## Medical Doctors in USA How to prepare USMLE?

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November, 2007





## Acknowledgement

- Dr. Suzanne Powell (Program director, TMH)
- Dr. Steven Shen (Staff Pathologist, TMH)
- Dr. Jerad Gardner (PGY 2, TMH)
- Dr. Douglas Kim (PGY 4, TMH)
- Dr. Hyo Jin Park (Pathologist, SNU)
- Dr. Pil Gyu Hwang (Pathologist, SNU)











## **Teachers**

- The mediocre teacher tells.
- The good teacher explains.
- The superior teacher demonstrates.
- The GREAT teacher inspires.

William R. Ward

## Medical Doctor in USA

- Introduction
- Status of medical field in US
- USMLE/ECFMG
- Matching program
- Summaries

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## Medical Doctor in USA

## No choices

- Enter medical school
- Graduation
- Taking Korean Medical Assoc (KMA) Exam

### Can be chosen

- Subspecialty
- Academic career vs. practice
- Staying in Korea vs. abroad

## Why and Where?

## Why USA?

- Not much choice in Korea
- For children
- Better life with more money
- More opportunity
- Opportunity to study with international experts
- Purpose, mission and vision
- Others

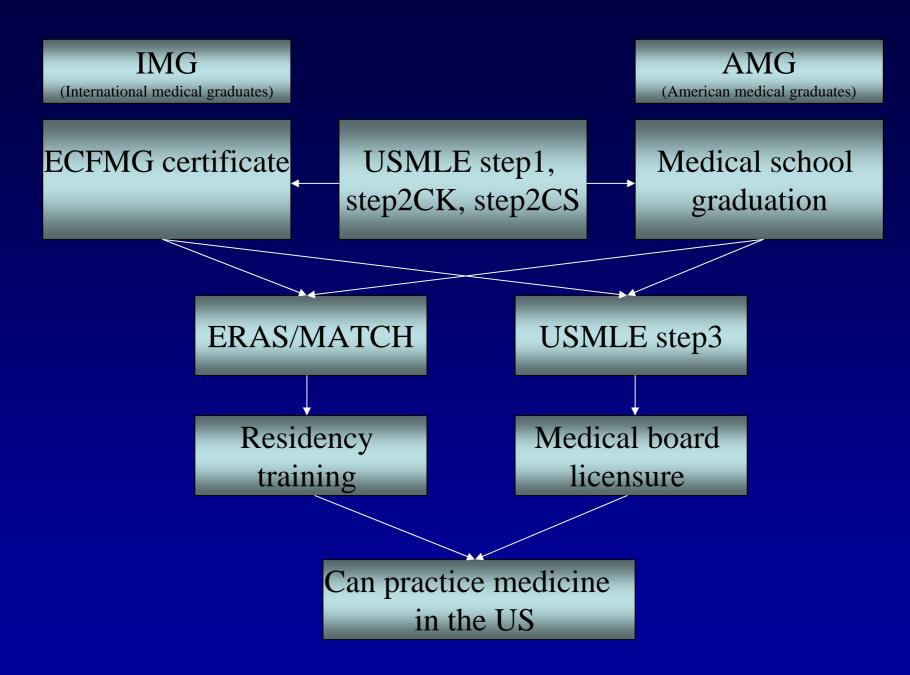
## How, When?

## How?

- Immigration
- J-1 visa
- H-1 visa
- **✓ ECFMG** certificate

### When?

- After graduation or during training
- After training (after army service)
- During faculty position

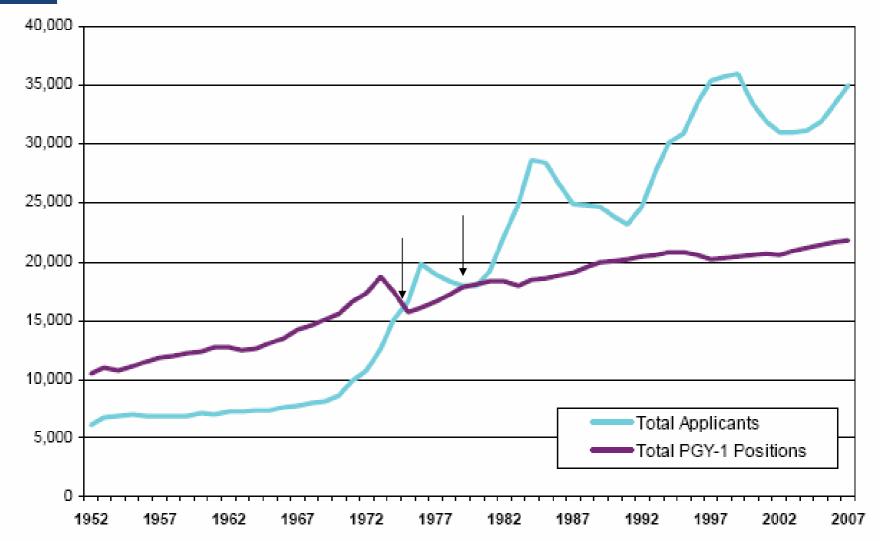


## **ERAS** and **NRMP**

- ERAS (Electronic Residency Application Service)
   Allows applicant to compose application online and forward to multiple residency programs.
- NRMP (National Residency Match Program) Allows applicant to rank residency programs and participate in The Match. If you fail to register for the NRMP, or if you fail to complete your program ranking list before the deadline, you will not Match



Figure 1 Applicants and 1st Year Positions in the Match, 1952 - 2007



## ECFMG history (I)

- March, 1958: first exam known as AMQ (American Qualification exam): 298 examinees at 17 test centers in US (9/1958, 844 candidates at 57 centers in US and foreign countries based on NBME (National Board of Medical Examiners) and English exam to write a short case history
- 1962: name AMQ changed to ECFMG examination
- 1963: ECFMG English exam new format consisting of objectives, multiple choice questions
- 1974: English exam changed to modified version of TOEFL
- 1977: VQE, equivalent to NBME part I and II, developed by NBME and administered by ECFMG

## ECFMG history (II)

- 1981: FLEX (Federation Licensing Ex) accepted for ECFMG certification
- 1984: FMGEMS (FMGE in Medical Sciences) replaces ECFMG and VQE
- 1989: NBME part I and II
- 1992: USMLE, part I, II and III (replace FLEX, NBME), also last year for NBME; last year for FMGEMS, 1993
- 1999: computer based testing for all steps: last ECFMG English test in 3/1999 (TOEFL is the only exam)
- 2004: CSA to Step II CS, no more separate English test

## Physician workforce in USA

- Total physician number in US: 836,036
- Total number of IMG in US: 208,733 (25.0%)
- No. of physicians/100,000 population
  - USA, 293
  - United kingdom, 231
  - Canada, 220
  - Australia, 271
  - Korea, 183
- % of IMGs, lower-income countries: 60.2%; other three countries (United Kingdom, Australia and Canada), 6.5%

## Physician workforce in USA

- Total number: 836,036
- Total number of IMG: 208,733 (25.0%)
  - **❖India:** 40,838 (4.9%)
  - **\*US IMGs:** 25,380 (3.0%)
  - **Philippines: 17,873 (2.1%)**
  - **Pakistan:** 9,667 (1.2%)

**South Korea:** 4,401 (0.5%), 10th

## Medical Practice in USA

- Minimal increase of medical graduates in USA since 1985
- Early retirement
- Growing medical business
- Shortage of MD in USA: need more doctors (50,000 in 2010, 200,000 in 2020) --- Houston Chronicle
- ECFMG mentioned that total spots for PGY1 trainees 21,659 in 2007 (205 more than 2006, and 1,057 more than 2002)

## Comparison of Medical Education in US and Korea

	# Medical schools	# Senior Graduates	Population (millions)
USA	126	~ 15,008	~ 300

 $\sim 3.500$ 

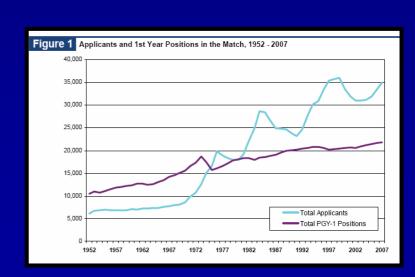
 $\sim 50$ 

Korea

## Medical Practice in USA

#### In 2006:

- Total # of active US medical school seniors and numbers matched
- **\$14,059/15,008 (93.7%)**
- # matched out of total active applicants
- **\*20,072/26,715 (75.1%)**
- # matched for IMG
- **4** 6,013/11707 (51.4%)





## Do your BeST

- Basic
- (effort) Study
- Thinking

**✓** You are so smart and nothing is impossible!

## **ECFMG**

주소(D) 🔊 http://www.ecfmg.org/

🔝 - 🗷 🕈 🥙 ECFMG?| Educational ...



ECFMG<sup>™</sup> Educational Commission for Foreign Medical Graduates



Promoting Excellence in International Medical Education

Home | About | News | Publications | Employment | Contact

#### **ECEMG Certification**

USMLE?Step 1 / Step 2 CK

USMLE Step 2 CS

Test Centers

Medical Education Credentials

Fees

Frequently Asked Questions

CVS - Certification Verification Service

ERAS? - the Electronic Residency Application Service

EVSP - ECFMG J-1 Visa Sponsorship

FICS - ECFMG International Credentials Services

**IMG Advisors Network** (IAN)

#### On-line Services

IWA | Apply for examination OASIS | Access your information IMED | Search for medical schools

Step 2 CS Calendar and Scheduling | Check test dates and schedule testing appointments

CVS ON-LINE | Request certification status

#### Latest News

Change from Paper to Electronic Score Reports July 30, 2007

All announcements >>

#### **FAIMER®**

The Foundation for Advancement of International Medical Education and Research (FAIMER), ECFMG월 non-profit foundation, seeks to improve world health through educational programs, resources, and research.

FAIMER Website >>

#### ECFMG is C

Our 50th Annive Invitational Con-

- Press Releat
- Program
- Photograph Our New Look Certification-rela are Changing

#### E-mail Upda

Subscribe to The to receive e-mai important issues Certification.

More E-Newslett

#### News

- ECFMG Celebrates 50th Anniversary
- · On-line Application Process Will Be Simplified for Students
- · Electronic Scheduling Permits for Steps 1 and 2 CK and more...see page vii.

#### www.ecfmg.org

**ECFMG** 

Apply On-line for Step 1 and Step 2 (Clinical Knowledge and Clinical Skills) of the United States Medical Licensing Examination TM (USMLETM) using IWA

ECFMG® CERTIFICATION

2007 Information Booklet

Subscribe to The ECFMG® Reporter for important updates on ECFMG Certification and entry into graduate medical education in the United States.

Access your Information On-line using OASIS.

#### **Educational Commission for Foreign Medical Graduates**

3624 Market Street, Philadelphia, PA 19104-2685 USA www.ecfmg.org

Form 1008, August 2006

#### Certification Resources



ECFMG Certification Fact Sheet



2007 Information Booklet

#### What is ECFMG Certification?

- -To enter U.S. residency and fellowship programs that are accredited by the Accreditation Council for Graduate Medical Education (ACGME).
- -To be certified by ECFMG, you must pass a series of exams (UMSLE step1, step2CK, CS); you must also fulfill ECFMG's medical education credential requirements.
- -These requirements include providing ECFMG with copies of your medical education credentials, which ECFMG will verify directly with your medical school.

## Why would I want to be certified by ECFMG?

- International medical graduates (IMG) MUST be certified by ECFMG before entering an ACGME-accredited residency or fellowship program in US
- To be eligible to take USMLE step 3.
- ECFMG certification is also one of the requirements to obtain an unrestricted license to practice medicine in the United States.

# 2007

A Joint Program of the Federation of State Medical Boards of the United States, Inc., and the National Board of Medical Examiners®

#### **BULLETIN OF INFORMATION**



US-MLE

United States

Medical

Licensing

Examination

TM

## USMLE

주소(D) <equation-block> http://www.usmle.org/













#### ▶ Home

News

Bulletin of Information

Step 1

Step 2

Step 3 Application Materials

Test Accommodations

Orientation and Practice Materials

**CBT Practice** Session

Scores and Transcripts

**FAQs** 

About USMLE

Contact USMLE

#### United States Medical Licensing Examination™

- Step 1 assesses whether medical school students or graduates understand and can apply important concepts of the sciences basic to the practice of medicine.
- Step 2 assesses whether medical school students or graduates can apply medical knowledge, skills and understanding of clinical science essential for provision of patient care under
- Step 3 assesses whether medical school graduates can apply medical knowledge and understanding of biomedical and clinical science essential for the unsupervised practice of medicine
- Application Materials are available for Step 1, Step 2, and Step 3 from your registration entity.
- Test Accommodations are provided for examinees with disabilities who are covered under the Americans with Disabilities Act.
- The Bulletin of Information includes information on all aspects of USMLE, such as eligibility requirements, scheduling test dates, testing, and score reporting.
- Orientation and Practice Materials are available for all Steps. Check here for answers to most frequently asked questions about the installation and use of the materials.

#### News

- Reporting of USMLE Results Available On-line
- Step 2 CK Score Reporting
- Change in Step 2 Minimum Passing Scores
- 🝳 Step 2 CK to Include Media Clips Starting in August
- Step 1 Score Reporting Updated June 29, 2007
- Retake Waiting Period Eliminated
- NBME Test Delivery Software Field Trial
- Review of Step 2 Minimum Passing Performance
- Revision to Step 3 Clinical Settings Organization
- Change in Step 1 Minimum Passing Score
- Reminder About Unauthorized Possession of Personal <u>Items</u>

More News>>

#### Step 2 Clinical Skills

Change in Step 2 Minimum Passing Scores

2007 and 2008 Schedules for Reporting Results

5/10/07

6/20/07

- 11/21/06 Important Information for Step 2 CS Registrants Attempting to Schedule or Reschedule a Testing Appointment
- Pilot of Email Notification System

9/6/06

Downloads and Information for Step 2 CS 2007 Orientation Materials Now Available

8/31/06

More Step 2 CS Information>>

@ 1996-2005 FSMB and NBME The USMLE is sponsored by the Federation of State Medical Boards (FSMB) of the United States, Inc., and the National Board of Medical Examiners® (NBME®). Results of the USMLE are reported to medical licensing authorities in the United States and its territories for use in granting the initial license to practice medicine. The three Steps of the USMLE assess a physician's ability to apply knowledge, concepts, and principles, and to demonstrate fundamental patient-centered skills, that are important in health and disease and that constitute the basis of safe and effective patient care.

## Introduction - USMLE

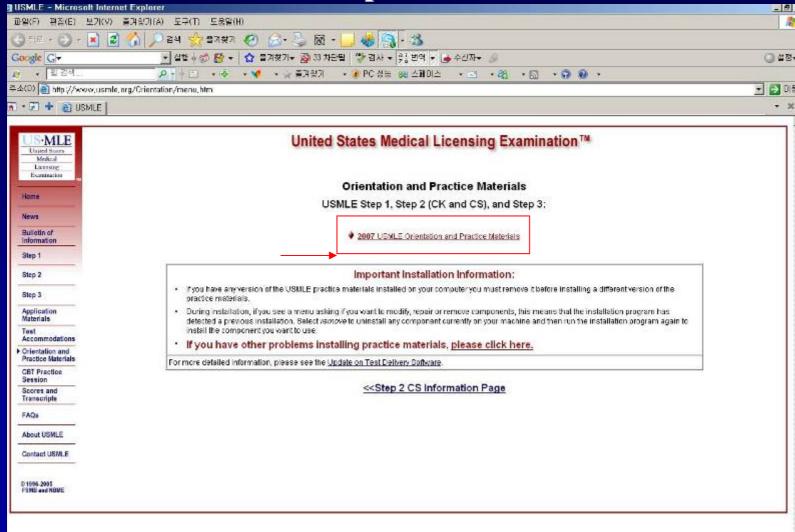
- Sponsored by the Federation of State Medical Boards (FSMB) and the National Board of Medical Examiners® (NBME®).
- -The United States Medical Licensing Examination<sup>TM</sup> (USMLE<sup>TM</sup>) is a three-step examination for medical licensure in the United States

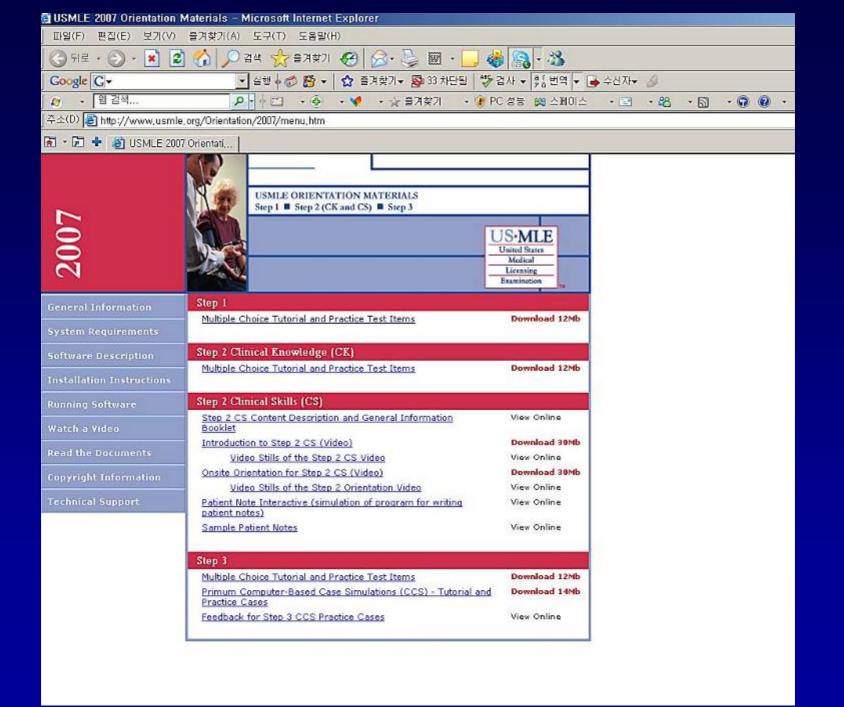
## Purpose of USMLE

- In the United States and its territories ("United States" or "US"), the individual medical licensing authorities ("state medical boards") of the various jurisdictions grant a license to practice medicine.
- Results of the USMLE are reported to these authorities for use in granting the initial license to practice medicine.
- The USMLE provides them with a common evaluation system for applicants for medical licensure.

## How to prepare the USMLEs?

Sample tests





## How to prepare the USMLEs?

- Step 1 and 2CK
- > Study with review (text) books first and then study sample tests
- > Study with sample test questions first and when you face problems, check review (text) books
- Step 2CS
- > OSCE, objective structured clinical exam; CPX, clinical performance experience
- Step 3
- ➤ Similar for Step 1 and step2CK preparation (Clinical vignettes, Q bank, develop systematic approach to diagnose and treat patients), and CCS (Computer-based case simulations)

## How to prepare the USMLEs?

#### **Internet sites for the information:**

- -www.usmlekorea.com
- -www.usmlemaster.com

#### **Institutions:**

- -GMES: www.gmes.co.kr
- -Kaplankorea: www.kaplankorea.com
- -Kaplan: www.kaplanmedical.com

#### **On-line study:**

- -Kaplan: www.kaplanmedical.com
- -Usmleworld: www.usmleworld.com

# How to prepare the USMLEs? Reference Books

- Step 1: review series (First Aid, etc); High Yield Gross Anatomy and Neuroanatomy; BRS physiology; Lippincott Illustrated Biochemistry; Lippincott Illustrated Pharmacology; Ridiculous Clinical Microbiology; High Yield Behavioral Science; Kaplan-Q-Book; NMS; Web-based test questions (Kaplan Q-bank step1, USMLEWORLD (UW), USMLE Rx)
- Step 2CK: review books (Boards and Wards, First Aid, etc); Kaplan Q-book, NMS, Mock exam; Web-based test questions (Kaplan Q-bank step2CK, USMLEWORLD (UW), USMLE Rx
- Step 2CS: First Aid, Web-based books (UW step 2CS), Kaplankorea
- Step 3:
- > MCQ (multiple choice questions): First Aid, Crush, etc , Swanson's family and geriatric medicine, review books, Kaplan Q-book, UW, Kaplan Q-bank
- ➤ CCS (computerized clinical simulation): strong medicine, Blueprint CCS, Web based test bank (UW CCS, USMLE step123)
- **ESSENTIAL** to use the practice CD (provided when you register for exam) until comfortable with CCS software!

### Frequent questions and answers

- 1. In what order do I take the exams required for ECFMG Certification?

  Once you meet the eligibility requirements for examination, you can take these exams in any order.
- 2. Is there a limit to the number of times I can take an exam?
- > For the purpose of ECFMG Certification
  - -There is no limit on the number of times you can take an exam.
  - -Once you pass a Step or Step Component, you cannot repeat it.
  - -You will have <u>seven years</u> to pass the other Step(s) or Step Component (s) required for ECFMG Certification.
- > For the purpose of medical licensure
  - -The USMLE program recommends to state medical licensing authorities that they require applicants to pass the full USMLE sequence (including Step 3) within a seven-year period.
  - -The USMLE program also recommends to state medical licensing authorities a <u>limit on the number of attempts</u> allowed to pass each Step or Step Component (>3 times, some states won't license).

http://www.fsmb.org (federation of state medical board)

## THREE STEPS OF THE USMLE

- Step 1: assesses whether you understand and can apply important concepts of the sciences basic to the practice of medicine.
- Step 2(CK, CS): assesses whether you can apply medical knowledge, skills, and understanding of clinical science essential for the provision of patient care under supervision and includes emphasis on health promotion and disease prevention.
- Step 3: assesses whether you can apply medical knowledge and understanding of biomedical and clinical science essential for the unsupervised practice of medicine, with emphasis on patient management in ambulatory settings.

## APPLYING FOR THE TEST

Examination	Type of Applicant	Registration Entity to Contact
Step 1 or Step 2 (CK or CS)	Students and graduates of medical school programs in the United States and Canada accredited by the Liaison Committee on Medical Education or students and graduates of medical schools in the United States and Canada accredited by the American Osteopathic Association	NBME Examinee Support Services 3750 Market Street Philadelphia, PA 19104-3190 Website: http://www.nbme.org Telephone: (215) 590-9700 Fax: (215) 590-9457 E-mail: webmail@nbme.org
Step 1 or Step 2 (CK or CS)	Students and graduates of medical schools outside the United States and Canada	ECFMG 3624 Market Street Philadelphia, PA 19104-2685 Website: http://www.ecfmg.org Telephone: (215) 386-5900 Fax: (215) 386-9196 E-mail: info@ecfmg.org
Step 3	All medical school graduates who have passed Step 1 and Step 2	FSMB Department of Examination Services PO Box 619850 Dallas, TX 75261-9850 Website: http://www.fsmb.org Telephone: (817) 868-4041 Fax: (817) 868-4098 E-mail: usmle@fsmb.org or Medical licensing authority (see pages 33–38)

## **USMLE Step1**

-Step 1 examination contents: anatomy, behavioral sciences, biochemistry, microbiology, pathology, pharmacology, physiology, interdisciplinary topics, such as nutrition, genetics, and aging.

-Step 1 is a broadly based, integrated examination.

#### Table 1: USMLE Step 1 Specifications\*

#### System\*\*

40%–50% General principles 50%–60% Individual organ systems

- hematopoietic/lymphoreticular
- · nervous/special senses
- skin/connective tissue
- musculoskeletal
- respiratory
- cardiovascular
- gastrointestinal
- renal/urinary
- · reproductive
- · endocrine

#### Process

30%-50%	Normal structure and function
30%-50%	Abnormal processes
15%-25%	Principles of therapeutics
10%-20%	Psychosocial, cultural,
	occupational, and environmenta
	considerations

## **USMLE Step2CK**

### -Step 2 CK examination contents:

- internal medicine,
- obstetrics and gynecology,
- pediatrics,
- preventive medicine,
- psychiatry,
- surgery,
- neurology,
- other areas relevant to provision of care under supervision.

# -Most Step 2 CK test items describe clinical situations

#### Table 2: USMLE Step 2 CK Specifications\*

#### Normal Conditions and Disease Categories

- Normal growth and development and general principles of care
- Individual organ systems or types of disorders
  - · immunologic disorders
  - diseases of the blood and blood-forming organs
  - · mental disorders
  - diseases of the nervous system and special senses
  - · cardiovascular disorders
  - · diseases of the respiratory system
  - · nutritional and digestive disorders
  - gynecologic disorders
  - renal, urinary, and male reproductive systems
  - disorders of pregnancy, childbirth, and the puerperium
  - disorders of the skin and subcutaneous tissue
  - diseases of the musculoskeletal system and connective tissue
  - · endocrine and metabolic disorders

#### Physician Task

- 15%-20% Promoting preventive medicine and health maintenance
- 20%-35% Understanding mechanisms of disease
- 25%-40% Establishing a diagnosis
- 15%–25% Applying principles of management

### **USMLE Step2CS**

-Step 2 CS assesses whether you can demonstrate the fundamental clinical skills essential for safe and effective patient care under supervision

-Step 2 CS uses standardized patients.

#### Table 3: The Subcomponents of Step 2 CS

#### Integrated Clinical Encounter (ICE)

- Data gathering patient information collected by history taking and physical examination
- Documentation completion of a patient note summarizing the findings of the patient encounter, diagnostic impression, and initial patient work-up

#### Communication and Interpersonal Skills (CIS)

- Questioning skills
- · Information-sharing skills
- Professional manner and rapport

#### Spoken English Proficiency (SEP)

 Clarity of spoken English communication within the context of the doctor-patient encounter

## **USMLE Step3**

-Step 3 content reflects a databased model of generalist medical practice in the United States.

- -Step 3 examinees test using two formats:
- Multiple choice questions
- Computer-based case simulations (CCS), a testing format that allows you to provide care for a simulated patient.

#### Table 4: USMLE Step 3 Specifications\*

#### Clinical Encounter Frame

20%–30%	Initial care
50%-60%	Continued care
15%-25%	Emergency care

#### Physician Task

8%-12%	Obtaining history and performing physical examination
8%-12%	Using laboratory and diagnostic studies
8%-12%	Formulating most likely diagnosis
8%-12%	Evaluating severity of patient's problems
8%-12%	Applying scientific concepts and mechanisms of disease
45%-55%	Managing the patient
	<ul> <li>health maintenance</li> </ul>
	<ul> <li>clinical intervention</li> </ul>
	<ul> <li>clinical therapeutics</li> </ul>
	<ul> <li>legal and ethical issues</li> </ul>

#### **Primum® Tutorial**

Select one of the following:

Primum Computer-based
Case Simulations (CCS) Overview

**Frequently Asked Questions (FAQs)** 

**Primum Software Instructions** 

To Exit, press the Esc key.

National Board of Medical Examiners® (NBME®) Primum® Computer-based Case Simulations Software Version 8.2
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### Frequently Asked Questions (FAQs)

- 1. What is Primum® Computer-based Case Simulations (CCS) software?
- 2. What are my responsibilities?
- 3. How do I manage a patient?
- 4. How do I write/cancel orders?
- 5. What am I supposed to do after I write orders?
- 6. Can I change my mind?
- 7. Why are consultants usually not helpful?
- 8. What kind of feedback do I get while caring for the patient?
- 9. How long do cases last?
- 10. How do I know when I have finished a case?
- 11. Does computer experience matter?
- 12. How is my performance scored?
- 13. Are there differences in practice and live case functionality?

To exit, press the Esc key.

Return to Tutorial Main Menu

### **USMLE Test Format**

- -Step1, Step2CK Computer based multiple choice test
  - Step1: one-day exam, 350 questions divided 7 blocks of 60 min.
  - Step2: one-day exam, 370 questions divided 8 blocks of 60 min.
- -Step2 CS
  - One-day exam, 12 standardized patients, 15 minutes for each patient encounter and 10 minutes to record each patient note
- -Step3 two-day computer based test
  - Day1: 336 multiple-choice questions, 7 blocks of 60 min.
  - Day2: 1st part; 144 questions, four blocks of 45-min.
    - 2<sup>nd</sup> part; 9 interactive case simulations over four hours

### SCORING AND SCORE REPORTING

### Step 1, Step 2 CK, or Step 3:

- -two equivalent scores, one on 3-digit score scale & one on 2-digit score scale
- -The 3-digit score : passing score ~180
- -The 2-digit score : a score of 75 always corresponds to minimum passing score.

### Step 2 CS:

- reported as pass or fail

USMLE Step 1					
	Three-Dig	it Score	Two-Dig	it Score	
Test Date Pass/Fail	Total	MP	Total	MP	Comments
06/07/1999 Pass	235	(179)	93	(75)	
USMLE Step 2					
Clinical Knowledge (CK)					
	Three-Dig	it Score	Two-Dig	it Score	
Test Date Pass/Fail	Total	MP	Total	MP	Comments
10/10/2000 Pass	217	(174)	86	(75)	
USMLE Step 3					
	Three-Dig	git Score	Two-Dig	it Score	
Test Date Pass/Fail	Total	MP	Total	MP	Comments
04/02/2002 Pass	221	(182)	90	(75)	

**USMLE Step 2 Clinical Skills (CS)** 

**Test Date** Pass/Fail

05/19/2001 Pass

### TABLE 1 - 2005-2006 **STEP 1** ADMINISTRATIONS

**Number Tested and Percent Passing** 

Number Testeu and Fercent Fassing					
	2005		2006*		
	<b>#Tested</b>	%Passing	<b>#Tested</b>	%Passing	
<b>Examinees from US/Canadian Sch</b>	nools that Gran	ıt			
MD Degree	18,290	92%	18,167	93%	
1st Takers	16,799	94%	16,818	95%	
Repeaters**	1,491	65%	1,349	67%	
DO Degree	1,331	73%	1,325	76%	
1st Takers	1,265	73%	1,258	77%	
Repeaters**	66	53%	67	52%	
Total US/Canadian	19,621	90%	19,492	92%	
Examinees from Non-US/Canadian Schools					

68%

39%

14,585

6,017

71%

39%

# 1st Takers 13,488

Repeaters\*\*

Total non-US/Canadian 19,399 59% 20,602 61% \* Represents data for examinees tested in '05 and reported through Feb 7, 2007.

5,911

<sup>\*</sup> Represents data for examinees tested in '05 and reported through Feb 7, 2007. \*\* 'Repeaters' represents examinations given, not number of different examinees.

### TABLE 2A - 2004-2006 STEP 2 CK ADMINISTRATIONS

**#Tested** 

17,803

16,447

1,356

399

386

13

18,202

10,355

3,470

13,825

\*\* 'Repeaters' represents examinations given, not number of different examinees.

<b>Number Tested and Percent Passing</b>	
2004-2005*	2005

<b>Number Tested and Percent Passing</b>		
	2004-2005*	200

**Examinees from US/Canadian Schools that Grant** 

**Examines from Non-US/Canadian Schools** 

**MD** Degree

1st Takers

Repeaters\*\*

**DO Degree** 

1st Takers

1st Takers

Repeaters\*\*

Repeaters\*\*

**Total US/Canadian** 

Total non-US/Canadian

05-2006\*

**#Tested** 

17,714

16,493

1,221

453

439

14

18,167

11,305

3,557

14,862

%Passing

93%

95%

72%

80%

80%

57%

93%

77%

71%

71%

%Passing

93%

94%

69%

85%

85%

62%

92%

77%

50%

71%

\* Data for Step 2 CK are provided for examinees tested during the period of Jul 1 to Jun 30.

### TABLE 2B - 2004-2006 STEP 2 CS ADMINISTRATIONS

**Number Tested and Percent Passing** 

	2004-2005*		2005-2006	** 
	<b>#Tested</b>	%Passing	<b>#Tested</b>	%Passing
<b>Examinees from US/Canadian</b>	Schools that G	rant		
MD Degree	16,124	96%	16,936	98%
1st Takers	15,814	96%	16,611	98%
Repeaters†	310	96%	325	97%
DO Degree	31	87%	28	89%
1st Takers	31	87%	27	89%
Repeaters†	0	N/A	1	***
Total US/Canadian	16,155	96%	16,964	98%
Examinees from Non-US/Canadian Schools				
1st Takers	12,708	83%	13,235	85%
Repeaters†	973	83%	1,875	81%
Total non-US/Canadian	13,681	83%	15,110	84%

### TABLE 3 - 2005-2006 STEP 3 ADMINISTRATIONS

**Number Tested and Percent Passing** 

**MD** Degree

1st Takers

Repeaters\*\*

**DO Degree** 

1st Takers

1st Takers

Repeaters\*\*

Repeaters\*\*

**Total US/Canadian** 

**Total non-US/Canadian** 

**Examinees from US/Canadian Schools that Grant** 

**Examines from Non-US/Canadian Schools** 

ssing	
2005	

**#Tested** 

16,934

15,868

1,066

58

54

4

16,992

8,307

3,712

12,019

\* Represents data for examinees tested in 2006 and reported through February 7, 2007.

\*\* 'Repeaters' represents examinations given, not number of different examinees.

† Performance data not reported for categories containing fewer than 5 examinees.

94%

96%

69%

95%

94%

94%

**75%** 

52%

68%

+

%Passing

2006\*

#Tested

17,427

16,395

1,032

34

32

17,461

9,003

3,471

12,474

%Passing

94%

96%

70%

97%

97%

94%

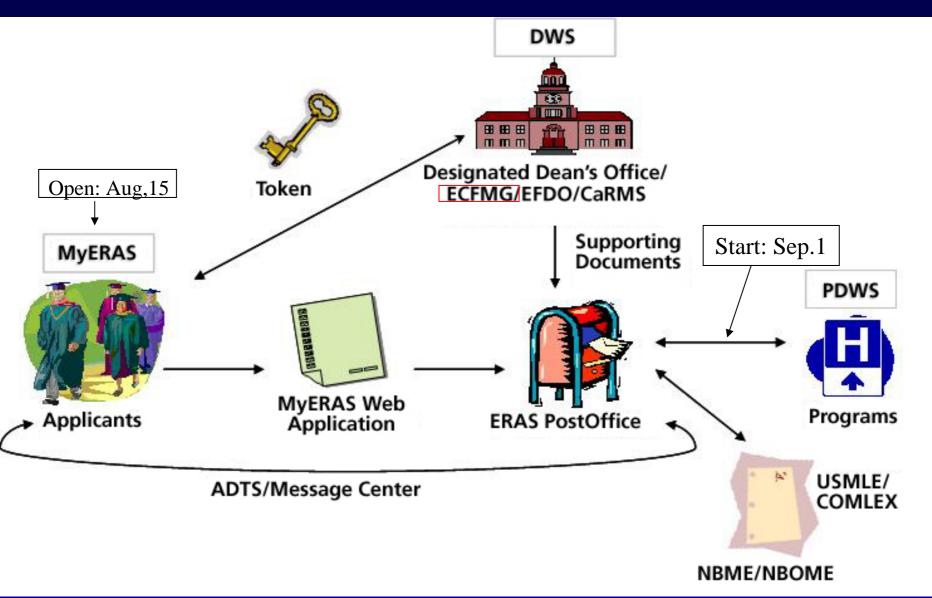
**75%** 

56%

70%

+

# Application for Residency Program



### **ERAS** and **NRMP**

- ERAS (Electronic Residency Application Service)
   Allows applicant to compose application online and forward to multiple residency programs.
- NRMP (National Residency Match Program) Allows applicant to rank residency programs and participate in The Match. If you fail to register for the NRMP, or if you fail to complete your program ranking list before the deadline, you will not Match

### ERAS Common Application Form

#### **General Information**

Name:		Applicant ID:
Previous Last I	Name:	AAMC ID:
Preferred Nam	e: <i>Taylor</i>	
School:	Texas Tech University School of Medicine	
	Clinical Campus:	
	Texas Tech University School of Medicine-El Paso	
E-mail:	hartleytaylor73@hotmail.com	
Gender:	Male	
Birth Date:	01/11/1973	
Birth Place:	Clovis, NM	NRMP: Yes
SSN:		Couples Match Notification: No
SIN:		
Citizenship:	U.S. Citizen	
Visa Type:	N/A	
		USMLE ID:
		NBOME ID:

Race:	
White	
Ethnicity:	
Not Spanish/Hispanic/Latino/Latina	
Contact Address:	Permanent Mailing Address:
Preferred Phone #:	Phone:
Alternate Phone #:  Mobile #:	
Pager #:	
Fax #:	

# **ERAS** Fees

### **Number of Programs Per Specialty**

- Up to 10 \$60
- 11-20 \$ 8 each
- 21-30 \$15 each
- 31 or more \$ 25 each

# 2008 Main Match Schedule (I)

- Aug 15, 07: Applicant registration begins at 12:00 noon ET.
- Sept 1, 07: Institution/program registration begins at 12:00 noon ET.
- Nov 30, 2007: Applicant registration deadline Note: Applicants may register after this deadline by paying additional late registration fee of \$50.00 when registering after 11:59 PM ET.
- Jan 15, 2008: Rank order list entry begins: Applicants and programs may start entering their rank order lists at 12:00 noon ET.
- Jan 31, 2008: Quota change deadline: Programs must submit final information on quotas and withdrawals by 11:59 PM ET.
- Feb 27, 2008: Late registration deadline, Rank order list certification deadline: Applicants and programs must certify their rank order lists by 9:00 PM ET. Staff will be available to answer your questions during the final deadline hours. CERTIFIED applicant and program rank order lists and any other information pertinent to the Match must be entered in the R3 System by this date and time.

# 2008 Main Match Schedule (II)

- Mar 17, 2008: Applicant matched and unmatched information posted to Web site at 12:00 noon ET.
- Mar 18, 2008: Filled and unfilled results for individual programs posted to Web site at 11:30 am ET. Locations of all unfilled positions are released at 12:00 noon ET. Unmatched applicants may begin contacting unfilled programs at 12:00 noon ET.
- Mar 20, 2008: Match Day! Match results for applicants are posted to Web site at 1:00 pm ET.
- Mar 21, 2008: Hospitals send letters of appointment to matched applicants after this date.

# **Opportunities to Enter Matching**

- 1. Observership
- 2. Externship
- 3. Internship
- 4. Research fellowship
- 5. Clinical fellowship
- 6. Clinical clerkship



- About ERAS
- Eligibility

Important Dates

E-mail Newsletter

Announcements

Resources

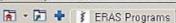
Contact

- ERAS Application Process
- Token Request
- ERAS Registration
- Supporting Documents
- ERAS Application Tracking
- National Resident Matching Program

#### About ERAS

The Electronic Residency Application Service (ERAS?, developed by the Association of American Medical Colleges (AAMC), allows medical school students and graduates to apply electronically for first- and second-year (PGY-1 and PGY-2) residency positions in U.S. programs of graduate medical education (GME), ECFMG serves as the designated Dean월 office for all international medical students and graduates (IMGs), including participants in Fifth Pathway Programs, who use ERAS. If you are a student or graduate of a U.S. (LCME- or AOA-accredited) medical school/program, you must apply for residency positions through the Dean월 office at your medical school. If you are a student or graduate of a Canadian medical school/program, the Canadian Resident Matching Service (CaRMS) acts as your Dean's office if applying to positions in the United States; for more detailed information, go to www.carms.ca.

Home Government Affairs Newsroom Meetings Publications





ERAS® is a program of the Association of American Medical Colleges

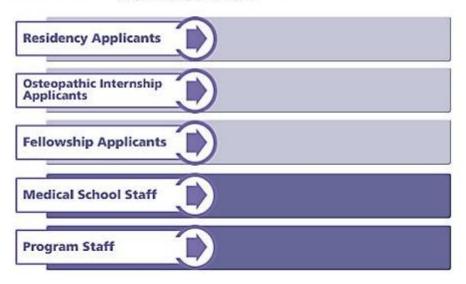
Shopping Cart Site Map





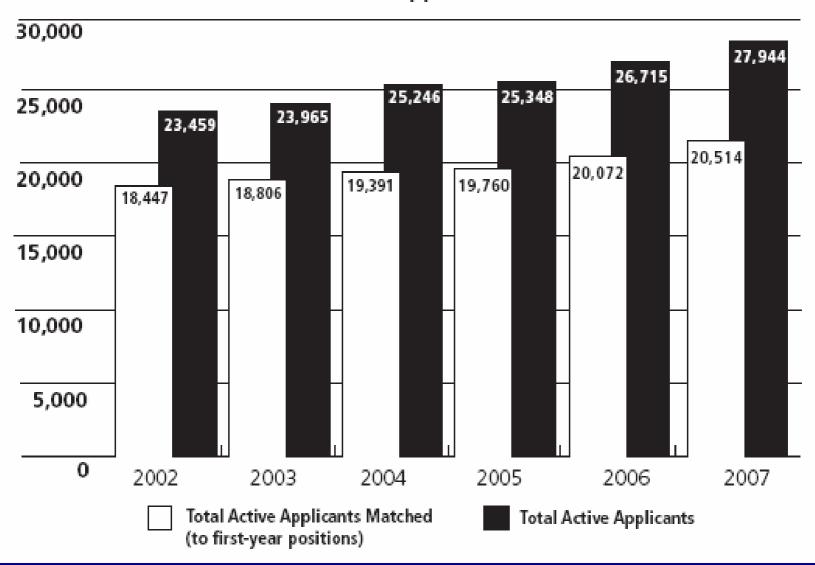
#### ERAS -The Electronic Residency Application Service

ERAS®—The Electronic Residency Application Service—is a service that transmits residency applications, letters of recommendation, MSPEs, transcripts, and other supporting credentials from applicants and medical schools to fellowship, osteopathic internship, and residency programs using the Internet.





#### **Total Number of Active Applicants and Numbers Matched**



### Number of Participants in the Match

Total Number of Active U.S. Medical School Seniors and Numbers Matched

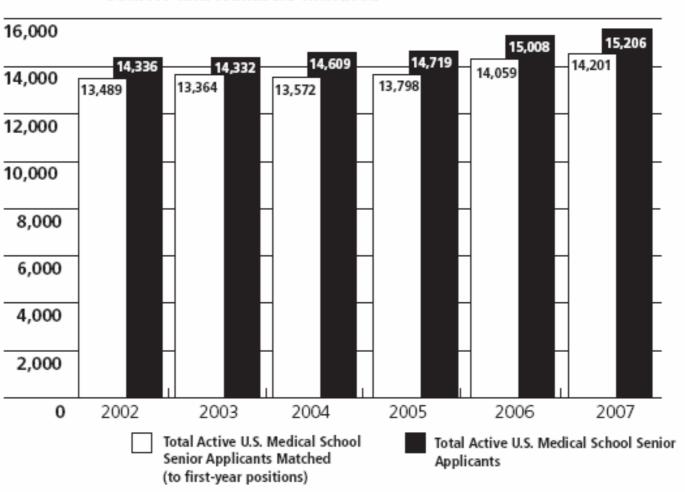
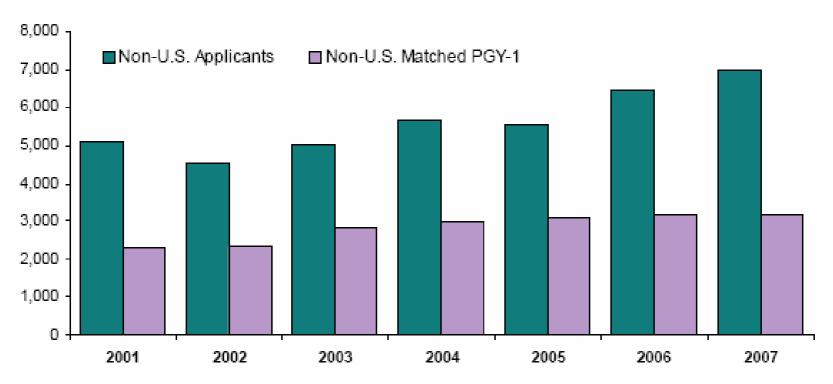
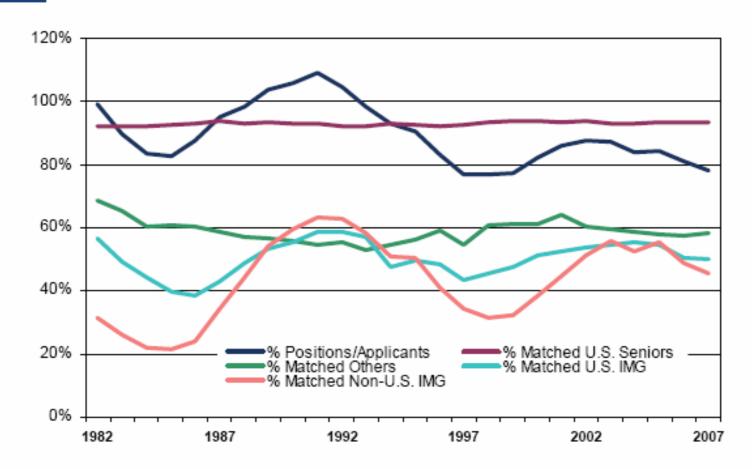


Figure 2 Number of Non-U.S. Citizen Active Applicants and Numbers Matched to PGY-1 Positions, 2001 - 2007

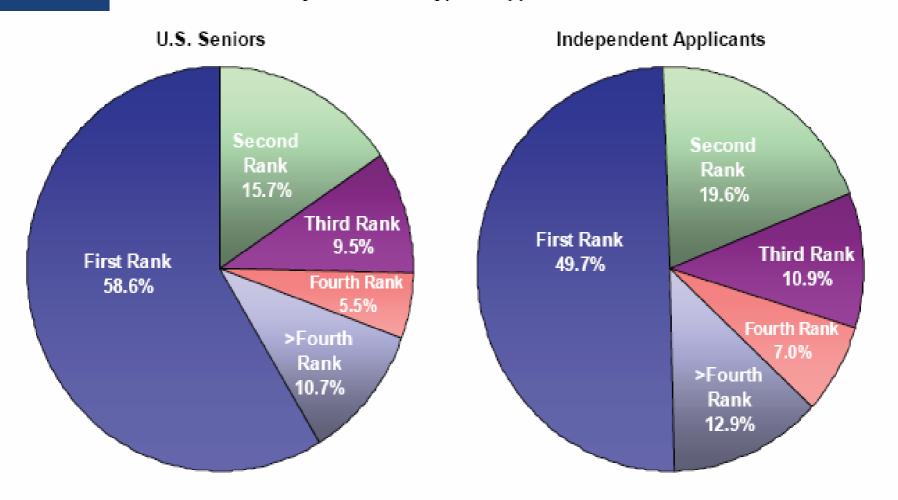


## Applicants in Matching program, 01-07

- Total applicants: 75%/25%
- US Senior students: matched more than 93 % with less than 7% unmatched
- Canadian students: 60%/40%
- US physicians: 45%/55%
- Osteopaths: 70%/30%
- 5th pathway: 50%/50%
- US IMGs: 50%/50%
- Non US IMGs: 45%/55%



### Figure 7 Percent of Matches by Choice and Type of Applicant, 2007



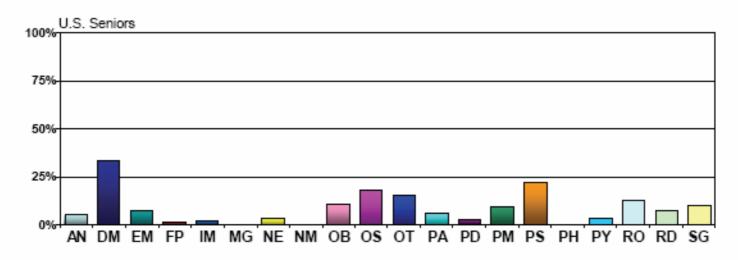
## Matches by specialty & applicant type, 2007

<b>Specialty</b>	No position	No filled	US senior	US	5 <sup>th</sup> path	US IMG	Osteo	Canad	IMG
Anesthe	575	<b>561</b>	448	grad 8	path 0	24	48		32
Derm	32	32	25	5	0	0	1	0	1
ER	1,288	1,282	1,027						
Family	2,603	2,299	1,096			335	277		538
GS	1,057	1,055	826			56	30		74
IM	4,798	4,720	2,680			392	233		1,303
OBGyn	1,155	1,149	837			<b>78</b>	87		120
OS	616	614	578			4	2		10
ENT	270	268	251			1			8
Pathol	513	466	296			22	29		75
Ped	2,328	2,265	1,694			113	129		282
PS	93	93	88						1
PMR	78	<b>74</b>	45			8	9		5
Psych	1,057	1,000	633			<b>71</b>	<b>74</b>		176
Radiology	141	141	125			3	6		4
Transit	1,017	966	882			21	15		30

## FMG Matched to PGY1 by specialty

<b>Specialty</b>	1999	2000	2001	2002	2003	2004	2005	2006	2007
	No %	No %	No %	No %	No %	No %	No %	No %	No %
Anesthe	3.2 to 1.2%								
Derm	Derm 0%								
ER	0.9 to 1.8%								
<b>Family</b>	amily 11.8 to 19.3%								
GS			1	.6 to 2.9	0%				
IM	40.5 to 37.4%								
Ob&Gyn			2	2.0 to 4.	<b>7%</b>				
OS				0.3%					
ENT/ophth	nal/NS			0%					
Pathol			3	.6 to 2.1	0/0				
Ped			5.	.9 to 9.2	0/0				
PS/urology	//vascula	r surg		0%					
PMR			0.	9 to 0.3	%				
Psych			9.	0 to 5.5°	%				
Radiology			0.	.3 to 0.2	%				
Transit			3.	9 to 1.1°	2/0				
Radiation	0%								

Figure 6 Percentages of Unmatched U.S. Seniors and Independent Applicants Who Chose One Type of Specialty, 2007



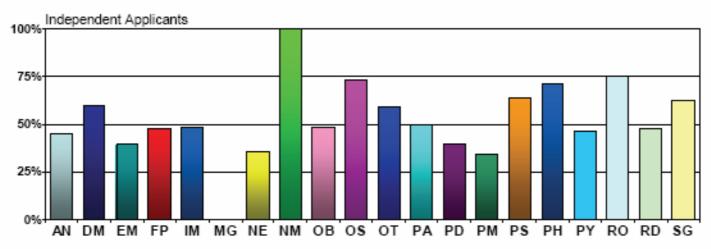
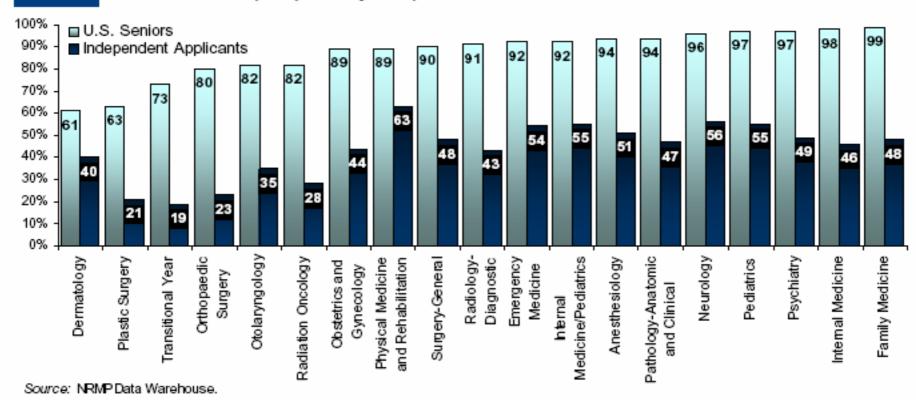


Chart 3

#### MATCH RATES

Percent Matched by Preferred Specialty

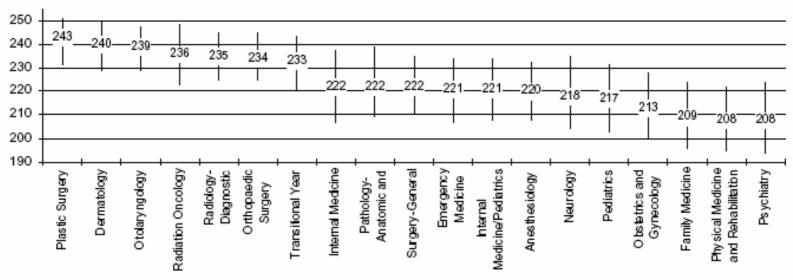


#### Chart 10

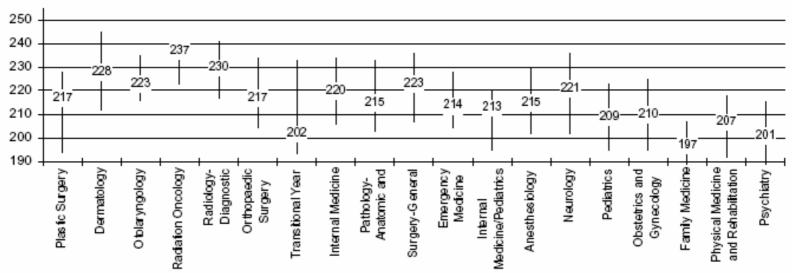
#### USMLE STEP 1 SCORES OF MATCHED APPLICANTS BY PREFERRED SPECIALTY

U.S. Seniors and Independent Applicants





#### Independent Applicants who Matched

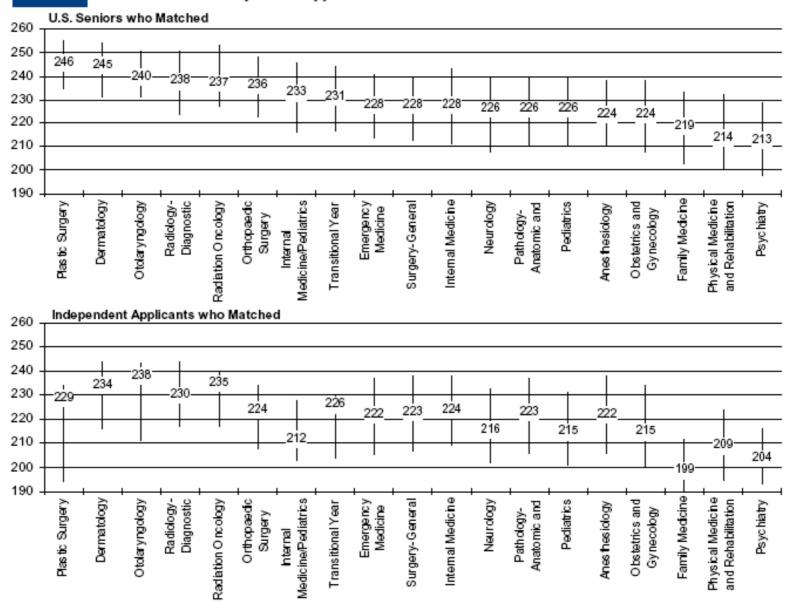


Note: Step 1 scores are not available for the majority of Osteopathic seniors and graduates included within the independent applicant category. Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG.

#### Chart 11

#### USMLE STEP 2 SCORES OF MATCHED APPLICANTS BY PREFERRED SPECIALTY

U.S. Seniors and Independent Applicants



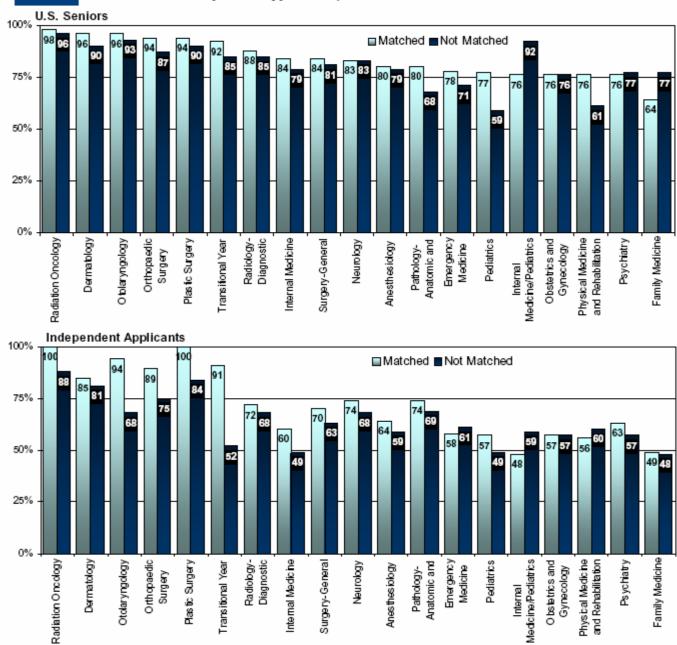
Note: Thirty-one percent of U.S. seniors did not take the Step 2 examination in time to be included in this report. Step 2 scores are not available for the majority of Osteopathic seniors and graduates included within the independent applicant category.

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG.

#### Chart 12

#### PERCENTAGE REPORTING RESEARCH EXPERIENCES BY PREFERRED SPECIALTY

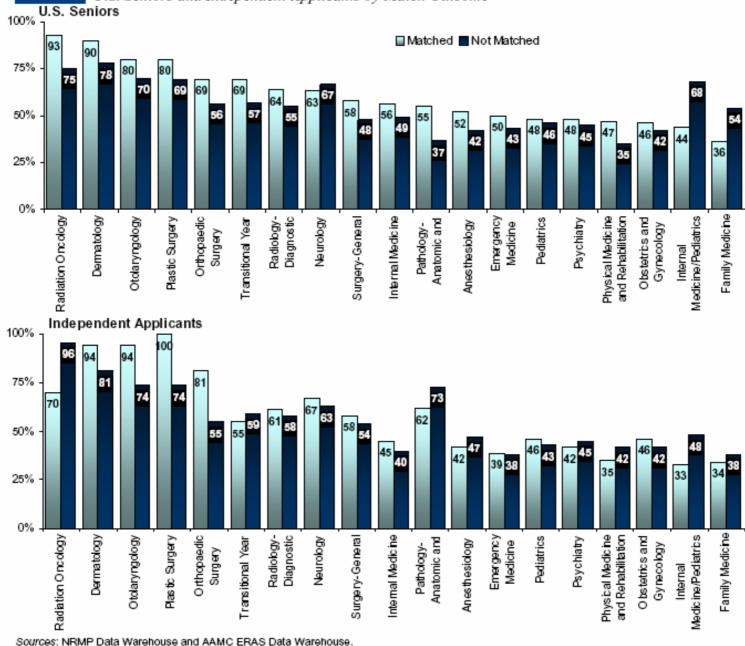
U.S. Seniors and Independent Applicants by Match Outcome



Sources: NRMP Data Warehouse and AAMC ERAS Data Warehouse

Chart
13
PERCENTAGE REPORTING ABSTRACTS, PRESENTATIONS, OR PUBLICATIONS BY
PREFERRED SPECIALTY

U.S. Seniors and Independent Applicants by Match Outcome



# Common elements of an application file

- Dean's letter: from medical school
- Letter's of recommendation: "strong" letter, especially from US MDs
- Personal statement : distinguish yourself from other applicants
- Transcript

# Common elements of an application file

- CV: summary of your credentials, activities, and accomplishments
  - General information, examinations (usmle), medical licensure (ACLS, PALS, board), medical education, graduate education, previous residencies/fellowships,
  - Work, volunteer, research experience: especially in US medical field
  - Medical school honors/awards
  - Other awards/accomplishments
  - Honorary/professional societies
  - Publications

## **Board Certified Korean Doctors**

## Door is opened for them!

- Subspecialty (radiology, transplantation surgery, etc)
- Experience (above Associate Professor, English, need in USA)
- Certain States (not every states)

## Shift in Specialties

(various specialties, change from 1998 to 2006)

0%

•	Anest	hesi	ology	<b>/</b>	+15	5
			<b></b>			

- Pathology +122%
- Dx Radiology + 34%
- Emergency Medicine + 18%
- Dermatology + 7%
- Gen Surgery 4%
- Pediatrics- 8%
- OB/GYN 16%
- Internal Medicine 18%
- Family Practice 51%

# Types of residents

- Categorical positions
- Preliminary positions
- Transitional positions
- Advanced positions

**ACGME approved: Accreditation Council for Graduate Medical Education** 

# Training Period

- OS, Urology, Otolaryngology: 1 yr preliminary surgery + 4 yrs: NS, 1 yr preliminary surgery + 6-7 yrs\*\*\*
- PS, CV surgery: general surgery 3 yrs + 3 yrs
- Anesthesiology, Derm, Neurology, Radiology, Radiation Oncology, Ophthalmology, PMR, Psychiatry: 1 yr preliminary or (transitional) + 3 yrs specialty
- Family medicine, ER, IM, Pediatrics, 3 yrs (IM and Ped, 4 yrs) + sub-specialty 2yrs
- Ob&Gyn, Pathology, 4 yrs
- General surgery, 5 yrs + 2-3 yrs sub-specialty
- Occupational, Preventive and Aerospace Medicine, and Public Health: 2 yrs
  - \*\*\*different match day; also NRMP to get preliminary

## **ACGME** competencies

- Patient care
- Medical knowledge
- Practice-based learning and improvement
- Communication skills
- Professionalism
- System-based practice

#### The Road Not Taken

Two roads diverged in a yellow wood, And sorry I could not travel both And be one traveler, long I stood And looked down one as far as I could To where it bent in the undergrowth;

Then took the other, as just as fair, And having perhaps the better claim, Because it was grassy and wanted wear; Though as for that the passing there Had worn them really about the same,

And both that morning equally lay In leaves no step had trodden black. Oh, I kept the first for another day! Yet knowing how way leads on to way, I doubted if I should ever come back.

I shall be telling this with a sigh Somewhere ages and ages hence: Two roads diverged in a wood, and I--I took the one less traveled by, And that has made all the difference.

## Summaries

- Not easy to be MD in USA; not impossible
- Need time, money and effort
- However, worthwhile to try
- Therefore need a strong mission and vision
- Don't give up and don't regret
- Minimal requirement: get ECFMG certificate
- Good luck and do your BeST!

# Acknowledgement

- Dr. Suzanne Powell (Program director, TMH)
- Dr. Steven Shen (Staff Pathologist, TMH)
- Dr. Jerad Gardner (PGY 2, TMH)
- Dr. Douglas Kim (PGY 4, TMH)
- Dr. Hyo Jin Park (Pathologist, SNU)
- Dr. Pil Gyu Hwang (Pathologist, SNU)



## **Basic Sciences**

# Second Academic Year Required course (Fall semester,18 wks)

Required course (Spring semester,19 wks)

- Behavioral Science
- Ethics
- Genetics
- Fundamentals of Clinical Medicine
- Integrative Clinical Experience/Problem-Based Learning
- Pathology
- Pharmacology
- Physical Diagnosis
- Reproductive Biology
- Radiology/1 week
- Technical Skills

## **Basic Sciences**

# First Academic Year Required course (Fall semester, 18 wks)

- Biochemistry
- Developmental Anatomy (embryology)
- Gross Anatomy
- Histology
- Introduction to Clinical Medicine (Cont'd in spring)
  Required course (Spring semester, 19 wks)
- Immunology
- Microbiology
- Neuroscience
- Physiology
- Introduction to Clinical Medicine

# Third Academic Year Required clerkship (48 weeks)

• Medicine	8 wks
<ul> <li>Medicine subspecialty</li> </ul>	4 wks
<ul> <li>Obstetrics &amp; Gynecology</li> </ul>	6 wks
<ul> <li>Neurology</li> </ul>	4 wks
• Pediatrics	8 wks
• Psychiatry	6 wks
• Surgery	8 wks
• Family Practice	4 wks

# Fourth Academic Year Required clerkship (16 weeks)

Medicine
 4 wks

Neurology4 wks

• Surgery 4 wks

• Family Practice 4 wks

### **Required Elective Program:**

- Students take a minimum of 5 months electives
- Two months available for vacation or additional electives

#### Third Academic Year

#### **Core rotations**

	Medicine	<b>200 hrs</b>
	Surgery	<b>200 hrs</b>
	Obstetrics & Gynecology	<b>200 hrs</b>
	Subinternship (surgery)	<b>100 hrs</b>
•	<b>Surgical Pathology</b>	<b>100 hrs</b>
•	<b>Outpatient surgery</b>	50 hrs
•	Radiology	50 hrs
•	Pediatrics	<b>200 hrs</b>
•	Pathology	<b>100 hrs</b>

## Fourth Academic Year

COI	CI	Ula	ILLU	1112

<b>Psychiatry</b>	1		h	r	S

T. T	4 (	To the second se
Neurology		hrs

• •	<b>⊿</b> ●	4001
Kamilw	practice	100 hrs
T. CILLILLY	bracher.	

	ev Medicine	<b>50 hrs</b>

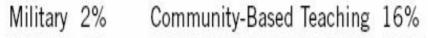
<ul> <li>Patl</li> </ul>	nology	100 hrs

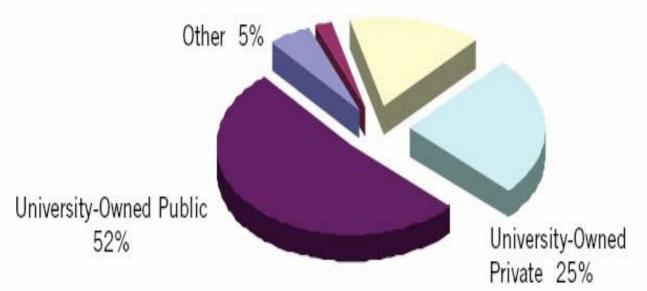
Ambulatory IM	100 hrs
---------------	---------

<ul> <li>Pathology</li> </ul>	100 hrs
lacksquare	

•	Dermatology	100 hrs
	Dermatology	100 1

#### Type of Hospital Training Program

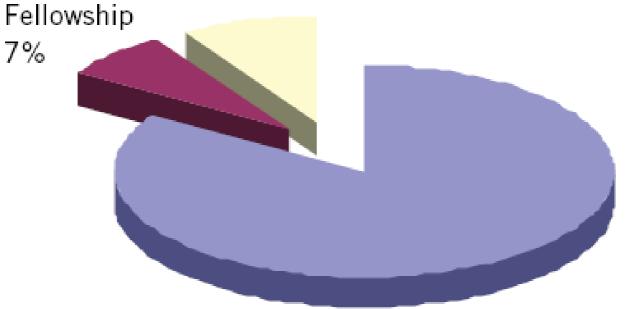




### Respondents Not Applying For A Job

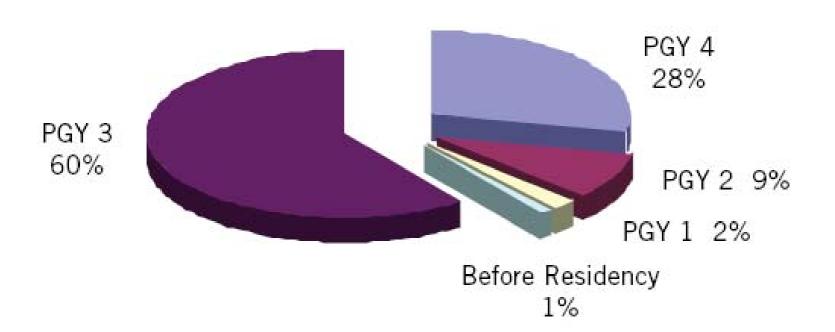
Intend To Do Not Intend To Apply Apply For For Fellowship 9%

7%

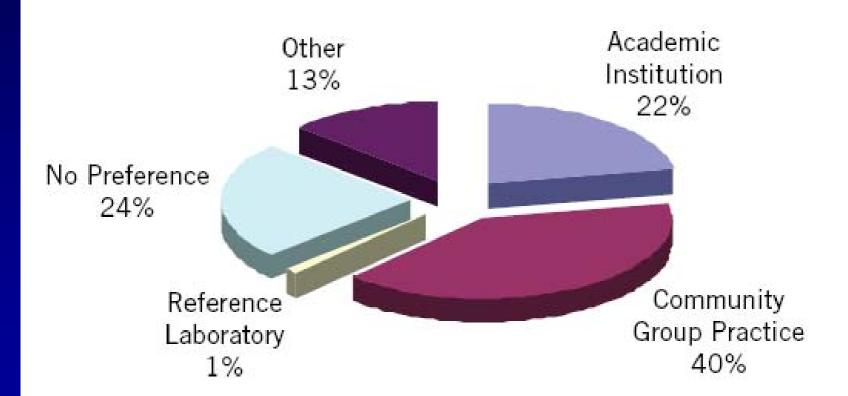


Applied For Fellowship 84%

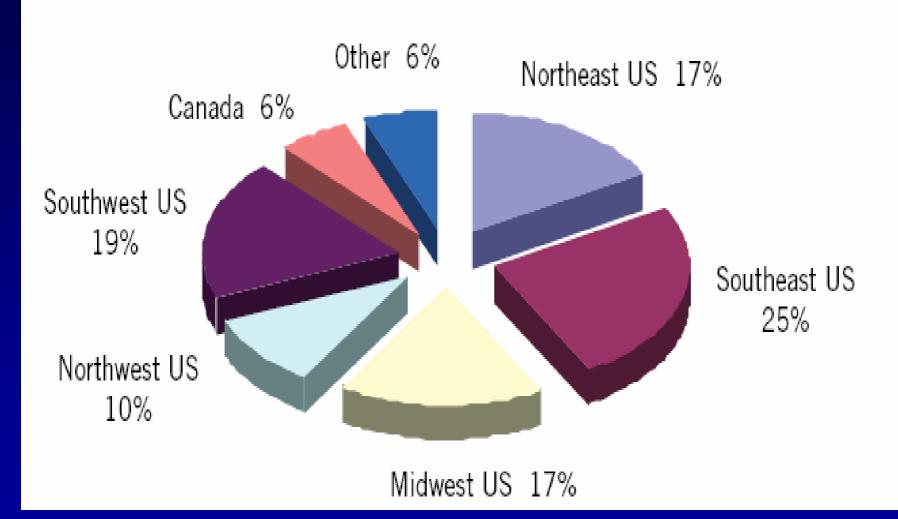
#### Fellowships: Plans Finalized in Which PGY?



#### Jobs: Favored Positions



## **Jobs: Favored Geographical Regions**





The average starting salary (excluding benefits) from those job offers was \$150,000-250,000 (43%), with 12% offered <\$100,000, 36% offered \$100,000-150,000, and 9% offered >\$250,000.

## ASCP sponsors training scholarships

<ul> <li>Hematopathology</li> </ul>	34%
• GI pathology	31%
<ul> <li>Dermatopathology</li> </ul>	26%
<ul> <li>Cytopathology</li> </ul>	24%
<ul> <li>Breast pathology</li> </ul>	22%

## **Job Markets in 2005 & 2006**

- 76% received job offers:8% decreased from 2005
- 94% received fellowship offers:
  6% increased from 2006
- ✓ Reflected from 5 yr program to 4 yr program