objectives are being achieved.***

Finding: The curriculum offers limited opportunities for medical students to participate in learning activities that allow them to acquire and demonstrate an understanding of the manner in which people of diverse cultures and beliefs system perceive health and illness. In the 2010 AAMC Medical School Graduation Questionnaire, more than one-third of respondents reported that their instruction related to providing culturally appropriate care for diverse populations was inadequate.

Introductory Comments

In response to the LCME concern that there were insufficient opportunities in the curriculum related to diversity the following actions were taken:

- The Curriculum Committee charged the year subcommittees, and course and clerkship directors to enhance the elements of diversity covered in the 2012-2013 curriculum
- The Curriculum Committee charged the integration committee to create a comprehensive, integrated four year diversity curriculum for the 2013-2014 curriculum
- The formal elements of diversity integrated across all four years was increased from six in 2009-2010 to 102 in 2012-2013
- An integrated four year diversity curriculum was created by the Integration Committee and approved and adopted by the Curriculum Committee in March 2013 for the 2013-2014 academic year which include 122 formal diversity elements

1. List the courses and clerkships in which students learn about issues related to cultural competence in health care and describe the objectives to cultural competence that are covered in each. Note whether the instruction occurs through formal teaching, informal exposure in the clinical setting, or both.

2. Provide examples of how students' acquisition of knowledge, skills, and behavioral objectives related to cultural competence are assessed.

The courses and clerkships in which students learn about issues related to cultural competence, the responsible faculty, year of inclusion in the curriculum, educational activity, diversity

element, diversity objective(s), and assessment methods, are found in **ED-21 Appendix: Diversity Elements in the Curriculum**. All elements in this chart are considered formal exposure for our students. Each class year contains a listing of the Core Competencies that are met as a result of these experiences.

Informal opportunities include participation in our two-week elective Medical Spanish course (105 students, or 50% of our fourth year students, have participated in this course over the past three years) and travel abroad opportunities such as our annual medical mission trip to Honduras. Our students are also exposed to a variety of diverse patient populations in both outpatient and inpatient settings. These include opportunities to:

- Care for patients at one of 40 rural sites around West Virginia which provides interdisciplinary learning within the context of a primary care practice and facility. Students experience a focused training in rural medicine overseen directly by JCESOM faculty that exposes them to the economic, transportation and educational challenges facing our rural areas. The experience weaves preventive care and community wide concerns into the clinical educational experience as well.
- Care for patients at the Ebenezer outreach clinic which cares for an underserved and economically disadvantaged population of predominantly African-Americans.
- Care for patients at the Health Department and the STD clinic
- Care for homeless patients on a monthly basis at the Marshall Medical Outreach (MMO) at River Front Park. This student led event began in 2011 and was recently recognized by West Virginia Governor Earl Ray Tomblin as part of the 2012 Governor's Day to Serve. The MMO also partners with the Christian Motorcycle Association of Huntington to provide assistance with clothing and food during the outreach events.

3. Provide data from the 2012 AAMC GQ and from an internal survey of medical students in all classes on their perception of the adequacy of instruction related to providing culturally appropriate care for diverse populations.

Graduation Questionnaire and Internal Survey Questions on Diversity

ED-21 Table 1a- Graduation Questionnaire

Based on your experiences, indicate whether you agree or disagree with the following statements: My knowledge or opinion was influenced or changed by becoming more aware of the perspectives of individuals from different backgrounds.

	Strongly Disagree % (1)	Disagree % (2)	Neutral % (3)	Agree % (4)	Strongly Agree % (5)	Total % (4+5)	Number of Students
Marshall 2008	0.0	7.1	21.4	53.6	17.9	71.5	28
Marshall 2009	3.7	3.7	37.0	51.9	3.7	55.6	27
Marshall 2010	2.2	2.2	30.4	52.2	13.0	65.2	46
Marshall 2011	2.0	18.4	30.6	38.8	10.2	50	49
Marshall 2012	5.6	9.3	24.1	53.7	7.4	61.1	54
All Schools 2012	1.1	3.7	18.2	56.6	20.4	78	12,245

ED-21 Table 1b- Internal Survey

All values are Percentages	Strongly Disagree %	Disagree % (2)	Neutral % (3)	Agree % (4)	Strongly Agree %	Total % (4+5)	Number of Students
February 2013	2.6	7.3	28.1	45.3	16.7	62.0	192

ED-21 Table 2a- Graduation Questionnaire

Based on your experiences, indicate whether you agree or disagree with the following statements: The diversity within my medical school class enhanced my training and skills to work with individuals from different backgrounds.

	Strongly Disagree % (1)	Disagree % (2)	Neutral % (3)	Agree % (4)	Strongly Agree % (5)	Total % (4+5)	Number of Students
Marshall 2009	7.4	7.4	25.9	44.4	14.8	59.2	27
Marshall 2010	4.3	26.1	19.6	45.7	4.3	50	46
Marshall 2011	12.2	16.3	38.8	24.5	8.2	32.7	49
Marshall 2012	9.3	18.5	25.9	38.9	7.4	46.3	54
All Schools 2012	3.4	9.3	21.3	43.8	22.3	66.1	12,242

ED-21 Table 2b- Internal Survey

	Strongly Disagree %	Disagree % (2)	Neutral % (3)	Agree % (4)	Strongly Agree %	Total % (4+5)	Number of Students
February 2013	1.6	10.4	23.4	40.6	24	64.6	192

ED-21 Table 3a- Graduation Questionnaire

Do you believe that your instruction in the following areas was inadequate, appropriate or excessive?

Culturally appropriate care for diverse populations	Inadequate %	Appropriate %	Excessive %	Number of Students
Marshall 2008	43.8	56.3	0.0	32
Marshall 2009	42.9	54.3	2.9	35
Marshall 2010	35.4	60.4	4.2	48
Marshall 2011	50.0	47.9	2.1	48
Marshall 2012	36.4	61.8	1.8	55
All Schools 2012	11.4	83.1	5.5	12,636

ED-21 Table 3b- Internal Survey

Culturally appropriate care for diverse populations	Inadequate %	Appropriate %	Excessive %	Number of Students
February 2013	12.5	82.8	4.7	192

ED-21 Table 4a- Graduation Questionnaire

Indicate whether you agree or disagree with the following statements about your preparedness for beginning a residency program: I believe I am adequately prepared to care for patients from different backgrounds.

	Strongly Disagree % (1)	Disagree % (2)	Neutral % (3)	Agree % (4)	Strongly Agree % (5)	Total % (4+5)	Number of Students
Marshall 2008	0.0	0.0	0.0	40.6	59.4	100	32
Marshall 2009	0.0	0.0	2.9	51.4	45.7	97.1	35
Marshall 2010	0.0	0.0	2.1	51.1	46.8	97.9	47
Marshall 2011	0.0	6.0	12.0	48.0	34.0	88	50
Marshall 2012	1.9	3.8	11.3	43.4	39.6	88.7	53
All Schools 2012	0.2	0.6	3.7	45.3	50.3	85.6	12,415

ED-21 Table 4b- Internal Survey

Ratings in Percentages	Strongly Disagree % (1)	Disagree % (2)	Neutral % (3)	Agree % (4)	Strongly Agree % (5)	Total % (4+5)	Number of Students
February 2013	0	3.7	13.4	36.6	46.3	82.9	82

MS-37

A medical education program should ensure that its medical students have adequate study space, lounge areas, and personal lockers or other secure storage facilities at each instructional site.

Finding: The increase in class size has placed strains on infrastructure and some resources for the educational programs. Concerns were raised by students that the patient volume at the VA Medical Center was insufficient due to the increasing number of learners. Students noted that study space was inadequate or marginal in some facilities.

A comprehensive analysis of medical student study space was conducted in August 2012. The process began with a financial commitment by the Dean and the endorsement of departmental chairs. Central to the process was the extensive involvement of medical students who identified limitations of existing space and assisted in the identification of new study space.

Study space with 24/7 swipe access in all facilities now exists in five buildings across campus with multiple study locations within each building as indicated in the table below. Based on student feedback, efforts were made to establish spaces in which distractions and interruptions would be at a minimum and would be conducive to individual and/or group study.

In 2010 there were 271 study spaces. Currently, we have 477. This process clearly illustrates the culture change at Marshall to a student-focused administrative initiative brought about by the new Dean.

The table below outlines the type and location of study space. Calculation of number of seats per space (column 4) was calculated in a manner considered realistic use by students:

- Small conference room/classroom=2
- Large conference room/classroom=4
- Computer seating=1
- Study carrels=1
- Study table=2
- Auditorium/clinical skills center=15

MS-37 Table 1- Study Space with 24/7 Swipe Access across Campus

Name of Building	Space type	Number Of Rooms	Number of Seats	Total Seating
Coon Education Building VAMC campus (Shared with School of Pharmacy)	Small conference/classroom Large conference room Computer seating Study carrels Study tables Auditorium/classroom Lounge space	2 1 10 14 6 7 YES	4 4 10 14 12 105	149
Byrd Biotechnology Sciences Center Main campus (Shared with College of Science)	Small conference/classroom Large conference room Computer seating Study carrels Study tables Auditorium/classroom Lounge space	5 4 10 4 0 2 YES	10 16 10 4 0 30	70
Byrd Clinical Center Medical campus	Small conference/classroom Large conference room Computer seating Study carrels Study tables Auditorium/classroom Lounge space	4 1 18 8 0 2 YES	8 4 18 8 0 30	68
Marshall University Medical Center Medical campus Health Science Library Lewis Technology Center (Shared with residents, faculty)	Small conference/classroom Large conference room Computer seating Study carrels Study tables Auditorium/classroom Lounge space	4 0 27 25 9 0 YES	8 0 27 25 18 0	78
Drinko Library Main campus Main library 24 hour Study Center (Shared with Main Campus)	Small conference/classroom Large conference room Computer seating Study carrels Study tables Auditorium/classroom Lounge space	20 4 56 0 0 0 YES	40 16 56 0 0 0	112
		TOTAL		**477**

After additions or upgrades were made to study space, email was utilized to communicate improvements to students and a new website was launched for students: **http://musom.marshall.edu/students/documents/studyspace.pdf.**

In addition to a map of study spaces across campus, each building page identifies the type of space (e.g. individual study space with carrels, group study space with large tables) and the number of study seats available.

There are currently 477 study seats, of which 160 are newly designated, across five JCESOM facilities for the entire student body of 290 students. The addition of sharing the new school of pharmacy study space also added significantly to availability of seating. The commitment of the Dean was central to our success in improving study space and the manner in which the process took place sent a clear message that being aware of and responsive to student needs is a priority.

MS-37 Table 2- Graduating Student Satisfaction with Study Space

Graduation Questionnaire Item	GQ 2010 MU (All Schools)	GQ 2011 MS (All Schools)	GQ 2012 MU (All Schools)
Satisfaction with Student Study Space*	64% (77%)	43% (78%)	68% (78%)

MS-37 Table 3- Student Satisfaction with Study Space

Student Services Assessment Survey Item	2012 (N=190)	2013 (N=197)
Satisfaction with Student Study Space*	48%	87%

*Percentage Satisfied represents combined “Satisfied” and “Very Satisfied”

ER-6

A medical education program must have, or be assured the use of, appropriate resources for the clinical instruction of its medical students.

Finding: The increase in class size has placed strains on infrastructure and some resources for the educational programs. Concerns were raised by students that the patient volume at the VA Medical Center was insufficient due to the increasing number of learners. Students noted that study space was inadequate or marginal in some facilities.

Students rotate at the VA Medical Center during the Internal Medicine and Surgery Clerkships in Year 3 and Internal Medicine as a Subinternship during their fourth year if they choose.

The following table illustrates the number of students at the VA Medical Center at any given time and demonstrates a significant decrease in student learners for 2012-2013. This is a result of a change in the MS-4 requirement of a mandatory one month subinternship in Internal Medicine. Students can now choose among Internal Medicine, Family Medicine, Obstetrics and Gynecology, Orthopaedics, Pediatrics or Surgery.

ER-6 Table 1- Number of Students Rotating at the VAMC for Required Courses*

	2010-2011	2011-2012	2012-2013
July	11	14	14
August	10	15	23
September	22	26	13
October	26	32	11
November	17	24	18
December	18	21	11
January	22	25	9
February	23	23	14
March	23	27	19
April	17	22	7
May	6	20	6
June	3	11	5
TOTALS	**198**	**260**	**150**

* If the course began on the last day of the month or ended within the first or second day of another month then it was counted for the month in which it mostly occurred

All students on required clerkships and rotations meet with their clerkship director at the midpoint to review their overall progress. One of the items discussed is the students' progress in completing their patient encounters (ED-2) and procedure logs as shown below from the actual form.

D. Patient Encounter and Procedure Logs reviewed with Student.

Patient Encounter Log on Track: ☐**Yes** ☐**No** **Procedure Log on Track:** ☐**Yes** ☐**No**

This formative encounter is the mechanism through which course directors assist students as needed in finding the necessary patient encounters and/or procedures prior to the completion of their educational experience. All students must complete all patient encounters and procedures as a Graduation Requirement.

Concluding Remarks and Acknowledgements

As we hope is evident, the preceding document and attached appendices indicate the very serious and committed response of the JCESOM faculty, student body, staff and administration to the very serious and important citations assigned by the LCME in June of 2011. As the "new" Dean of the JCESOM, I can testify to the dynamic environment at our medical school and the sweeping culture change which is being embraced by all constituents.

This is not to say that we are "done." We are very much still a "work in progress", attempting to continue to evolve and improve into a medical school which can optimally address its noble mission of providing a physician work force to enhance health care delivery to this underserved region of the country. While it is admittedly self-serving to use the adjective "noble", my tenure at the JCESOM is short enough that I can say without false modesty that I have been impressed and inspired by the diligence with which our faculty, students and staff pursue this noble mission. Furthermore, I truly believe that the JCESOM simply must succeed as this mission is just too important for us to fail.

As I review the LCME citations as well as areas with a need for monitoring or in transition, I would say that the major concerns raised by the LCME could be summarized as concerns about the commitment of LCME to 4 specific areas, namely:

- Development and maintenance of diversity (IS-16)
- Medical student education (ED-5A, 33, 21)
- Faculty scholarship (FA-5)
- Medical student services and well-being on multiple levels (MS-19, 23, 24, 25, 37)

I believe that the JCESOM is making the most sincere effort and progress towards addressing each of these areas, and I am personally grateful to the entire JCESOM community for this. This has truly been a group effort, and although I will call out some specific individuals in the next paragraphs, the entire JCESOM has been enthusiastically on board.

On the subject of diversity, we have received great leadership from our new Assistant Dean of Diversity, Dr. Shelvy Campbell. I would also like to thank the other members of the IS-16 committee in particular Ms. Jennifer Plymale and Ms. Cindy Warren for their terrific work with medical school admissions as well as the institutional leadership in diversity for Marshall University provided by Dr. Shari Clarke.

On the subject of medical student education, there are just too many people to thank. Drs. Paul Ferguson and Bobby Miller, both active clinicians, put incredible effort into this dynamic process. I also have to point out the great work done by our Curriculum Committee Chair, Dr. Carl Gruetter, our Senior Associate Dean for Medical Education, Dr. Aaron McGuffin, our Associate Dean for Medical Education, Dr. Brian Dzwonek and our Assistant Director of Medical Education, Ms. Amy Smith.

Engaging the entire faculty, these leaders have transformed our curriculum from a rigid and overly traditional lecture based system to a dynamic, innovative and horizontally and vertically integrated system which will continue to adapt to changing needs. The process has been

incredible, and I could not be more proud of all those involved. The curriculum committee at the JCESOM is truly empowered to set the curriculum, and they actively engage the office of medical education in a very positive way.

Faculty scholarship is the area I've probably worked on personally the most. I should probably pause and say that commitment to scholarship truly came from the top when our President, Dr. Stephen Kopp, chose me, a dyed-in-the-wool clinical scientist, to be the Dean of the JCESOM. His support has been invaluable as I've tried to inculcate a major culture change with respect to scholarship and research. I'm also very fortunate to have terrific buy-in from existing research leaders like Dr. Richard Niles, Chairman of Biochemistry and Microbiology and Dr. Gary Rankin, Chair of Physiology and Pharmacology as well as an incredible lift from the recruitment of Dr. Nader Abraham, our new Vice-Dean for Research. Dr. Abraham's work here has been nothing short of transformational.

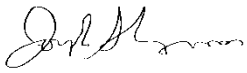
Our Associate Dean for Faculty Affairs, Dr. Darshana Shah has been a tireless advocate for faculty development and faculty engagement. Dr. Shah is the architect of our formal mentoring program in addition to founder of our Gold Humanism Honor Society this past year. I'm grateful for her enthusiasm, energy and generosity.

The newly elected head of our faculty council, Dr. Sona Shah, and representatives from each department are serving on this new created council which was developed to give faculty a more direct say in administrative matters. This faculty council was instrumental in allowing us to develop, discuss, modify and ultimately ratify our new promotion and tenure guidelines. However, what has impressed me the most is how the clinical faculty rallied around the very important idea that scholarship is simply part of their jobs. I must say that the visit from the LCME secretariat played a positive role in getting this point across. Additional and probably more convincing evidence than my impressions are the increased numbers of presentations and publications. Although we still have a way to go, our progress is inspiring to me.

Last but certainly not least, I'd like to comment on our commitment to student services and student well-being. On this subject, we need to first point out that our associate and assistant deans, namely Drs. Marie Veitia, Tracy LeGrow and Ms. Amy Smith as well as their staff have always been committed to our students and their well-being. What our administration has done more recently is given them the resources necessary to be successful. The hiring of Ms. Prudence Barker was key for the development of a cogent financial counseling program. The application of relatively modest amounts of money allowed Dr. Marie Veitia to dramatically improve other student services including study space. I would be remiss if I didn't also acknowledge the incredibly effective fundraising championed by Ms. Linda Holmes who is in large part responsible for our strong increases in student scholarships and waivers. I would also like to acknowledge the great support from our physician practice plan and specifically call out the impact of Dr. Joseph Werthammer, our chief medical officer, Ms. Beth Hammers, our chief executive officer and Mr. Matt Straub, the chief financial officer and Mr. Joshua Dorsey, our chief operating officer. The excellent management by these leaders along with our clinical chairs and their administrators has allowed us to support student scholarships and tuition waivers along with other initiatives. That said, student debt remains a great concern, and we must continue to address it honestly with sustainable strategies in order to be true to our core mission.

As I wrap up these concluding comments and acknowledgements, I would be remiss in not calling attention to the efforts of Dr. Aaron McGuffin, Dr. Brian Dzwonek and Mr. Michael McCarthy. I have previously mentioned Drs. McGuffin and Dzwonek before in the context of ED-5A and ED-33. Both of these exceptional faculty have coordinated the entire process of self-study and the preparation of this document. Mr. McCarthy, our Assistant Dean for Information Technology, has made our information systems and website work seamlessly to allow us to truly overhaul our medical school. Mr. McCarthy's fingerprints are all over this document, ranging from institutional agreements and scholarship database to mentor-matching programs. I am grateful to these three individuals in particular, but also to the entire JCESOM as we've taken the concerns of the LCME and leveraged them to make our school get better. I'm truly proud of the transformation which has taken place.

Sincerely,



Joseph I. Shapiro, MD
Dean
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