

# The Results Are In: Analyzing Your MCAT Diagnostic Exam



# Introductions

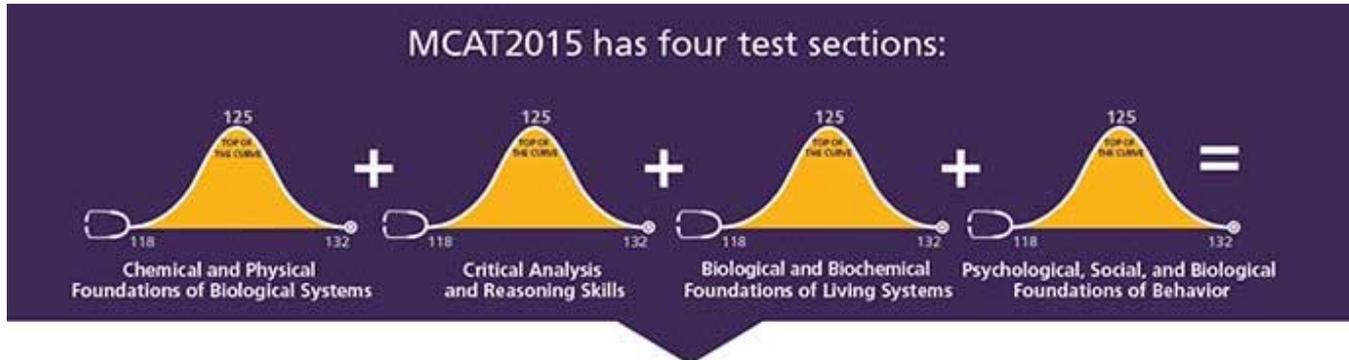
- Bryan Schnedeker
- National MCAT Director of Next Step
- Worked with thousands of MCAT students over the last 15+ years
- Personally achieved a 44 MCAT score (old scale) and a 525 MCAT score (new scale)

# Agenda:

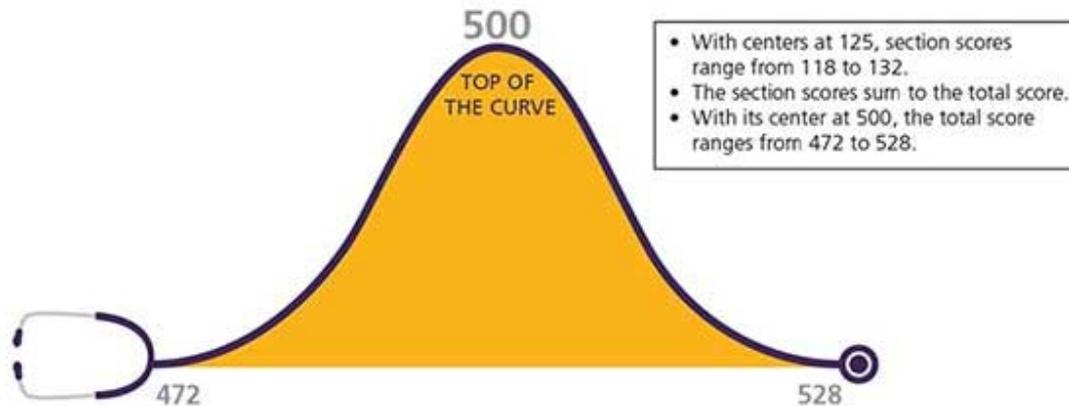
- MCAT Scoring
- MCAT Practice Problems
- What your score means
- How the MCAT factors into admissions
- MCAT prep strategies and materials
- QA Session

# How is the test scored?

- **Raw score:** number of questions right out of total
- **Scaled score:** 118-132 on each section, 472 – 528 total
- **Percentile rank:** How many students scored below you



## MCAT2015 Total Score



# Out with the old, in with the new!

Old MCAT

New MCAT

25 → 500

30-32 → 507-510

# Biology Practice Problem

1. Which molecule is most likely to use a protein channel to cross the eukaryotic cell membrane?

- A. Aldosterone
- B. Vasopressin
- C.  $O_2$
- D.  $CO_2$

# Physics Practice Problem

2. Modern MRI machines use electricity to generate their magnetic fields inside a circular chamber instead of permanent magnets. Which of the following would NOT increase the strength of the MRI field?

- A. Increased radius of the MRI chamber
- B. Increased power supplied to the MRI
- C. Decreased resistance of the MRI
- D. Increased current through the MRI

# MCAT Passage Strategy

- Read critically
- Read thoroughly
- Use the highlighting function
- Take note of key pieces of information

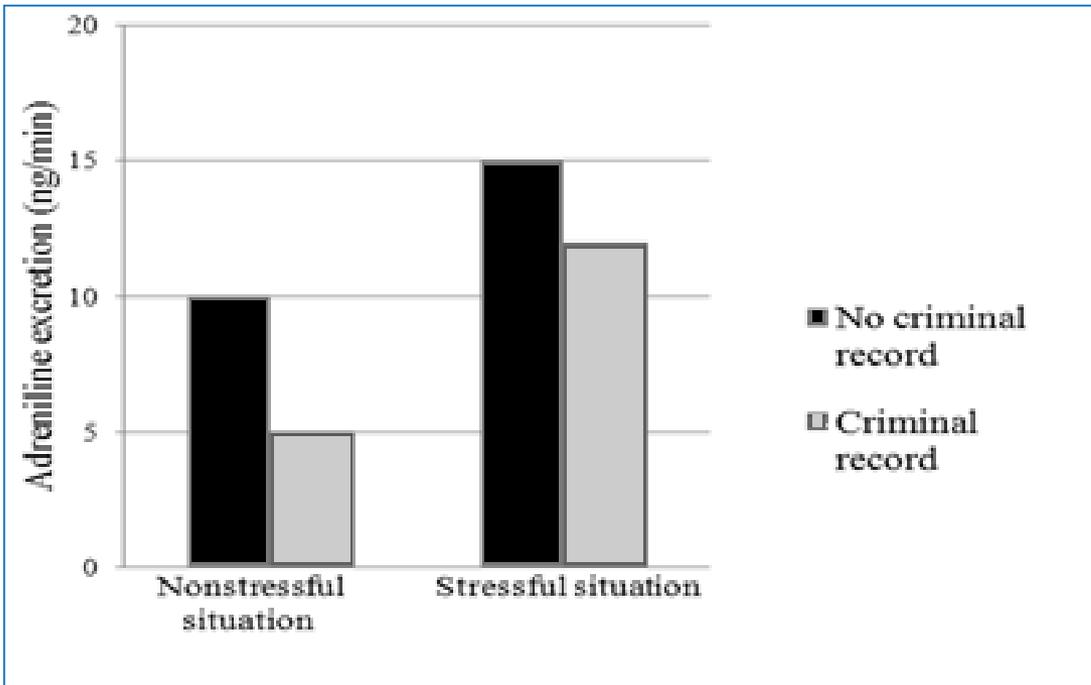
# MCAT Practice Passage 1

Antisocial personality disorder is a chronic mental condition in which a person's ways of thinking, perceiving situations and relating to their peers are dysfunctional and destructive. People with antisocial personality disorder typically have no regard for right and wrong and often disregard the rights, wishes and feelings of others. Several traits necessary to assess antisocial personality disorder have been identified.

- Superficial charm (smooth-talking, engaging and slick)
- Greatly inflated idea of one's abilities and self-esteem and a sense of superiority
- Pathological lying
- Manipulative (uses deceit to cheat others for personal gain)
- Lack of remorse or guilt
- Limited range or depth of feelings
- Callous/lack of empathy
- Failure to accept responsibility for own actions

# MCAT Practice Passage 1 (cont.)

Despite their antisocial behavior, many criminals do not fit the description of antisocial personality disorder. The disorder has both biological and psychological roots. No single gene codes for such complex behavior but some studies have detected early signs of antisocial behavior. Figure 1 below show the results of an experiment performed to measure levels of the hormone adrenaline in 2 groups of boys at age 15.



**Figure 1** Levels of adrenaline measured in 2 groups of boys

# MCAT Practice Passage 1 (cont.)

In both stressful and non stressful situations, those who acquired a juvenile criminal record (as 12-15 year olds) showed comparatively low arousal. Genetics alone cannot tell the whole story. Relative to 1955, the average American in 2005 was twice as likely to be murdered, four times as likely to be robbed and five times more likely to be assaulted. Yet the human gene pool had hardly changed.

# Passage Questions!

3. Which conclusion is supported by Figure 1?

- A. Boys with a criminal record have a no autonomic response to stress.
- B. Boys with no criminal record have a smaller autonomic response to stress.
- C. Boys with no criminal records have lower resting levels of adrenaline.
- D. Boys with a criminal record have a smaller autonomic response to stress.

4. It is found that some people who suffer from antisocial personality disorder had trouble with speech a child. What brain area is likely the cause?

- A. Somatosensory cortex
- B. Wernicke's area
- C. Occipital lobe
- D. Basal ganglia

# Passage Questions (cont.)

5. A woman walking to work sees a group of people on the street staring at the sky. She stops to join them in staring up at the sky. Her behavior is an example of:

- A. The bystander effect.
- B. De-individuation.
- C. Conformity.
- D. Groupthink.

6. Which organ is associated with the hormone response monitored in the experiment discussed in the passage?

- A. Kidneys
- B. Adrenal glands
- C. Thymus
- D. Amygdala

# MCAT Practice Passage 2

If a drug company could take all of the positive effects of exercise and put them into a pill, they'd be the most successful company in history. It is, in fact, nearly impossible to overstate the positive effects that regular exercise has on nearly every facet of the body's physiological and the mind's psychological state. Exercise has been demonstrated to not just slow the progression of, but to reverse, many of the symptoms of type 2 diabetes, heart disease, high cholesterol, and hypertension. It can delay the onset of dementia, reduce symptoms of anxiety and depression disorders, and aid in smoking cessation programs.

And yet when patients meet with their physicians, the overwhelming majority of primary care doctors fail to discuss the importance of exercise with patients. To the extent that the topic is discussed at all, the doctor will make, at best, passing remarks about the importance of an exercise program. Even more perversely, there is a strong correlation between lower economic class and decreased likelihood of physician-recommended exercise programs, despite the even stronger correlation between lower economic class and many of the diseases that exercise would most directly benefit (most notably obesity and type 2 diabetes). That is to say, those patients who most need regular exercise are the ones least likely to have a doctor that strongly recommends such a program.

# MCAT Practice Passage (cont.)

Why this connection exists is still somewhat unclear, although research is slowly shedding light on the topic. Fundamentally, public health scientists examine two different facets of the correlation: patient-sided factors and healthcare provider-sided factors. Thus, working and lower class patients may not have access to the kind of doctors that will recommend exercise, or doctors may change how they treat patients based on perceived economic class.

To date, research seems to suggest both of these factors work in concert. In a groundbreaking study at the University of Arizona College of Medicine, experimenters created audio recordings of over 5,000 patient-physician interactions for patients that were classified as obese. The patient population was categorized into three broad categories of economic class based on income. Researchers found that physicians were 22% more likely to discuss exercise regimens with the high-class patient group than the lowest, and that when exercise was discussed, doctors spent a staggering 420% more time in conversation about exercise with the high economic class group than either the middle or low class group. Despite these stark findings, the researchers' failure to control for factors of ethnicity and gender have created large enough concerns about methodological validity to lead some critics to dismiss the study entirely.

# MCAT Practice Passage (cont.)

More promising are results obtained from examining the patient-sided factors, including frequency of patient-initiated discussions about exercise programs and patient access to high quality primary care. Here, surveys of both patients and healthcare workers have demonstrated a strong correlation between a patient's economic class and their likelihood of initiating a conversation about exercise with their healthcare provider. This correlation seems to exist regardless of the health status of the patient, and any similarities between the patient and provider in terms of demographic categories. The findings suggest, perhaps, that patients from higher economic classes are simply more comfortable initiating conversations with their healthcare professionals.

A final irony was revealed in the most recent major study published on the topic, which found no correlation between a patient's ability to start and stick with an exercise regimen and how frequently such programs were discussed with healthcare professionals.

# Passage 2 Questions

7. In the study discussed in the fourth paragraph, the researchers created audio recordings of the doctor-patient interactions in order to:

- A) prove that physicians unconsciously discriminate against lower class patients by not discussing exercise with them.
- B) determine differences in doctor-patient interactions when the doctor and patient are of the same or of different ethnicities.
- C) ascertain whether doctors were more likely to discuss exercise regimens with obese male patients than with obese female patients.
- D) assess both how often exercise was discussed and for how much time it was discussed.

8. Which of the following studies would provide the best evaluation of the author's speculations at the end of the fifth paragraph?

- A) A study examining how frequently patients ask physicians about medications other than the ones initially recommended by the doctor
- B) A cross-sectional study that correlates ethnicity and gender with frequency of implementation of doctor-recommended exercise plans
- C) A survey asking patients how many members of their immediate family are healthcare workers that specialize in exercise-based fields such as psychiatry or physical therapy
- D) A longitudinal study that follows three different groups who are given three different doctor-prescribed exercise regimens to determine whether they are able to stick with the plan and if not, why not

# Passage 2 Questions (cont.)

9. For which of the following statements does the passage provide the *least* explanation or support?

- A) A patient with type 2 diabetes who is trying to quit smoking may be able to improve both of these health factors with regular exercise.
- B) Patients who discuss exercise plans with their physician are unable to stick with the plan due to how infrequently they are able to get check-ups with their doctor.
- C) Even studies that include a very large amount of data may nonetheless lead to questionable conclusions.
- D) Patients' own behavior can influence the likelihood that their doctor will discuss exercise plans with them.

10. The passage author would be most likely to agree with which one of the following assertions?

- A) Patients in the lowest economic classes are just as likely to be able to stick with a doctor-recommended exercise plan than patients in the highest economic classes.
- B) A female doctor is more likely to discuss an exercise regimen with an obese female patient of lower economic class than a male obese patient from a higher economic class.
- C) The positive effects of exercise are overwhelming in the scope and profundity of effect on physiological conditions but are very limited on psychological ones.
- D) Had the study described in paragraph 4 been conducted at a different institution the researchers would have been more likely to use more robust controls.

# Passage 2 Questions (cont.)

11. Which of the following could serve as an appropriate title for the passage?

Physician-Recommended Exercise Plans: When and Why  
The Benefits of Exercise in Addiction Recovery  
Doctors and Patients Both Fail to Address Exercise

- A) I only
- B) III only
- C) I and II only
- D) I and III only

# How worried should I be?

- 505+: You're in great shape!
- 500 – 505: Good job, a great place to start
- 495 – 500: Normal starting point for MCAT prep
- 490 – 495: Common starting point, but you've got a lot of work to do
- Less than 490: Significant investment required. Have you finished your pre-reqs?

Critical Analysis!

Start early to find

**YOUR** strategy



# 2

Passage analysis:  
Note-taking and  
**highlighting**

Science

content:

Rule of 2's

3

4

Know  
what to  
expect on  
test day

Study

Group

5

# Introduction

- Linda Abraham
- Found and President of Accepted.com
- Worked with thousands of students since 1994
- Extensive experience with both MD and DO programs

# What Does the MCAT Reveal About You?



LIVE WEBINAR

Presented by Linda Abraham  
Accepted, CEO & Founder

July 9, 2015  
5 PM PT



# • APPLICATION TO-DO LIST •

- Show you can do the work.
- Share mission of the school.
- Will make a good physician.
- Will contribute to school community and medical profession.

# AAMC: MCAT Provides a Common Metric



GPA 3.7 from School X = 3.3 from School Y  
= GPA 3.5 from School Z = ?



# ***The MCAT Predicts:***

- ◆ **Grades in medical school**
- ◆ Scores on STEP exams
- ◆ Likelihood of graduation in 4-5 years
- ◆ Ability to pass licensing exams on 1st try

## ***The MCAT Predicts:***

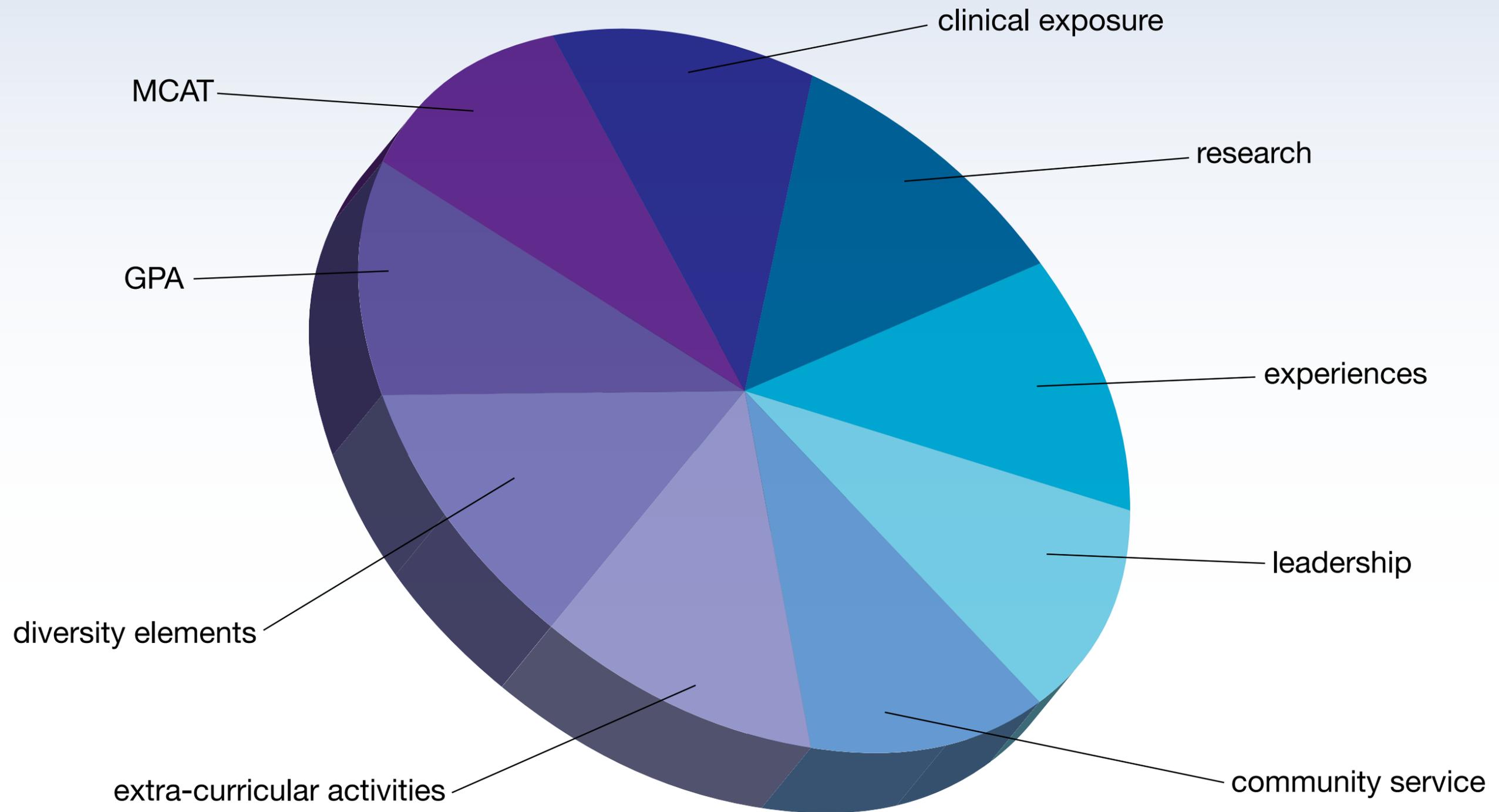
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# HOLISTIC REVIEW

**ATTRIBUTES &  
EXPERIENCES**



**ACADEMIC  
METRICS**

**MEDICAL  
SCHOOL**



CV

ESSAYS

SECONDARIES

INTERVIEWS

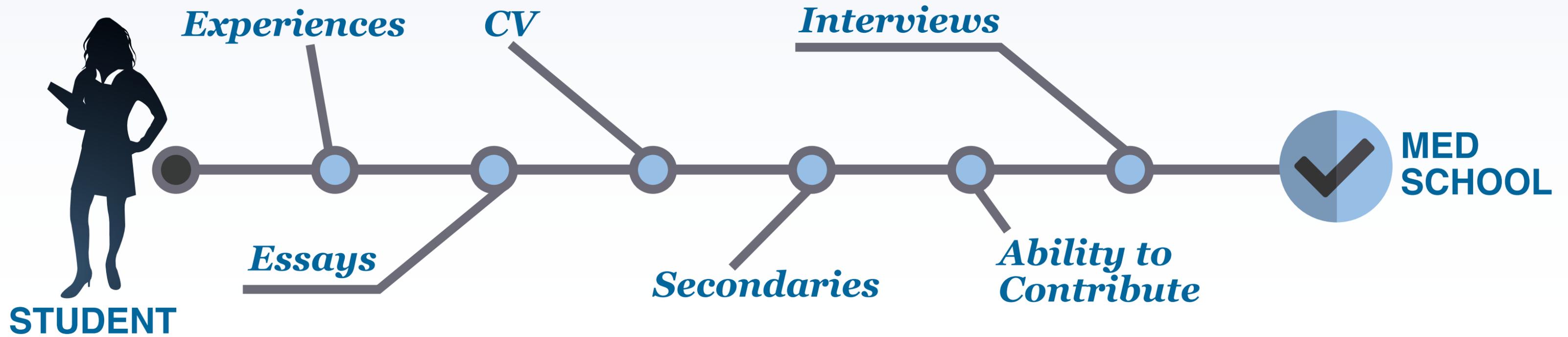
EXPERIENCES

?



Show  
Ability to  
Contribute?





Let Accepted be your guide! →

## Consultant Profile Alicia McNease Nimonkar

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Congratulations on making the decision to pursue higher education! The path that you are embarking on will challenge you in new and exciting ways. With my extensive experience in academic advising, I would be delighted to guide you through the admissions process.

For over five years with the UC Davis School of Medicine Postbaccalaureate Program, I worked closely with students from diverse backgrounds, helping them to improve their writing and learning skills as they prepared to apply to professional schools in healthcare. While I began as the program coordinator, I later took on the responsibilities of program manager and then acting director. For me, the most important part of my job was serving as student advisor.

To excel in this role, I pursued an MA in Composition and Rhetoric so that I could better assist students in developing first-rate writing and interviewing skills. I also worked with medical school faculty and learning skills specialists to empower students to reach their academic goals and have myself learned what is important to medical school selection committees when they evaluate an application.

As a result, under my guidance students were able to achieve record high GPA's during their post-baccalaureate year and equally stellar acceptance rates into medical school. In my last application cycle with the program, 100% of the students I advised were accepted into



## Consultant Profile Cydney Foote

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When I first joined Accepted.com in 2001, I never imagined the personal satisfaction that would come from sharing my clients' successes. Now, over a decade later, I've discovered the personal and professional satisfaction that comes from getting to know applicants, working with them to bring out the best in their essays, and then celebrating the happy news that they've been accepted to their top-choice schools.



Admissions consulting combines my background in healthcare administration at both the University of Washington Medical and Dental Schools, where I served on several fellowship admissions committees, with my years in business as a marketing editor for SicolaMartin and later marketing manager for Classmates.com. Few consultants can claim this joint background – they're either writers or industry professionals – but I think it's this combination that is key to my clients' success. The application process is about selling yourself and telling your story in a way that works for your audience. Too often, students have great qualifications, but getting that across on paper – especially for those who've focused on sciences or technical fields in their academic and professional careers – is a real challenge.

My own story begins with a love of persuasion and the written word. In high school, I discovered the power of language through debate and essay competitions. A BA in political science and communications and two master's degrees – from University College, Dublin and the University of Washington – exposed me to new perspectives and helped me articulate what



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# What materials should I use?

## Good question.

- ALL official AAMC materials: practice test, official guide, practice sets, and use Khan Academy.
- Use our AAMC practice test review videos
- Admissions resources from Accepted.com
- Finally, get a good set of prep books and practice tests from a reputable company like Next Step.

# Next Step Test Prep MCAT 2015 Resources

- Free Diagnostic (if you haven't taken it!)
- Free MCAT question of the day emails
- 5 full length practice tests for the 2015 MCAT
- Full set of MCAT 2015 books: Content review, strategy and practice, and the biggest book of verbal passages available!
- Highest quality, highest value, one-on-one tutoring available

# A few additional things....

Sign up for our remaining webinars:

**Biochemistry Sample Class**

Monday July 13th @ 8pm EST

**Critical Analysis and  
Reasoning Sample Class**

Tuesday July 21st @ 8pm EST

**Med School Selection and  
Application Strategies**

Thursday August 6th @ 8:30pm EST

**Click Below to register!**

<https://rd150.infusionsoft.com/app/page/default-campaign-landing-page38>

Tell us how you plan on prepping to win free MCAT resources:

<http://goo.gl/forms/fKdJfZWcZF>

# MCAT Prep Options

	Self-Study	Prep Course	1 - on - 1 Tutoring
PROS	<ul style="list-style-type: none"><li>• Lowest price (~\$500)</li><li>• Self-paced</li><li>• Focus on need areas</li><li>• Roughly 30% of test-takers report self-study</li></ul>	<ul style="list-style-type: none"><li>• Generally good materials</li><li>• Schedules keep students on pace</li></ul>	<ul style="list-style-type: none"><li>• Study plan completely tailored</li><li>• Help identifying and fixing weak areas</li><li>• Work on concepts until <i>you</i> understand them</li></ul>
CONS	<ul style="list-style-type: none"><li>• Hard to know what you don't know</li><li>• Few resources to answer questions</li><li>• Score plateaus</li><li>• Every point counts</li></ul>	<ul style="list-style-type: none"><li>• Lack of personal attention</li><li>• Valuable time devoted to unnecessary areas</li><li>• \$\$\$\$</li></ul>	<ul style="list-style-type: none"><li>• Costs more than self-study</li><li>• <i>Used</i> to cost 3-4x more than a prep course</li></ul>

# Questions?



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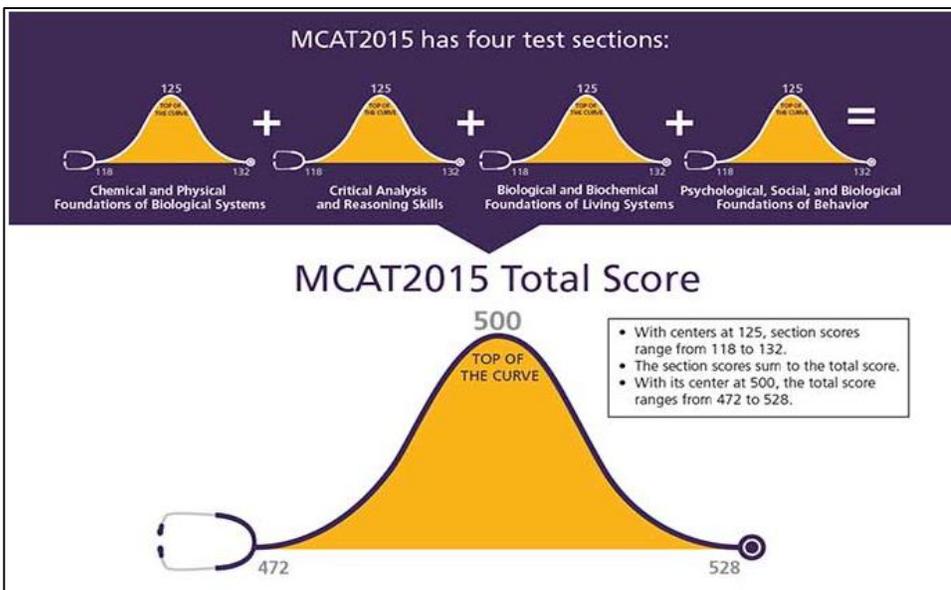
TEST PREP [nextsteptestprep.com](http://nextsteptestprep.com)

## Free MCAT 2015 Resources

- [Next Step's Free Half Length Diagnostic Exam](#): If you are preparing for the MCAT then you need to take this test. It will take about 4 hours and includes full answers and explanations for every question. This resource will help you identify your strengths and areas of opportunity when you start your prep.
- [AAMC 2015 MCAT Practice Test Review Video Series](#): Every student should take the official AAMC Practice Test. This free video series reviews each section to help students understand their results on the test after they have taken it.
- The Critical Analysis and Reasoning Section is often the most challenging for pre-med students. This free video course provides an overview of strategies that will help you tackle this section of the test: [Click here to access this free video course!](#)
- [Click here](#) to sign up for our MCAT question of the day emails for great, free, practice content throughout the week.
- [Click here](#) for our MCAT blog.

## Additional MCAT resources for sale from Next Step

- [Next Step's MCAT Book Store](#): Next Step has published a nine book series to help students prepare for the new MCAT. These books are a great addition to any students MCAT library and we are unrivaled when it comes to prep for the verbal section of the new MCAT.
- [Next Step's Full Length Practice Tests](#): Next Step has created 5 full length practice tests for the new MCAT.



**MCAT 2015 Pre-Reqs  
Next Step Suggests:**

Biology: 2 to 3 semesters  
Chemistry: 2 semesters  
O-Chem: 1 to 2 semesters  
Physics: 2 semesters  
Biochemistry: 1 semester  
Psychology: 1 semester  
Sociology: 1 semester  
Statistics: 1 semester  
Humanities: 1-3 semesters

# 1-on-1 tutoring for the MCAT for the price of a prep class!

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Group prep classes are built to serve large groups of students and teach them the entire test. If you only need to work on certain sections of the exam, are starting very low on the scoring scale, need to achieve a 90<sup>th</sup> percentile plus score on the exam, or if your schedule is just too hectic to work with a set prep-class schedule, tutoring might be your best option.

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888-530-NEXT OR [info@nextstestprep.com](mailto:info@nextstestprep.com)

[www.nextstestprep.com](http://www.nextstestprep.com)

# Additional Resources from Accepted.com:

[Accepted](#), the premier admissions consultancy, has been successfully advising medical school school (and allied program) applicants since 1994. Our [expert consultants](#) are delighted to use their knowledge and experience to guide you to acceptance!

As you go through the grueling med school application process, ensure that you have the support of a dedication admissions consultant and coach by purchasing Accepted's [medical school admissions services](#).

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