# **USMLE Step 1 Seminar**

**No copyright intended.** StudyAid does not own any of the images presented in this seminar. Images have been used for educational purposes only.



# Today's presentation

- 1. Background about USMLE
- 2. Statistics, scoring, scope
- 3. How to sign up as a student at UJ
- 4. Resources, and how to use them properly
- 5. Logistics to consider
- 6. Personal experiences, testday experiences, student experiences
- 7. Q&A



## What is the USMLE?



Exam sequence **required** to receive a medical license in the USA Three "steps" required

- Step 1 (MCQ)
- Step 2 CK (MCQ)
- Step 2 CS (Live)
- Step 3 (Two-part MCQ)



## **Importance**

- Screening tool to assess applicants for residency in the US
  - Step 2 score often unavailable to US MDs during residency applications, thus Step 1 is the more popular metric
- Prerequisite to take final year rotations in the US\*\*
- Regarded to be one of the most challenging exams in the world



Figure 1

All Specialties

Percentage of Programs Citing Each Factor And Mean Importance Rating¹ for Each Factor in Selecting Applicants to Interview (N=1,793)

	Percent Citing Factor	Average Rating
USMLE Step 1/COMLEX Level 1 score	<b>3</b> 4%	4.1
Letters of recommendation in the specialty	86%	4.2
Medical Student Performance Evaluation (MSPE/Dean's Letter)	84%	4.0
USMLE Step 2 CK/COMLEX Level 2 CE score	80%	4.1
Personal Statement	78%	3.6
Graduate of U.S. allopathic medical school	75%	4.1
Grades in required clerkships	70%	4.0
Gaps in medical education	70%	4.1
Honors in clinical clerkships	69%	4.0
Perceived commitment to specialty	69%	4.3
Class ranking/quartile	69%	3.9
Evidence of professionalism and ethics	65%	4.5
Personal prior knowledge of the applicant	65%	4.1
Audition elective/rotation within your department	63%	4.0
	NACOCIO A DE CONTRA DE CON	



## 6th year rotations offered at JUMC\*\*

In the final year, our students are eligible to complete a clinical rotation in approved teaching hospitals.

Students may apply for the elective rotations through the home University:

University of Rochester School of Medicine and Dentistry, Rochester, NY

Below is the current list of the universities that offer elective rotations to students in their final year of study.

- · University of California, Los Angeles (UCLA) David Geffen School of Medicine, Los Angeles, CA
- University of California, Irvine (UCI), Irvine, CA
- University of California, San Diego (UCSD), San Diego, CA
- Loma Linda University Medical Center (LLU), Løma Linda, CA

Applicants are granted the approval of the Dean of the Jagiellonian Uni performance at the JUMC School of Medicine in English.



#### University of Rochester Grad Schools v

601 Elmwood Avenue, Box 706, Rochester, NY 14642

#32 in Best Medical Schools: Research (tie)
#32 in Best Medical Schools: Primary Care (tie)



#### **University of California--Los Angeles (Geffen)**

Grad Schools -

885 Tiverton Drive, Los Angeles, CA 90095

#8 in Best Medical Schools: Research (tie) #4 in Best Medical Schools: Primary Care



# **USMLE Step 1**

- 8 hour exam
  - 60 minutes x 7 blocks
  - Up to 1 hour break
- About 280 questions
  - 7 blocks x 40 questions
  - 90 seconds per question
- Assessment of basic sciences: 1st, 2nd, and 3rd year
- Clinical vignettes, classic radiologic interpretations, videos/interactive assessments



# **Topics covered**

Behavioral Sciences
Biochemistry + Nutrition
Genetics
Gross Anatomy/Embryology
Histology + Cell Biology
Microbiology and Immunology
Pathology
Pharmacology
Physiology
Biostats and Epidemiology

General Principles
Blood/Lymph
Behavioral Health
Nervous System
Musculoskeletal + Skin
Cardiovascular system
Respiratory and Renal
Gastrointestinal
Reproductive + Endocrine
"Multisystem"

**Applying Science Concepts** 

Patient Care: Diagnosis

Patient Care: Management

**Evidence Based Medicine** 



# Types of questions

- Often require multi-step approach
- Integration of subjects
- Calculations, interpretation, epidemiology

## Require SPEED AND CAUTION!

- Determine what they are asking for
- They are not out to trick you.



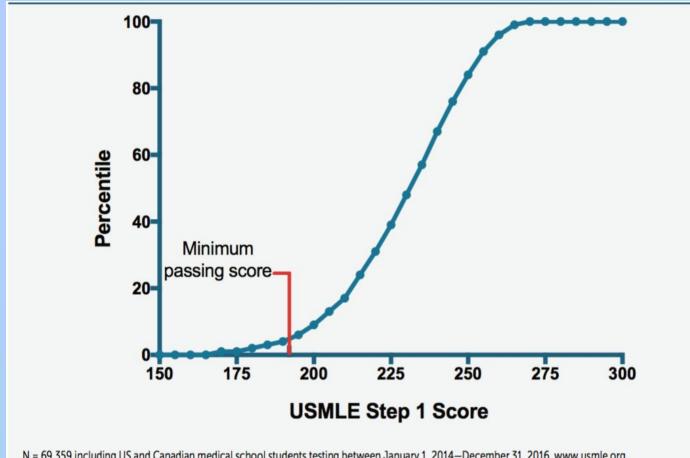
#### USMLE STEP 1 PERFORMANCE PROFILE

	Lower Performance	Borderline Performance	Higher Performance
DISCIPLINE	****		
Behavioral Sciences	*xxxxxxx	xxxxxxx	
Biochemistry		xxxx	xxxxxxxx
Genetics		xxxxxx	xxxxxxxxx
Gross Anatomy & Embryology		xx	xxxxxxxxxxxx
Histology & Cell Biology		xxxxx	xxxxxxxx
Microbiology & Immunology		xx	xxxxxxxxx
Nutrition		XXXXXXXXXXX	xxxxxxxx
Pathology			xxxxxxxx
Pharmacology		xxxx	xxxxxxxx
Physiology		x	xxxxxxxxx
SYSTEM	75.0°		
General Principles of Foundational Science		x	xxxxxxxxxxx
Immune System		хххххх	xxxxxxxxxxx
Blood & Lymphoreticular System		xxxxxx	xxxxxxxxxx
Behavioral Health & Nervous Systems/Special Senses	xxx	XXXXXXXXXXX	
Musculoskeletal, Skin, & Subcutaneous Tissue		*xxxxxx	xxxxxxxxx
Cardiovascular System		x	xxxxxxxxxxxx
Respiratory System			xxxxxxxxxxx*
Gastrointestinal System		×	xxxxxxxxxxxxxx
Renal/Urinary System			xxxxxxxxxxxxxxxx
Reproductive System		xxxx	xxxxxxxxxxxx
Endocrine System		xxxxx	xxxxxxxxxxx
Multisystem Processes & Disorders		xxxxx	xxxxxxxxx
Biostatistics & Epidemiology/Population Health			xxxxxxxxxxxxxxx

# Scoring and feedback



# Scoring



N = 69,359 including US and Canadian medical school students testing between January 1, 2014—December 31, 2016. www.usmle.org. Accessed October 1, 2017.

**194** - pass

229 - average score (2017)



USMLE Score	Step 1 (N=71,104)
300	100
295	100
290	100
285	100
280	100
275	100
270	100
265	99
260	96
255	91
250	84
245	76
240	67
235	57
230	48
225	39
220	30
215	23
210	17
205	12
200	9
195	6
190	4
185	3
180	2
175	1
170	1
165	0



Table 2

# **Summary Statistics** *All Specialties Combined*

	U.S. IMGs		Non-U.S. IMGs	
Measure	Matched (n=2,248)	Unmatched (n=1,990)	Matched (n=3,269)	Unmatched (n=2,910)
1. Mean number of contiguous ranks	7.3	2.3	6.4	2.3
<ol><li>Mean number of distinct specialties ranked</li></ol>	1.5	1.5	1.3	1.4
3. Mean USMLE Step 1 score	222	212	234	221
4. Mean USMLE Step 2 score	232	222	240	228
5. Mean number of research experiences	1.7	2.5	2.3	2.7



## Non-U.S. IMGs



# Table Summary Statistics FM-1 Family Medicine

		U.S. IMGs		Non-U.S. IMGs	
Measure		Matched (n=519)	Unmatched (n=458)	Matched (n=240)	Unmatched (n=342)
1.	Mean number of contiguous ranks	6.1	2.7	3.8	1.9
2.	Mean number of distinct specialties ranked	1.3	1.4	1.4	1.4
3.	Mean USMLE Step 1 score	211	207	220	212
4.	Mean USMLE Step 2 score	225	219	231	223
5.	Mean number of research experiences	1.4	3.0	1.9	2.1



# **Table Summary Statistics PD-1** *Pediatrics*

		U.S.	U.S. IMGs		Non-U.S. IMGs	
Measure		Matched (n=189)	Unmatched (n=67)	Matched (n=288)	Unmatched (n=166)	
1.	Mean number of contiguous ranks	7.9	1.8	5.3	1.8	
2.	Mean number of distinct specialties ranked	1.4	1.4	1.4	1.4	
3.	Mean USMLE Step 1 score	221	211	230	213	
4.	Mean USMLE Step 2 score	232	221	238	224	
5.	Mean number of research experiences	1.6	1.8	2.1	3.7	



# Table Summary Statistics GS-1 General Surgery

Measure		U.S.	U.S. IMGs		Non-U.S. IMGs	
		Matched (n=61)	Unmatched (n=122)	Matched (n=62)	Unmatched (n=173)	
1.	Mean number of contiguous ranks	6.3	3.2	3.4	2.0	
2.	Mean number of distinct specialties ranked	1.3	1.6	1.2	1.3	
3.	Mean USMLE Step 1 score	237	228	242	236	
4.	Mean USMLE Step 2 score	245	236	249	240	
5.	Mean number of research experiences	2.2	2.0	5.2	3.1	



# Table IM-1

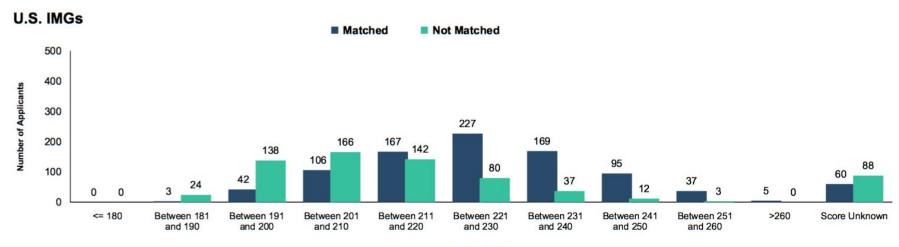
#### Summary Statistics Internal Medicine

The state of the s		U.S.	U.S. IMGs		Non-U.S. IMGs	
		Matched (n=911)	Unmatched (n=690)	Matched (n=1,917)	Unmatched (n=1,403)	
1.	Mean number of contiguous ranks	7.8	1.9	7.0	2.3	
2.	Mean number of distinct specialties ranked	1.4	1.5	1.2	1.3	
3.	Mean USMLE Step 1 score	225	210	236	222	
4.	Mean USMLE Step 2 score	234	220	241	228	
5.	Mean number of research experiences	1.6	2.5	2.1	2.1	

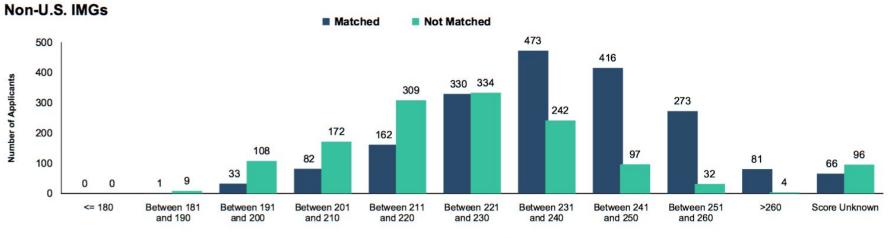


#### Chart IM-3

## **USMLE Step 1 Scores of International Medical Graduates** *Internal Medicine*



Step 1 Scores



Step 1 Scores



# Heads up!

If you PASS Step 1, you can never retake the test.

 If you PASS, but with a <u>bad score</u>, you are "stuck" with this score forever

If you **FAIL** in your attempt, you are allowed to retake Step 1 up to **six times.** Your new score will always be marked to show you failed the first attempt. If you fail the first attempt, you can try again. If you fail your second attempt, you can try again. This applies for five fails (six attempts). Special rules apply.

Take-away: STUDY HARD! Get it right the first time!



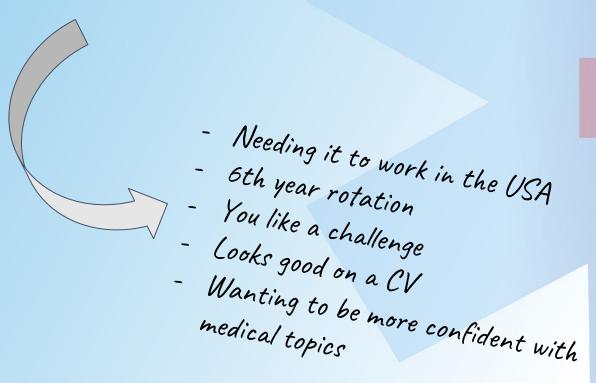
# Now that you know a little bit about Step 1

Determine your reason for taking it. Motivation?

Safetynetting!

General expectations

Realistic goal





# Requirements from JUMC to take Step 1

- "Good standing"
- Finished and passed the core basic sciences (→ after 3rd year)
- GPA above 3.0 (request through DRF)
  - If your GPA is between 3.0 3.3, you must take comprehensive NBME
- Signed "Score Release Form"



# 1. How do I sign up?

# Days to planned exam: **6 - 12 months**

- Make a plan! Commit!
- Check your eligibility with the School Office
- Register with the Educational Commission for Foreign Medical Graduates
   @ ECFMG.org
  - https://secure2.ecfmg.org/emain.asp?app=iwa
  - IWA: "If you have never been issued a USMLE/ECFMG Identification Number and want to request one..."
  - Wait a few days, receive ID number



# 2. When you have the ID number

# Days to planned exam: **6 - 12 months**

- Back to IWA with your ID number: login and set a password
  - REMEMBER YOUR PASSWORD
- Application for ECFMG® Certification (\$ fee)
- Form 186: new this year NotaryCam
  - Scan of passport
  - Fill out Form 186
  - Webcam (to talk to the notary and take a picture)



# Other things to do

 Deliver "CONSENT FOR RELEASE OF USMLE TRANSCRIPT" to School Office. This is mandatory from the school.



# 3. Completed Form 186?

# Days to planned exam: **6-12 months**

- After all verifications are complete, go back to IWA
- Application for USMLE
  - Long application (\$\$\$) takes 30 minutes
  - Choosing your eligibility period
- Now the wait: receive Scheduling Permit
  - Most important document: SP#, CIN
  - Must bring to testing center on day of exam



# 4. Got your scheduling permit?

# Days to planned exam: **3 - 6 months**

- Prometric.com
- Sign up for the exam
  - Choose your location
  - Choose your time
- Check regularly to see when spots will open
  - · Generally 6 mo. ahead



## Logistics to consider

- When will I study? How much time do I need?
  - Main focus during 2nd semester
  - Summer holiday
- Where will I study?
  - Stay in Krakow
  - Travel home
  - Other?
- Where will I take it?
  - Europe or USA



# The best time to take Step 1

When you are ready

In the US, students generally take it after 2nd year (of 4 years)

 At JUMC, must have completed pharmacology + pathology. Thus, earliest time to take it would be after 3rd year.



## Ideal time to take Step 1 at UJ

#### After 3rd year

- Fresh basic science knowledge
- Good timeframe during 3rd year
  - Well timed Pharm Course
- Better prepared for fourth year
- Year off between Step 1 and Step 2

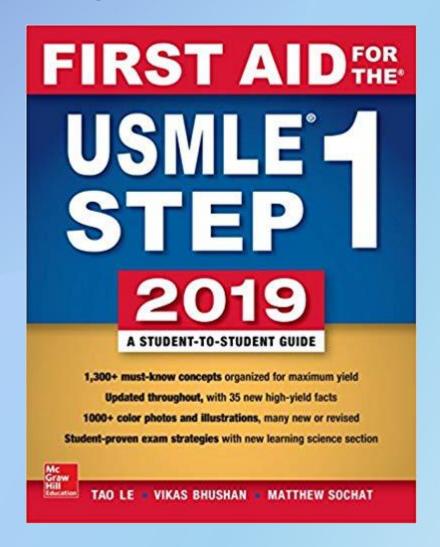
#### After 4th year

- Longer time to learn medicine
- More clinical experience
- Integration of 4th year subjects on the exam
  - Review of several courses
  - More subjects actually tested
- More time to study during 4th year

Summer job vs. dedicated studying



# Ok, great! What's the key to success?







## With that said...

### Choose your resources and stick with them!

- "Pathoma: Fundamentals of Pathology" (rated A+)
- Sketchy Medical (rated A)
- BRS
- Kaplan lecture notes
- Doctors in Training (DIT)
- Boards and Beyond (rated A-)
- Kaplan videos



## Additional resources

**USMLE Step 1 Preparation Forum** on facebook

Medschooltutors.com/blog/ + USMLEpro.com/blog/

YouTube

**Student Doctor Network** 

r/Step1 & r/medicalschool

Students that have taken Step!!!!

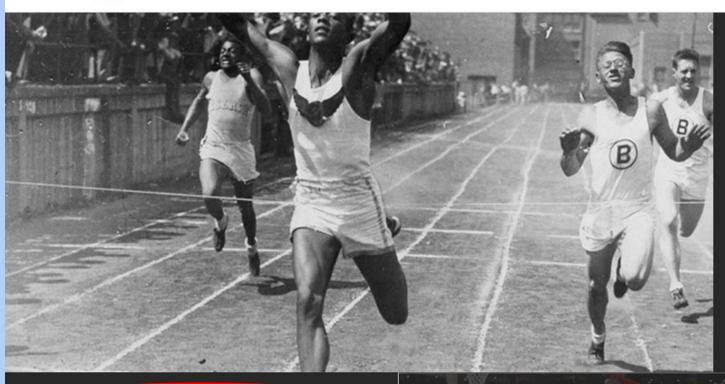


## Examples of good blogs to visit



XAMS TUTORS PRICING PODCAST BLOG FAQ CONTAC





By Jennifer Li

# Three Ways to Get Ahead with First Aid for USMLE Step 1

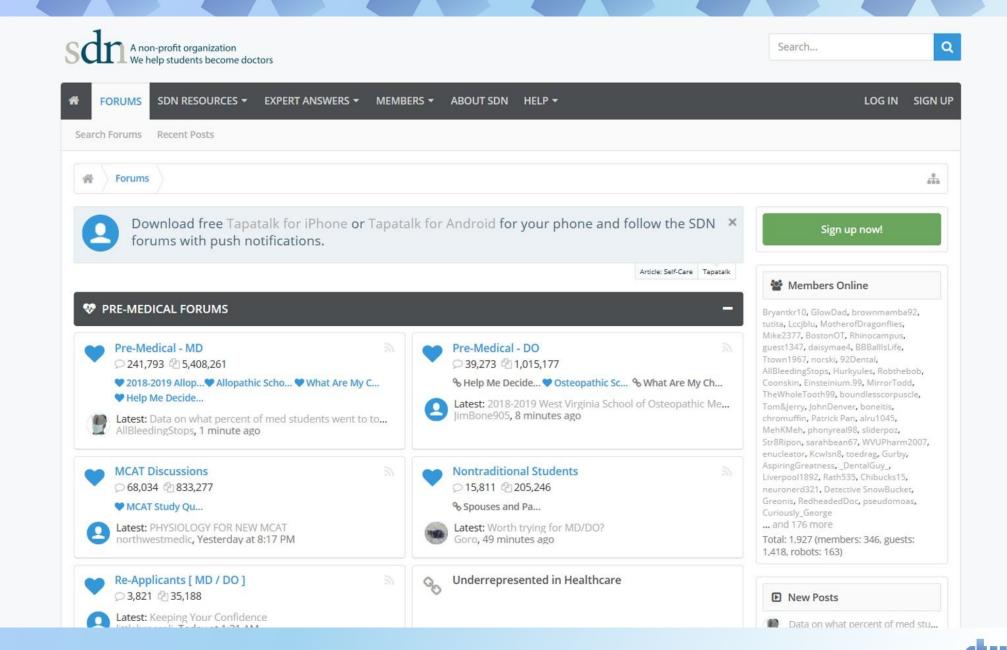
First Aid is often hailed as the Step 1 "Bible" by everyone and anyone who has had to study for those dreaded medical examination boards. In fact, the most common piece of advice I personally heard as a wide-eyed junior medical student was to have First Aid in one hand and then UWorld in the other...

Three Ways to Get Ahead with First Aid for USMLE Step 1

How I Scored a 270 on the USMLE Step 2 CK

Five Biggest Mistakes Students Make With USMLE World









Home

**Book Now** 

Free Consult

Exams

**Tutors** 

Pricing

Blog

FAQ

Contact

## THE SECRET TO USMLE SUCCESS: SPACED REPETITION

April 30, 2018 by Emmanuel Carrodeguas



No matter how much we stare at the page, highlight or sketch things out, retaining factual information can remain elusive without spaced repetition.



#### HOW TO PREPARE FOR THE USMLE STEP 1 BEFORE YOUR DEDICATED STUDY PERIOD

April 20, 2018 by Michael Sayegh



Spending an hour or two a week getting used to USMLE questions and reviewing high yield materials is essential for setting yourself up for success on Step 1.





# National Board of Medical Examiners (NBME)

- Comprehensive NBMEs three available via school
  - Baseline assessments
  - Before dedicated
- Subject exams
  - First come, first serve (approx. 6 spots)
  - Facebook group: CMUJ USMLE Step 1
- <u>CBSSAs</u> 60\$



# Questions, questions, more questions!

How to best do them?

Allocate enough **TIME!** 

Learning tool

Different approaches

```
1. UWorld for Step 1
2. Kaplan Qbank
       3. USMLERX
       4. Pastest
      5. First Aid Q&A
      6. Firecracker
     7. BRS questions
    8. Questions from other
        textbooks
   9. cNBME + subject exams +
  10. Anki
 11. Study groups
 12. Earlier exams
13. Quizlet
14. USMLE free 120 Q's
```

#### Two Birds with One Stone

Step resources are <u>heavily relevant</u> for our curriculum

# Commit to using First Aid!

- Taking Step 1? You MUST also purchase
   UWorld for Step 1
- Not taking Step 1? Consider purchasing UWorld as a learning tool; screenshots also exist.



# Summary of essential resources every medical student should learn to love

- 1. First Aid
- 2. UWorld
- 3. Pathoma
- 4. Sketchy Medical
- 5. Questions

6. NBMEs



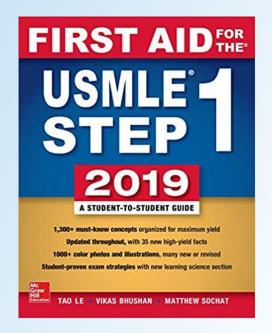
# Suggestions on how to use various resources

First Aid, UWorld, NBMEs, Kaplan videos, Sketchy



#### How to use First Aid

- (Maybe) not the best resource for first-time learners
- Understanding → Memorization
- Memorization → Understanding
  - Active learning! (Writing, highlighting, covering up, flashcards, annotate)
  - Youtube patients
  - First Aid Express videos
- Apply the knowledge! Use it to structure study groups, do questions...
- REVIEW. REVIEW. REVIEW.





#### How to use UWorld

#### **Personal preference**

- Random OR subject-based
- Timed OR non-timed
- Tutor?
- Will you make notes? Will you have time to review them?

#### Universally agreed upon

- Takes longer than you think!
- Read the explanations for all answer choices carefully, even if you got the question correct.





#### How to use Pathoma

- To understand pathology.
   Might require some memorization.
- Buy print-out
- Annotate, add notes from class
- At UJ, should supplement with review of oncology

#### Complications include

- Iron deficiency anemia
- AML (develops in 10% of patients)

Sign up for a free trial account at www.pathoma.com to view the rest of this sample video, download the related textbook pages, and access 5 additional lessons

Fundamentals of Pathology | pathoma.com



# How to use Sketchy Medical

- Watch alongside microbiology course
- Print out: active learning!
- Does not contain everything
  - Best for memorization
  - Fill in new information







# Example: Staphylococcus epidermidis

- 1. Watch S. epidermidis and S. saprophyticus video
- 2. Read First Aid, p. 135
- 3. UWorld question about something different? **FILL IN!**
- 4. Teacher says something semiuseful? **FILL IN!**
- 5. More questions! Review!



Staphylococcus epidermidis

Gram  $\oplus$ , catalase  $\oplus$ , coagulase  $\ominus$ , urease  $\oplus$  cocci in clusters. Novobiocin sersitive. Does not ferment mannitol (vs S *aureus*).

Normal flora of skin; contaminates blood cultures.

Infects prosthetic devices (eg, hip implant, heart valve) and IV catheters by producing adherent biofilms.



#### How to use CBSSAs

Exam Section 1: Item 4 of 50

Mark

National Board of Medical Examiners
Comprehensive Basic Science Self-Assessment

- 4. During an experiment, an isolated skeletal muscle is placed in a bath with a high concentration of glucose for 2 hours. The muscle is then contracted with electrical stimulation. An intracellular decrease in which of the following most likely indicates the onset of muscle fatigue?
- O A) ADP
- B) Inorganic phosphate
- O C) Inosine monophosphate
- D) Lactate
- (iii) pH

#### When to do them?

- All in the last week?
- One each week during dedicated?

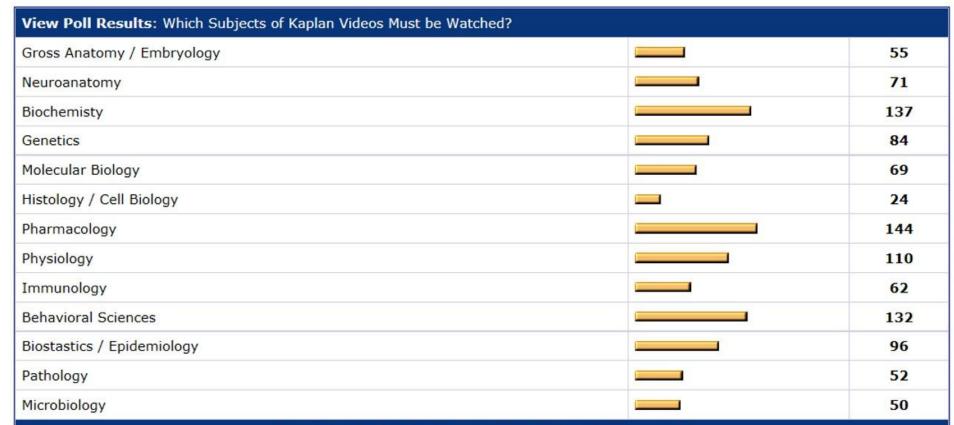
#### To buy or not to buy

General: 1 day to do it. 1 day to review it.

Don't be discouraged!



# How to use Kaplan/DIT/Boards n' Beyond



Multiple Choice Poll. Voters: 248. You have to register to vote in this poll.

This is a dynamic poll. Disregard the original thread starting date, members are still casting votes on this poll.

The poll still reflects the current popularity of the options.



#### Estimated workload

Use First Aid for everything

Seen from the perspective of already studying for normal schoolwork!

- 4-5 hours of review per week during third year = 100 hours
- Average recommended:
- 6 weeks of dedicated study time x 7 days x ca. 10 hrs = 400 hrs
- 500+ raw hours



#### **Estimated costs**

- Application fees
  - ECFMG certificate to apply → 125\$ (466 PLN)
  - Cost of the test itself  $\rightarrow$  910\$  $\rightarrow$  (3,399 PLN)
  - Testing center charge if outside US/Canada → 185\$ (691 PLN)
- Absolute essential reading
  - First Aid for the USMLE Step 1 2019  $\rightarrow$  55\$ (204 PLN)
  - UWorld for Step 1  $\rightarrow$  from 329\$ to 479\$ (1,229 PLN)
- Purchasing online NBMEs → 60\$ x 2 (448 PLN)
- Flight ticket, hotel, food, celebration...



#### Continued

Expect to spend a MINIMUM AMOUNT OF 6,437 PLN

$$6,437$$
 PLN =  $1,723$ \$ =  $1,493$ € =  $14,235$  NOK

But an excellent USMLE Step 1 score  $\rightarrow$  PRICELESS



# Alright. Now what?

- Arrange transportation and somewhere to stay!
- Take a practice test!
- Plan your test day strategy
- Confirm your appointment with Prometric
- Stay healthy



## Practice prometric session

- Option to take a 120 question practice exam for a small fee
- Most similar to real exam
- Decreases test day anxiety



# No prometric center? DIY!

- Decide your strategy for the real day
- Choose a location
- Use a remaining set(s) of about 280 questions (e.g. UWSA 1 & 2)
- Stick with the time

No phone, plan your food, bathroom breaks...

Warn others to leave you alone!



# Taking it after 3rd Year

- First Aid for coursework starting day 1 of UJ
- Continuance of USMLE resources for 1st, 2nd, 3rd year
- Third year: fairly light coursework
  - October March: 3-4 hours of First Aid per week
  - March: baseline cNBME
  - March May: 6-8 hours of review per week
  - May: Practice Prometric Exam
  - June 15 July 30: dedicated review period, started UWorld
    - Two blocks + 10 hours of review per day
  - July 31 August 7: final pass of First Aid
  - August 8 August 9: rest
  - August 10: Exam



# Test Day experience

- Prometric in Downtown Chicago
  - Did the Practice Session here, thus was super familiar
- Was able to come in at 7am, exam started at 7:30am
- 4 blocks, no breaks
- 15 minutes for restroom, sandwich, water break
- 3 blocks, no breaks
- Out before 2:30pm + done!



## Taking it after 4th Year

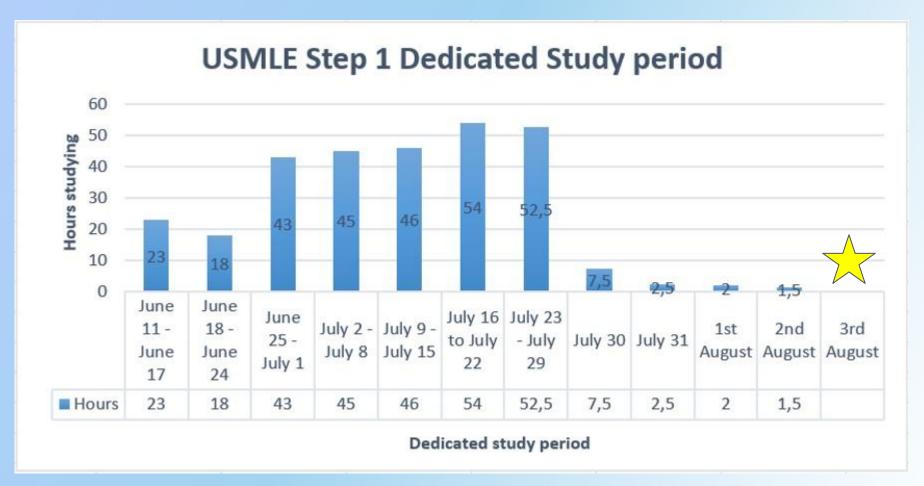
- Pondering about USMLE Step 1
  - First hearing about it
  - Starting to use First Aid from printed PDF (end of 3rd year)

#### Fourth year

- Summer after 3rd year: working + rewatching videos along lecture notes + basic chapters in First Aid 2017
- November 2017: started signing up for USMLE Step 1, purchasing UWorld
- November March: average 15 hours a week
- March June: average 20 hours a week. Bought First Aid 2018.
- June 25th July: 45 hours a week for 5 weeks
- August 3rd: Exam



# Dedicated studying





# Test day experience #2

- London
- Insane amounts of food; really expensive hotel room
- Excellent staff, perfect environment

• Sleep... then celebration!



#### **THINGS TO DO**

- Take care of yourself
- Assess your knowledge regularly
- Use approved and recommended resources
- Set short-term goals!
- Reward yourself at regular intervals!

#### THINGS TO NOT DO

- Make unrealistic goals
- Spend too much time on the stuff you know
- Get sidetracked
- Have too much going on
- Extend, postpone.



## **Takeaways**

Set a goal! Make a plan! Stick to it!

Start early!

You will not be able to learn everything.

Support each other!

Take breaks and enjoy life! Don't go (too) crazy.

Celebrate properly after finishing!



Questions?
Ideas, Concerns, Expectations?

# GOOD LUCK on behalf of StudyAid!

#### References

https://www.kaptest.com/study/usmle/the-most-important-part-of-your-residency-application/

http://www.nrmp.org/main-residency-match-data/

First Aid for USMLE Step 1 2018

Usmle.org

ECFMG.org

