# STATE OF MEDICAL EDUCATION







# **Topics**

- Current Students
- Curriculum
- Outcomes
- Initiatives:
  - Admissions
  - Student Affairs
  - Academic Affairs
  - Office of Medical Education





### **Current Students**

	2014	2013	2012	2011	2010	2009	2008
Overall GPA	3.6	3.6	3.5	3.5	3.5	3.5	3.5
Science GPA	3.5	3.5	3.4	3.4	3.4	3.4	3.4
Average MCAT	28.5	27.9	29.1	29.3	29.1	27.2	26.9
Gender of Entering Class							
Males	46	44	46	49	47	40	35
Females	33	31	20	22	28	34	43

For 2014 – 1,800 applicants, 162 interviewed, 77% WV Residents

For 2015 – 1,820 applicants, 148 are WV Residents





# Curriculum





### A New Schedule

Introduction to Clinical Skills

### Year 1

#### **Elements of Medicine**

Molecular Basis of Medicine, Microanatomy, Basic Tissue Types, Introduction to Hematology

#### Structure & Function I

Musculoskeletal and Integument, Introduction to Radiology

### **Structure & Function II**

Head and Neck, Nervous System and Behavior

#### **Structure & Function III**

Cardiovascular, Respiratory and Renal Systems

### **Structure & Function IV**

Gastrointestinal, Endocrine and Reproductive Systems

### Year 2

### **Principles of Disease**

Core Concepts, Infectious Disease, Antimicrobials, Neoplasia, Hematology

### Disease & Therapeutics I

Musculoskeletal, Dermatologic and Hematopoietic systems

### Disease & Therapeutics II

Nervous System, Eye and Psychopathology

### Disease & Therapeutics III

Cardiovascular, Respiratory and Renal Systems

### **Disease & Therapeutics IV**

Gastrointestinal, Endocrine and Reproductive Systems. Toxicology

# **Advanced Clinical Skills**





# A Shift to Engaged Learning

	2009-2010	2012-2013	2013-2014	2014-2015
Year One Contact Hours	744	672.5	650	641
Year Two Contact Hours	636	567	525	613.5
Total Contact Hours	1380	1239.5	1150	1254.5
Didactic Lecture Hours	970.5	742.5	575	696
Percentage of Didactic Lecture	70%	60%	50%	55%*

Academic Year	2009-2010	2012-2013	2013-2014	2014-2015
Total Hours	1380	1239.5	1150	1254.5
Total Weeks	80	81	81	81
Hours/Week	17.3	15.3	14.2	15.5

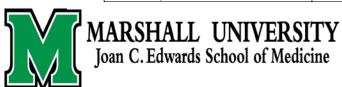




# A Shift to Engaged Learning

#### APPENDIX 1: OPPORTUNITES TO PARTICIPATE IN ACTIVE LEARNING IN THE FIRST TWO YEARS OF THE CURRICULUM

Session	Contact Hours	Estimated Student Prep Time	Students assess their learning needs individually or in groups	Students identify analyze and synthesiz e informati on relevant to their learning needs	Students assess the credibility of informatio n sources	Students share the informati on with their peers and superviso rs	Students receive feedback on their information retrieval and synthesis skills
Case discussions	7	1.5 h per	×	×	×	X	X
3 2-session cases, student work		case					
between, one single session case							
In-class case (PEM)	2	In-class	X	X	X	X	X
Nutrition modules	-	4 h	X	X	X	X	X
Nutrition project presentations	2	2	X	X	X	X	X
Movie forum: Bad Blood	4	(in class)		×	X	×	X
Class forum – inquiry	3	(In class)	X	X	X	X	
Histology TBLs (3)	3	1 h	X	X		X	X
Histology Labs (3)	3	(as above)	X	X		X	X
Anticoagulant exercise	2	(In class)	X	X	X	X	X
Independent learning (self study; genetics problems; histo orientation, nutrition)	-	8	Х	х			x
Peer teaching: Amino acids in metabolism	1.5	1	х	X	Х	х	×
Peer Teaching: Differential Diagnosis of Anemia	1	1	×	×	×	×	×
Integration sessions/ large group discussions (2- 2h; regulation of gene expression, diabetes vs. metabolic syndrome)	4	-	х	×	X	х	×
Integration session (causes of anemia, small group)	2	-	X	X	Х	Х	×
Obesity Conference	4	-		X	X		
Theme-based large group discussions (Behavior Med, Research)	4	-	X	X	X	X	
Research)							





# Integration

- Horizontal within the year
- Vertical across all 4 years
- 115 Diseases
- 3<sup>rd</sup> and 4<sup>th</sup> years mapping their curriculum
- PERCI model
- Continuous Quality Improvement





### **PERCI**

#### Medical Humanities







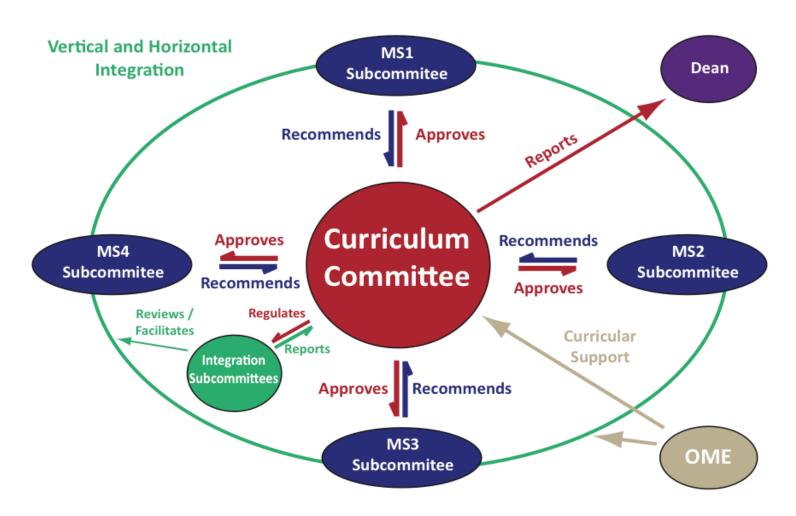
#### MSI-Block 1-Elements of Medicine

	<u> </u>		-
Professionalism	<ul> <li>One Book Program</li> </ul>	Read article <i>Medical</i>	Self-reflection
	<ul> <li>Ethics/Truthfulness and</li> </ul>	Professionalism in the New	regarding elements
	Informed Consent	Millenium: A Physician	of professionalism
		Charter	and how they relate
			to this case.
			Participation.
Ethics	<ul> <li>Introduction to Ethics</li> </ul>	Students will have to give	Written response to
	<ul> <li>J Gerlach/C Keaton</li> </ul>	informed consent regarding	patient regarding
	<ul> <li>No materials posted</li> </ul>	alternative medication – St	continuing St. Johns
	<ul> <li>Everyday Ethics</li> </ul>	Johns Wart	Wart.
	o S. Petrany		
	<ul> <li>No materials posted</li> </ul>		
	<ul> <li>Truthfulness and Informed</li> </ul>		
	Consent-Gallagher		
Research	<ul> <li>Introduction to Evidence-</li> </ul>	Students will research EBM	Explanation of the
	Based Medicine (DL) 2 hrs	for treatment of Depression.	EBM regarding
	o T Gress	Submit sources used and	treatment of
	<ul> <li>Materials-ppt printed</li> </ul>	type of literature reviewed.	Depression.
	<ul> <li>Study Design: Case Control</li> </ul>		
	(DL,SG, LG) 2 hrs		
Cultural	Cultural Awareness	Alternative Medication and	Reflection regarding
Competency	o ICS-Materials Posted	cultural belief regarding	self-bias.
	10/8/2013	"mental illness"	
IPE	• N/A	Consultation with pharmacy	Participation.
		student via phone/email	

<sup>\*</sup>PERCI is professionalism, ethics, research, cultural competency and inter-professional education.











# **Integration Process**

#### **Diabetes Mellitus**

Object	ives	Block	Competency	Assessment Method
		MS I	-	
	Describe the normal microscopic structure of the pancreatic islets.	MBM S & F IV	MK1A1 MK1B1	Block exams
2.	Describe the regulation of insulin and glucagon release.		MK1C1 MK1E2	
3.	Explain normal glucose and lipid metabolism.		PB1A1 PB1A2	
4.	Describe glucose homeostasis and the endocrine regulation of		PR1A1 IC1A3	
5.	glucose and lipid metabolism.  Describe the effects of diet and exercise on metabolism.		IC1B1	
	<ol><li>Describe the physiological actions of insulin and glucagon the</li></ol>			
	consequences of insulin deficiency.			
		MS II		
1.	Demonstrate an understanding of	D&TIII	MK2A1	Block exams
	the pathophysiology, clinical		MK2B1	Small Group
	features, diagnostic criteria,		MK2C1	Discussions
	treatment, preventive measures		MK2E1	
	and complications of		MK2E2	
	<ul> <li>Diabetes mellitus type 1</li> </ul>		M2KE3	
	<ul> <li>Diabetes type 2</li> </ul>		MK2E4	
	<ul> <li>Myogenic diabetes</li> </ul>		MK2G1	
	<ul> <li>Gestational Diabetes</li> </ul>		MK2H1	
			MK2H2	
2.	Describe various life-style		PC2E1	
	modifications and pharmacologic		PC2E2	
	therapies available for treating		PC2F1	
	diabetes, including the scientific		PC2F2	
	rationale for their use.		PC2F3	
			PC2G1	
		I	PC2H1	1





# **Integration Process**

		MS III		
1.	Explain the pathophysiologic	PEDS	MK3B1	Direct observation
	factors underlying the clinical	FM	MK3C1	by faculty, clerkship
	manifestations of DM.	IM	MK3D1,	standardized exams
2.	Use knowledge of pathophysiology	OB/GYN	MK3D3	small group
	to develop diagnostic and	,	MK3H1,	
	therapeutic plans for patients with		PC3D1,	
	DM.		PC3F1	
3.	Describe how clinical laboratory		IC3A1,	
	tests are used in diagnosis and		IC3B1	
	subsequent care in DM.		PC3A1	
	MSIV (if part	icipating in these re	otations)	
1.	Describe the altered function of	EM	MK4B1	Direct observation &
	the pancreas and end-organs	ICU Sub-I	MK4B1	feedback by
	giving rise to diabetic ketoacidosis.		MK4C1	preceptor, written
2.	Discuss the scientific basis for		MK4D2	examination
	laboratory studies utilized in		MK4F1	
	managing a patient with diabetic		MK4H1	
	ketoacidosis.		PC4B1,	
3.	Describe techniques to counsel		IC4A3	

IC4B1

PB4C2

PR4I1

 Describe techniques to counsel patients with diabetes mellitus in achieving dietary lifestyle changes in adopting a diabetic diet.

 Differentiate between alternative medications for hyperglycemia in diabetes mellitus based on therapeutic effectiveness and cost consideration.

Joan C. Edwards School of Medicine



# Integration Reports

#### Integration Report

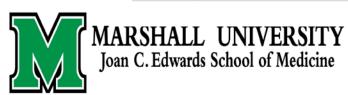
Disease: Diabetes Mellitus

#### First Year Blocks

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Elements of Medicine	8/20/2013	Introduction to Nutrition	Wanda Elaine Hardman (BIC)	Lecture	60
Elements of Medicine	9/11/2013	Signaling 3	William D McCumbee (PMC)	Lecture	60
Elements of Medicine	9/24/2013	Overview of Metabolism	Richard M Niles (BIC)	Lecture	60
tlements of Medicine	9/26/2013	Electron Transport 2	John Wilkinson IV (PTH)	Lecture	60
lements of Medicine	9/27/2013	Glycogen Metabolism	Richard M Niles (BIC)	Lecture	60
lements of Medicine	9/27/2013	Gluconeogenesis	Richard M Niles (BIC)	Lecture	60
Elements of Medicine	9/30/2013	Lipid Metabolism 2 Oxidation	Wanda Elaine Hardman (BIC)	Lecture	60
tlements of Medicine	9/30/2013	Lipid Metabolism 1 Synthesis	Wanda Elaine Hardman (BIC)	Lecture	60
Elements of Medicine	10/1/2013	Lipid Metab 3 Acylglycerols and Sphingolipids	Wanda Elaine Hardman (BIC)	Lecture	60
lements of Medicine	10/2/2013	Attend Obesity Conference Big Sandy Arena		Conference	270
tlements of Medicine	10/2/2013	Nutrition Modules- Diabetes - Nutritional Mechan		Independent Learning	0
lements of Medicine	10/3/2013	Completion of cholesterol lectureNutrition-Introd	Wanda Elaine Hardman (BIC)	Discussion Small Group (<=12)	60
tlements of Medicine	10/7/2013	Clinical Correlate- Diabetic Ketoacidosis	Henry K Driscoll (MED)	Lecture	60
tlements of Medicine	10/7/2013	Integration of Metabolism 1	Richard M Niles (BIC)	Lecture	60
lements of Medicine	10/8/2013	Nutrition Project presentations	Wanda Elaine Hardman (BIC)	Peer Teaching	120
tructure and Function IV	4/18/2014	Pancreatic hormones	William D McCumbee (PMC)	Lecture	60
Rructure and Function IV	4/21/2014	Diabetes\; hypoglycemia. GROUP 2	William D McCumbee (PMC)	Discussion Small Group (<=12)	120
Structure and Function IV	4/21/2014	GI HistologyReviewGROUP 2	Laure L Richardson (PTH)	Laboratory	120
tructure and Function IV	4/21/2014	Endocrine regulation of metabolism	William D McCumbee (PMC)	Lecture	60
tructure and Function IV	4/21/2014	GI HistologyReview GROUP 1	Laura L Richardson (PTH)	Laboratory	120
tructure and Function IV	4/21/2014	1 Diabetes\hypoglycemiaGROUP 1	William D McCumbee (PMC)	Discussion Small Group (<=12)	120
tructure and Function IV	5/1/2014	Radiology		Lecture	60

#### Second Year Blocks

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Principles of Disease	8/22/2013	Bordetella pertussis Pseudomonas	Hongwel Yu (BIC)	Lecture	60
Principles of Disease	9/9/2013	Introduction to Medical Mycology	Dershana Shah (PTH)	Lecture	60
Principles of Disease	9/9/2013	Candida albicans	Dershana Shah (PTH)	Lecture	60
Principles of Disease	9/20/2013	Autoimmunity	Wel-ping Zeng (BIC)	Lecture	60
Principles of Disease	9/30/2013	Autonomic Nervous System Pharmacology - Adren	Carl A Gruetter (PMC)	Independent Learning	180
Disease and Therapeutics I	10/9/2013	Red Blood Cell Disorders- The Anemias Part I	Vincent A Graffeo (PTH)	Lecture	120
Disease and Therapeutics I	10/14/2013	HIV/AIDS ModuleMedications	James Allman ()	Lecture	60
Disease and Therapeutics II	12/2/2013	Peripheral Nerve Disorders	Nancy B Norton (PTH)	Lecture	120
Disease and Therapeutics III	1/6/2014	Overview of Incidence and Impact of CV Pulmonar	Paulette S Wehner (CAR)	Lecture	30
Disease and Therapeutics III	1/6/2014	Risk Factors for CV Pulmonary and Renal Diseases	Paulette S Wehner (CAR)	Discussion Small Group (<=12)	60
Disease and Therapeutics III	1/6/2014	Review of Risk Factors for CV Pulmonary and Rena	Paulette S Wehner (CAR)	Discussion Large Group (>12)	60
Disease and Therapeutics III	1/8/2014	Drugs to Treat Dyslipidemias	Monica Valentovic (PMC)	Lecture	60
Disease and Therapeutics III	1/9/2014	Vascular Diseases (Arterioscierosis	Nancy B Norton (PTH)	Lecture	60
Disease and Therapeutics III	1/30/2014	Respiratory Infections I @Cystic Fibrosis and Tubero	Hongwel Yu (BIC)	Lecture	60
Disease and Therapeutics III	2/11/2014	Cystic and Glomerular Diseases	Nancy B Norton (PTH)	Lecture	120
Disease and Therapeutics III	2/12/2014	Glomerular Diseases	Nancy B Norton (PTH)	Lecture	60
Disease and Therapeutics III	2/13/2014	Renal Vascular Diseases	Nancy B Norton (PTH)	Lecture	60
Disease and Therapeutics III	2/14/2014	Chronic Renal Fallure	Charles E Meadows III (MED)	Case-Based Instruction/Learning	60
Disease and Therapeutics III	2/17/2014	Add-Base Disorders	Charles E Meadows III (MED)	Lecture	60
Disease and Therapeutics III	2/18/2014	Electrolyte and Acid-Base Disorder Cases	Charles E Meadows III (MED)	Discussion Small Group (<=12)	120
Disease and Therapeutics III	2/18/2014	Discussion of Electrolyte and Add-Base Disorder Co	Charles E Meadows III (MED)	Discussion Large Group (>12)	60
Disease and Therapeutics III	2/28/2014	Gestational and Placental Disorders	A Betts Carpenter (PTH)	Lecture	120
Disease and Therapeutics IV	2/28/2014	Drugs in Pregnancy and Lactation	Shannon L Browning (MED)	Lecture	120
Disease and Therapeutics IV	3/5/2014	Introduction to Endocrine System- Pituitary and Ac	Vincent A Graffeo (PTH)	Lecture	120
Disease and Therapeutics IV	3/6/2014	Endocrine Pancreas	Vincent A Graffeo (PTH)	Lecture	120
Disease and Therapeutics IV	3/7/2014	Diabetic Drugs	Monica Valentovic (PMC)	Lecture	120
Disease and Therapeutics IV	3/10/2014	Diabetes in Children	Eduardo Pino (PED)	Case-Based Instruction/Learning	60





### Third Year Clerkships

COURSE	Date	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Family and Community Health	N/A	Headache/Diabetes/Obesity	Dilip Nair	Small group	60
Internal Medicine	N/A	Diabetes Mellitus	Henry Driscoll	Lecture	60
Ob/Gyn	N/A	Diabetes in Pregnancy	Ryan Stone	Lecture	60
Peds	N/A	Respiratory Distress Syndrome	Renee Domanico	Small group	60
Peds	N/A	Clinical Problems in Newborn	Renee Domanico	Small group	60

#### Fourth Year Required Rotations

COURSE	Date	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Medidne Sub-I	N/A	Diabetic Ketoacidosis and Hyperosmolar Coma	VAMC	Small Group Discussion (<12)	60
Ob/Gyn Sub-I	N/A	Pregestational Diabetes Mellitus	ACOG Practice Bulletins	Independent Learning	60
Peds ICU	N/A	Diabetic Ketoacidosis	PREP Article	Independent Learning	60
Neonatal ICU	N/A	RDS review article	Neo Review Article	Independent Learning	60
Emergency Medicine	N/A	Diabetic Ketoacidosis	Mitch Charles	Oral presentation	60

#### Patient Logger

Students in the Class of 2014 logged 71 encounters with patients having a diagnosis of Diabetes Mellitus

#### Question Bank

Year	# of Questions
MS 1	6
MS 2	55
MS 3	7
MS-4	39

#### Integration Committee Recommendations:

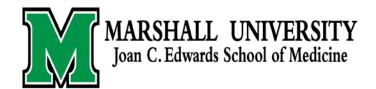
- 1. Identify/Confirm absence of Diabetes in the other first year blocks
- 2. Review tagging of some of the sections

Curriculum Committee Recommendations:





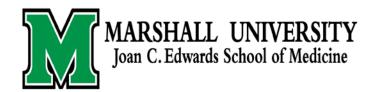
### **Outcomes**





### **Student Satisfaction**

MS 1	2010-2011 (mean ± SD)	2011-2012 (mean ± SD)	2012-2013 (mean ± SD)	2013-2014 (mean ± SD)
I understand my individual responsibilities for this course/clerkship.	$4.2 \pm 0.9$	$4.4 \pm 0.7$	$4.3 \pm 0.9$	$4.3 \pm 0.8$
This course/clerkship is well organized.	$4.0 \pm 1.0$	$4.2 \pm 0.9$	4.1 ± 0.9	4.1 ± 1.0
This course/clerkship provides me with clear goals and objectives.	$4.2 \pm 0.9$	$4.3 \pm 0.7$	4.2 ± 0.9	4.2 ± 0.9
The course material and lectures match the goals and objectives of this course/clerkship.	$4.3 \pm 0.7$	$4.4 \pm 0.7$	$4.3 \pm 0.8$	$4.4 \pm 0.7$
The required textbook(s) or other reading material help me to understand the topics presented in this course/clerkship.	$4.0 \pm 0.9$	$4.2 \pm 0.9$	3.9 ±1.1	4.1 ± 1.0
Rate the overall quality of this course/clerkship.	$4.1 \pm 0.9$	$4.2 \pm 0.8$	$4.1 \pm 1.0$	$4.2 \pm 0.8$
This course/clerkship clearly incorporates concepts and techniques of assessing and improving the management and care of patients.	$4.2 \pm 0.9$	$4.26 \pm 0.8$	4.1 ± 1.0	4.2 ± 0.9
The clinical correlations are helpful to integrate basic science concepts into clinical practice.	$4.2 \pm 0.9$	$4.4 \pm 0.8$	$4.2 \pm 0.9$	$4.4 \pm 0.8$





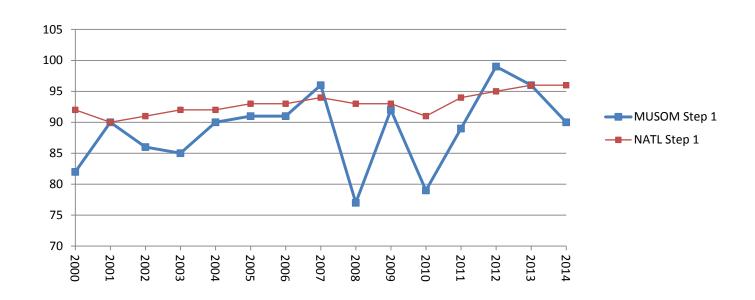
### **Student Satisfaction**

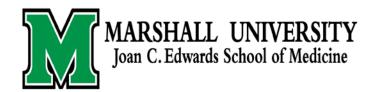
MS 2	2010-2011	2011-2012	2012-2013	2013-2014
N15 2	(mean ± SD)	(mean ± SD)	(mean ± SD)	(mean ± SD)
I understand my individual responsibilities for this course/clerkship.	4.2 ± 0.9	$4.4 \pm 0.8$	$4.4 \pm 0.8$	$4.2 \pm 0.9$
This course/clerkship is well organized.	$4.0 \pm 1.0$	$4.2 \pm 0.9$	$4.3 \pm 0.8$	$4.1 \pm 1.1$
This course/clerkship provides me with clear goals and objectives.	4.2 ± 1.0	4.3 ± 0.9	4.4 ± 0.8	4.2 ± 1.0
The course material and lectures match the goals and objectives of this course/clerkship.	4.3 ± 0.8	4.4 ± 0.7	4.4 ± 0.7	4.2 ± 0.9
The required textbook(s) or other reading material help me to understand the topics presented in this course/clerkship.	4.1 ± 1.1	4.2 ± 0.9	4.3 ± 0.8	4.1 ± 1.0
Rate the overall quality of this course/clerkship.	$4.1 \pm 1.0$	$4.3 \pm 0.8$	$4.3 \pm 0.8$	$4.1 \pm 1.0$
This course/clerkship clearly incorporates concepts and techniques of assessing and improving the management and care of patients.	$4.2 \pm 0.8$	4.4 ± 0.8	$4.4 \pm 0.8$	4.2 ± 0.9
The clinical correlations are helpful to integrate basic science concepts into clinical practice.	4.3 ± 0.8	4.4 ± 0.7	$4.4 \pm 0.8$	4.2 ± 1.0





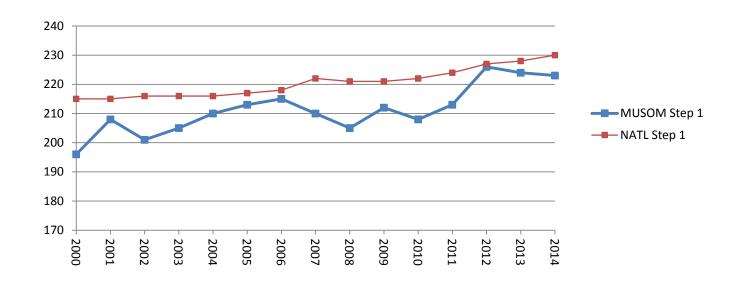
# **USMLE Step 1 Pass Rate**







# **USMLE Step 1 Average Score**







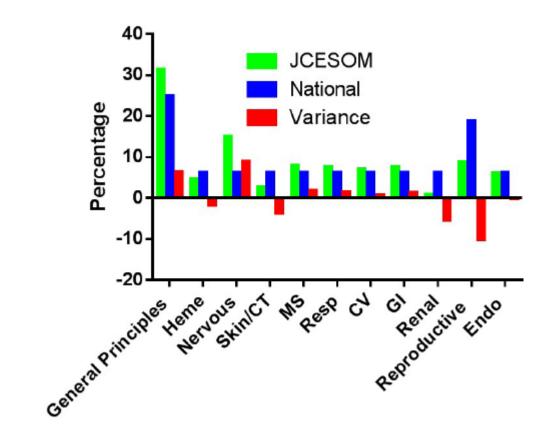
### **Curricular Content**

Educational Activity Breakdown by % of Activities Tagged in the Database						
Systems	MS 1 (%)	MS 2 (%)	Total (%)	USMLE (%)		
General Principles	25.9	36.7	31.4	20.0		
Hematopoietic & Lymphoreticular Systems	2.7	6.5	4.6	7.2		
Central & peripheral nervous Systems	20.1	10.0	15.1	7.2		
Skin & Related connective Tissue	2.4	3.0	2.7	7.2		
Musculoskeletal System	8.0	8.1	8.0	7.2		
Respiratory System	6.9	8.5	7.7	7.2		
Cardiovascular System	6.7	7.3	7.0	7.2		
Gastrointestinal System	7.1	8.1	7.6	7.2		
Renal/Urinary System	1.5	0.3	0.9	7.2		
Reproductive System	9.2	8.2	8.7	15.0		
Endocrine System	9.1	3.2	6.1	7.2		





### **Curricular Content**







### NATIONAL BOARD OF MEDICAL EXAMINERS®

### Performance of Examinees Taking USMLE® Step 1 for the First Time in 2012

Medical School: 049-010 Joan C Edwards Sch Med at Marshall Univ

Behavioral Sciences

Blochemistry

Biostatistics & Epidemiology

Cardiovascular System

GastroIntestInal System

General Principles of Health & Disease

Genetics

Gross Anatomy & Embryology

Hematopoletic & Lymphoreticular Systems

Histology & Cell Biology

Immune System

Microbiology & Immunology

Musculoskeletal, Skin & Connective Tissue

Nervous System/Special Senses

Nutrition

Pathology

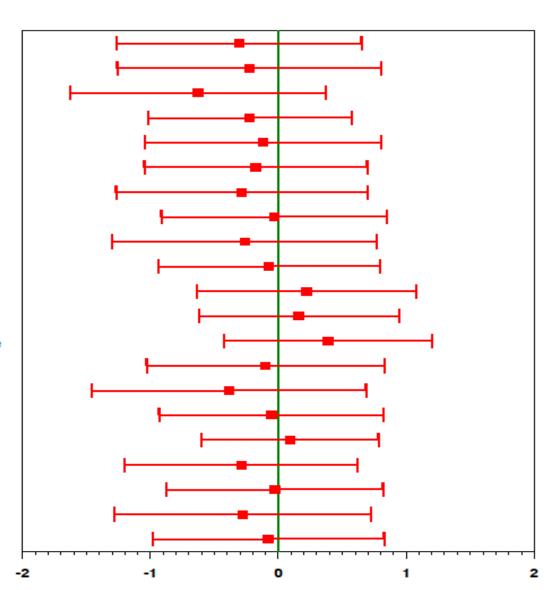
Pharmacology

Physiology

Renal/Urinary System

Reproductive & Endocrine Systems

Respiratory System



### NATIONAL BOARD OF MEDICAL EXAMINERS®

Performance of Examinees Taking USMLE® Step 1 for the First Time in 2013

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Histology & Cell Biology

Immune System

Microbiology & Immunology

Musculoskeletal, Skin & Connective Tissue

Nervous System/Special Senses

Nutrition

Pathology

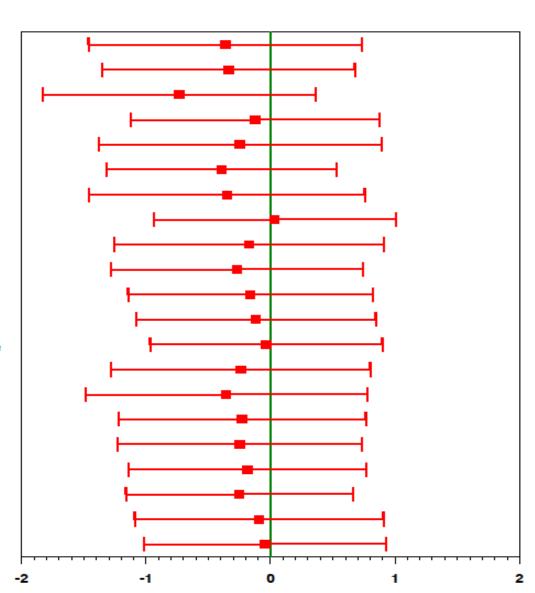
Pharmacology

Physiology

Renal/Urinary System

Reproductive & Endocrine Systems

Respiratory System

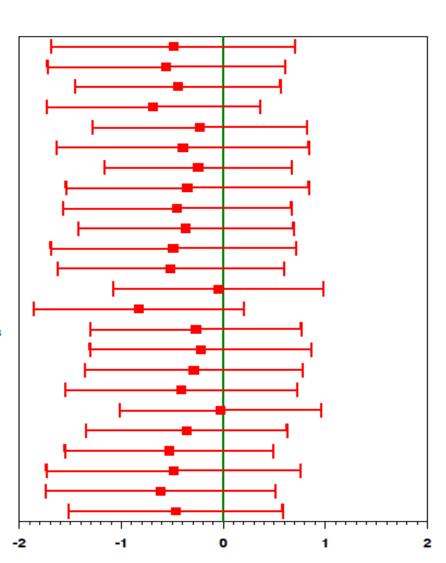


### NATIONAL BOARD OF MEDICAL EXAMINERS®

Interim Report on Performance of Examinees Taking USMLE Step 1 for the First Time in 2014 with Scores Reported Through September 24

Medical School: 049-010 Joan C Edwards Sch Med at Marshall Univ

- 1-Behavioral Sciences
- 1-Blochemistry
- 1-Blostatistics
- 1-Genetics
- 1-Gross Anatomy & Embryology
- 1-Histology & Cell Biology
- 1-Microbiology & Immunology
- 1-Nutrition
- 1-Pathology
- 1-Pharmacology
- 1-Physiology
- 2-General Principles of Foundational Science
- 2-Immune System
- 2-Blood & Lymphoreticular System
- 2-Behavioral Health & Nervous Systems/Special Senses
- 2-Musculoskeletal, Skin, & Subcutaneous Tissue
- 2-Cardiovascular System
- 2-Respiratory System
- 2-GastroIntestinal System
- 2-Renal/Urinary System
- 2-Reproductive System
- 2-Endocrine System
- 2-Multisystem Processes & Disorders
- 2-Biostatistics & Epidemiology/Population Health



# **Identifying Students at Risk**





### **Risk Factors**

- MCAT
- 1st MS 1 exam
- Overall MS 1 performance
- Overall MS 2 performance
- 2<sup>nd</sup> year Miniboard performance
- CBSSA performance





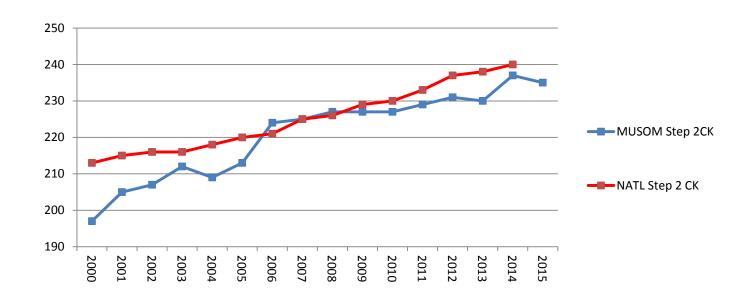
# **Question Performance**

- 2 x 2 contingency table for 5,500 question in our question bank
- 39 question identified as predictors of performance on Step 1
- 7 in the first year  $R^2 = 0.4023$  (p<0.003)
- 32 in the second year  $R^2 = 0.5579$  (p<0.0003)





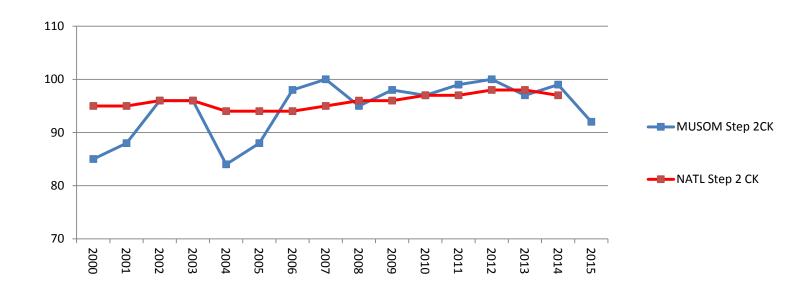
# **USMLE Step 2 CK Average Score**







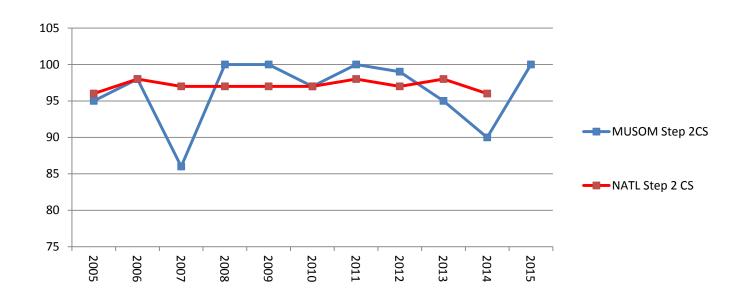
# **USMLE Step 2 CK Pass Rate**







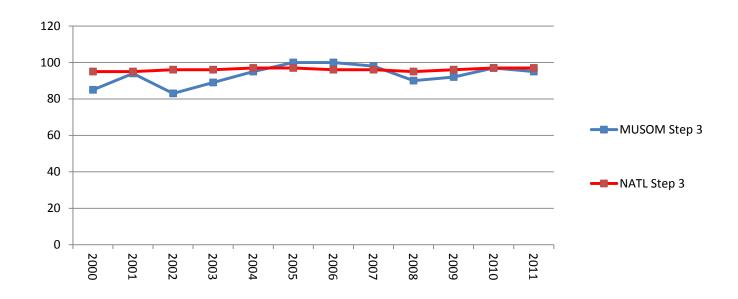
# **USMLE Step 2 CS Pass Rate**







# **USMLE Step 3 Pass Rates**







# **Program Director Surveys**

#### MARSHALL UNIVERSITY SCHOOL OF MEDICINE CLASS OF 2013 PG 1 Residency Director Survey

Name of Resident	Residency Program	Status of Resident	:	Trans. to Another
Program, If so, Wi REMEDIATION	nere?Dismissed	TRANSFER To Specialized Residency	Remediating Part/All of PG 1_	REASON FOR

AREAS OF EVALUATION	UNSATISFACTORY	SATISFACTORY	GOOD	VERY GOOD	OUTSTANDING	NOT EVALUATED
PROFESSIONALISM	<ul> <li>Does not accept responsibility; inappropriate or immature behavior</li> </ul>	0	<ul> <li>Exhibits good judgment in personal and professional situations</li> </ul>	0	<ul> <li>Exceptional professional conduct; demonstrates maturity, excellent judgment and integrity</li> </ul>	0
RELATIONSHIP WITH PATIENTS	<ul> <li>Insensitive and avoids personal contact with patients</li> </ul>	0	<ul> <li>Relates appropriately to patients and demonstrates undentanding of their personal and emotional needs</li> </ul>	0	<ul> <li>Exhibits exceptional warmth and empathy with patients; respects patients' cultural and religious beliefs; effectively explains medical care</li> </ul>	o
RELATIONSHIP WITH OTHERS	<ul> <li>Serious problems with interactions with others</li> </ul>	0	☐ Works cooperatively with others	0	<ul> <li>A highly valued team member who promotes cooperation among others</li> </ul>	0
FUND OF KNOWLEDGE	☐ Insufficient knowledge base	0	<ul> <li>Average knowledge base; usually applied appropriately</li> </ul>	0	<ul> <li>Extensive knowledge base; excellent ability to integrate factual knowledge</li> </ul>	0
DATA GATHERING ABILITY	<ul> <li>Incomplete or inaccurate histories and physicals; essential data frequently not obtained</li> </ul>	O	<ul> <li>Careful, reasonable organized history with most significant issues covered; generally complete physical with most pathology detected</li> </ul>	0	<ul> <li>Comprehensive, well organized histories with pertinent negatives; thorough and accurate physical exam</li> </ul>	0
DIAGNOSTIC PROBLEM SOLVING ABILITY	<ul> <li>Frequently has difficulty integrating data from history and physical when developing differential; poor clinical judgment in selection of treatment plan</li> </ul>	а	□ Usually able to analyze data from history and physical to obtain concise problem list; ability appropriate for level of training to plan patient management; sound judgment in selection of lab tests, consults and therapeutic program.	0	Consistently synthesizes data from history and physical to arrive at accurate, comprehensive differential; unusual ablitties in patient management with excellent judgment in selection of laboratory tests, consults and therapeutic program	0
PROCEDURAL SKILLS	<ul> <li>Has difficulty performing the basic techniques and has difficulty with timing or organization</li> </ul>	0	<ul> <li>Can adequately perform the basic techniques in an organized and coordinated manner</li> </ul>	0	<ul> <li>Highly skilled with use of proper technique, organizes equipment prior to procedure</li> </ul>	0
LEARNING ATTITUDE	<ul> <li>Lacks motivation, shows little evidence of independent work</li> </ul>	0	<ul> <li>Conscientious worker who is receptive to teaching and feedback</li> </ul>	0	<ul> <li>Exceptionally hard worker who maximizes learning opportunities</li> </ul>	0
COMMUNICATION SKILLS	<ul> <li>Oral presentations are unorganized and does not accurately present patient information; write-ups and progress notes are unorganized or inadequate</li> </ul>	О	<ul> <li>Oral presentations present patient information in an organized and accurate manner; write- ups and progress notes are clear and well organized</li> </ul>	0	<ul> <li>Onal presentations demonstrate total knowledge of patient with outstanding ability to communicate; write-ups are outstanding; progress notes are thorough and well-organized</li> </ul>	0

OVERALL EVALUATION: UNSATISFACTORY SATISFACTORY GOOD VERY GOOD OUTSTANDING (please circle one)

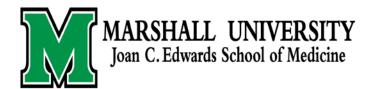
(Over, please)





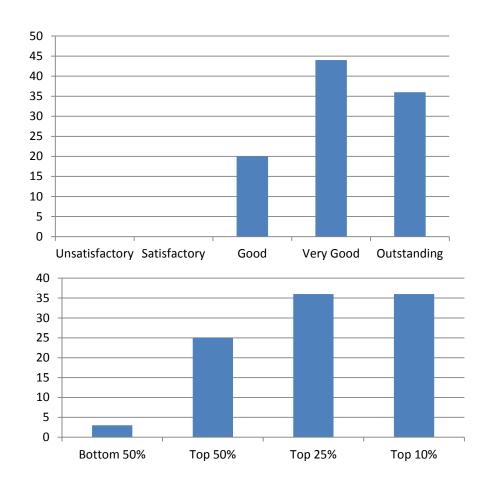
# **Program Director Survey**

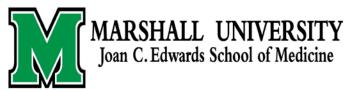
Resident's standing in relation to o (please underline one)	thers at same program level :	Bottom 50%	Top 50%	Top 25%	TOP 10%	
PLEASE COMMENT ON THE RESIDEN	T'S PERFORMANCE NOTING STREE	NGTHS AND WEAKNESS	SES:			
Has the resident required any disciplinary action?  If so, please describe.						
Mehiar El-Hamdani, MD	Marshall University Scho	of of Medicine Program; Interne	al Medicine; WV			
Program Director's Name	Resi	dency Program Name		Signa	ture and Date	





### **PD** Results







## **Current Initiatives**





### **Admissions**

- High Schools 2013-2014
  - 2,500 students in 31 schools in 15 counties
  - Targeting underserved and minorities
- Colleges
  - Focused on in-state students
  - MOU with Hampton University
- Summer Academy
  - Began in 2013
  - 4 participants are in Medical School





### **Admissions**

- Accelerated BS/MD Program
  - ACT of 30 with Math of 27
  - 35 applicants
  - Interviewed 34
  - Select 10 with 5 alternates





### **Center for Rural Health**

- Rural research projects for medical students, residents and fellows.
- Aim is to address barriers to care and improve health promotion and disease prevention.
- Over the course of four years, 29 grants have been awarded for a total of \$490,463.
- A Rural Research Conference was held in October 2014, with 13 grant participants presenting their results and plans for future funding or publication.





### **Student Affairs**

- Careers in Medicine Curriculum
- Inter-Professional Education
- Match Day March 20<sup>th</sup>
- College of Health Professions Senate
- Academic Support Services
- Mentors
- Student Services Annual Survey





### **Academic Affairs**

Certifying current 4<sup>th</sup> years for Graduation

 Small Group meetings with current 3<sup>rd</sup> years regarding 4<sup>th</sup> year scheduling

 Working with HELP and STAT to improve our ability to remediate students midstream





### Office of Medical Education

- Progress Report to LCME
- St. George's University of London
- Computer Based Testing
- Honors/Pass/Fail for clinical years
- Questions
  - Workshops for question writing
  - Statistical outcomes for current and future questions
- Academic Dashboard
- Ongoing LCME Accreditation





# Questions?





### **Current Students**

	Average MCAT	Average UG GPA
MS1	28.3	3.59
MS2	27.7	3.62
MS3	28.4	3.54
MS4	28.8	3.51
Total of All classes	28.3	3.57

